

In the early 2000s, a mysterious technology/organism – eventually to be known by the tongue-in-cheek name *handwavium* – appeared from no known origin. Properly applied, handwavium allows, among other things, almost anyone to build a spacecraft far in advance of anything any government is fielding. And almost anyone does – most of North American science fiction fandom makes it off the planet in an explosive diaspora before laws against the use of handwavium are passed by paranoid governments worried about the devastating changes such a disruptive technology can cause to the comfortable and profitable status quo.

These are the stories of those who made it into space, and what they did and found there.

WELCOME TO
HENSPACE
A Quick Start Guide

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This is a highly cut-down version of the *Fenspace Writers' Guide*, intended as a basic introduction to the setting. People interested in learning more about Fenspace are encouraged to read that document.

THE ABRIDGED RULES OF FENSPLACE

Genre Directive:

This is not a dystopia. Fenspace is an optimistic near-future space opera. Neither the Earth nor the rest of the solar system are wracked by wars, corruption, crime, environmental collapse, peak oil, etc. – at least, no more so than as of where we stood on New Year's Day, 2007. There are potential rough patches ahead, but most of humanity is looking forward and has better than even odds of making it through with civilization still intact. There are still Big Bads, a shadowy conspiracy or two and plenty of mooks for the heroes to smack around, but they are defeatable.

Co-operation:

This is a collaborative project, which means there's a whole bunch of people adding their ideas to the pot. As a contributor, you're expected to behave like the adult that you are, or at least are pretending to be, when participating. (As the man said, "Don't be mean. We don't have to be mean.")

"If the only people who want to colonize space are science fiction fans, what happens when they go and do it?"

— the basic concept of Fenspace, as stated by S. M. Breen

No one person can hog all the Good Stuff without upsetting the others. Don't step on anyone else's toes – don't consume too much Cool at once, don't try to be better than the already-established "best in Fenspace" at something, and talk with people before doing things that No One Else Can Do.

Handwavium:

Handwavium is like a cat; it doesn't go where you tell it to, it goes where it wants to. If you're trying to get a random device with no plan in mind, then that's exactly what you'll get. If you have a specific device or set of devices in mind, you will get something close but not exactly identical to your specifications, within limits.

If handwavium is like a cat, then using it to create weapons is like giving a cat a bath; difficult and full of extreme pain. To wit: Any attempt to use handwavium to create advanced genre weapons (phasers, antimatter bombs, any type of anime death ray, etc.) will fail without reservation. Handwavium is not naturally explosive, either chemically or nuclear. Adding handwavium to an explosive device will just destroy the handwavium. Handwavium can be used to enhance simple weaponry (swords, knives, staves, clubs, etc.) but the enhancement will not increase the total effectiveness as a weapon.

Weapons designed and built using no or effectively no (≤ 1 mg per kilo) handwavium can be powered by a 'wave-based energy source and mounted in handwavium vehicles without difficulty or losing effectiveness.

Those who wish to point out that handwavium-based spacecraft already constitute kinetic-energy weapons are referred to the Genre Directive for further discussion.

Biomods:

You can get one biomod, you get only one, and after you get it, you can't get rid of it, barring major reconstructive surgery – and sometimes not even then. Biomods are physical alterations and like anything else that makes substantial invasive changes to a biological system, may well cause corresponding changes in physical appearance. Particularly strong handwavium fumes over a period of time may be enough to biomod someone, but that's about it, and that only because the lungs are so efficient at absorbing the stuff.

Combat:

Space combat is more like Bronze Age warfare than modern warfare – you might shoot things at each other, but the decisive role usually involves getting up close and personal. This is because handwavium hulls are relatively resistant to hardtech weapons (just about any handwavium hull will be bulletproof and it's not difficult to make them proof against anti-tank weapons), and bigger ships tend to be slower than smaller craft. Smaller craft, which control the engagement

ranges, have less ability to inflict hurt. But they can “land” boarders relatively easily.

Travel:

Handwavium-enhanced engines tend to produce speed drives, which allow vehicles to fly around without needing lots of fuel, cornering on dimes, etc.

The top velocity of a speed drive is determined by the total dry mass of a vehicle. The smaller it is, the faster it is. The absolute maximum velocity a speed drive can reach is 0.2c (20% the speed of light, or about 60,000 kilometers a second). The average Fenspace vehicle has a top speed closer to 0.1c

Faster than light (FTL) travel is rare and requires moving outside the Limit, a boundary around 35 to 40 AU away from the sun. The maximum FTL velocity a speed drive can reach is 500c.

Speed drives slow down significantly in atmospheres, due to vehicle mass, size, engine power, atmospheric density and local gravity. This makes entering or exiting atmosphere with a speed drive a tricky process. The reduced speed is too low to make kinetic-energy weapon strikes (for sufficiently high values of “kinetic energy”) effective inside an atmosphere.

THE SETTING IN GENERAL

ABRIDGED TIMELINE

Late 2006 / Early 2007: Handwavium is invented or discovered. Samples are sent to high-security labs for analysis.

Spring 2007: Handwavium manages to slip past security, and starts filtering into fandom.

May 10, 2007: *SS Uncertainty* launches.

August 31, 2007: Worldcon Yokohama: The first public demonstration of the power of handwavium, when an enterprising fan refits his car and flies to Japan for the con. NASA/DARPA/USAF establish Transrationality Scientific Assessment Bureau (TSAB) to study and reverse-engineer handwavium devices.

Fall 2007: Someone spikes a small convention’s hospitality suite food with concentrated handwavium, causing unexpected biomods in seventeen convention-goers. The U.S. government “quarantines” the guests until they escape.

Fall/Winter 2007: First wave of handwavium-equipped explorers hit orbit, Luna, Mars. First Lunar and Martian settlements founded (Kandor City and Starbase 1, respectively).

February 2008: Wave Convoy’s escape to orbit becomes one of the staple clips for Fen exodus documentaries. The last of the original seventeen biomod subjects still on Earth leaves with him.

Spring 2008: Noah Scott begins construction of L5 station *Stellvia*. The fan later known as “Mr. Morden” inadvertently provokes the Russian Federation to formally declare ownership of handwavium or use of ‘wavetech items by anyone but licensed professionals to be illegal.

Summer 2008: *Floating Island* launches. Major factions begin moving off Earth en masse. The Professor obtains the *Sol Bianca* from the Danish crown and makes his way offworld. *Space Rock #7* becomes the Hidden Asteroid.

October 12, 2008: USSR *Ptichka* leaves Wittman Field during a standoff with state and federal law-enforcement officers. Eight days later, US government passes draconian handwavium restrictions in wake of this incident, to take effect on December 1.

Fall 2008: *SS Galaxy Express 999* launched. Mars Terraforming Project begins. Colonel Stephen Caldwell, USAF, appointed administrator of TSAB station *Benjamin Franklin*.

Winter 2008/2009: Senshi settle on (above) Venus. Venus Terraforming Project begins.

Spring 2009: Trekkies and *Galaxy Express* stage the Great Beijing Fake-Out, causing the Chinese government to restrict handwavium possession.

Summer 2009: Worldcon Floating Island: First off-Earth Worldcon; first Articles of Convention written and voted on. Afterwards, a substantial amount of 'Dane/Fen trade moves away from Earth orbit and into Fenspace proper.

August 15, 2009: *World Watch One* launches from the Northeast Texas countryside.

September 23, 2009: *Hephaestus* lifts from the rural Alaska, completely ruining one young USAF pilot's day.

November 2009: Treaty of Algeron between Trekkies and Warsies signed, defusing a potential civil war in Fenspace.

Winter 2009/2010: *USS Miranda* leaves on its five-year mission to take astronomical readings from locations far from Sol.

January 1, 2010: The Banzai Institute for Biomedical Research and Strategic Information established as a non-profit organization, headquartered in Irving, Texas, with a sister office in London, England.

March 2010: KandorCon: First formal Convention; treaty between the Fandom Nation and the governments of Earth. Blanket amnesty given to all fen who left Earth during the hardest parts of the handwavium restrictions.

August 15, 2010: The Banzai Institute *Shuttle HB88*, better known as the Jet Car, makes its maiden flight. Airspace is violated, windows are shattered, and the speed of sound is broken. The Blue Blazer Irregulars realize one of the Jet Car's quirks firsthand. Three weeks later, the Jet Car is stolen for the first time by an attendee of the 2010 Burning Man Festival at Black Rock, South Dakota. The Blue Blazer Irregulars retrieve the car and depart the festival on Monday; on their way out, they set a personal record of 400 mph before taking off.

Summer 2011: CrystalCon is held in the just-completed skycity of Crystal Kyoto, Venus.

March 31, 2012: Less hidebound elements of the US Navy (and the last action of a retiring Admiral) launches *USS Stingray* (SSN 2161-X), a black project that was willing to deal with fennish quirks.

April 20, 2012: The *SS Grover's Corners* lifts off from West Virginia, which plunges the United States into a new round of antihandwavium paranoia.

May 7, 2012: Suzumiya's Convention: SOS-dan calls a Convention under the emergency clause; Star Patrol founded. Operation GREAT JUSTICE begins.

MAJOR PLACES IN FENSPACE

As of the beginning of Operation GREAT JUSTICE, May 2012

Venus

Crystal Kyoto; Crystal Tokyo (a.k.a. Castle Magellan – Senshi faction home base); Crystal Osaka; Crystal Paris; Crystal Seattle

Earth

Australia: Avalon & Point Wilson Aerospace & Aqua port, Melbourne; "Orbital Air" head office, Perth; Kingsford Smith International Spaceport, Sydney

New Zealand: Wellington International Spaceport, Wellington

Luna

Kandor City: the Metahuman Power Biomodification Research Institute (Supers faction home base); Kandor City Hospital; the Watchtower (oldest part of the city)

Sea of Serenity: Senshi "Moon Kingdom memorial base" outpost

Tranquility Base (a.k.a. Port Luna): US Coast Guard base

Moonbase Alpha (an underground complex specializing in hazardous wastes)

Near-Earth space

Babylon .5

Earth-Luna L3: Grover's Corners

Earth-Luna L4: TSAB Station *Benjamin Franklin*

Earth-Luna L5: free station *Stellvia*, Warsie station *New Yavin*

between Earth and Mars

The Island (the largest shopping mall off-Earth)

Mars

Castle Wulfenbach

Helium (beside the Valles Mareneris – Barsoomian faction home base)

Mos Eisely

Utopia Planitia (Trekkie faction home base)

areosynchronous orbit above Utopia Planitia's meridian: *Starbase 1*

Phobos: Port Phobos

The Belt

Greenwood (Rockhounds head office)

Hephaestus

Hogwarts (Wizarding World faction home base)

Pirate Island (a.k.a. 6565 Reiji – Pirate faction home base)

Village of Hidden Asteroid (a.k.a. 498 Tokio – Ninja faction home base; Ninjaburger head office)

Jupiter

Ganymede: Whedonite domed towns; Heinleinian Juvie "farmers in the sky"

Saturn

Mimas: Warsie base *New Coruscant*

Trans-Neptunian Objects

Hades (usually at Pluto-Charon L3; studies The Limit)

The Limit: sphere approximately 40AU from Sol where FTL travel becomes possible

Comet mining stations in the Kupier Belt

Alpha Centauri

Starbase 2

IMPORTANT FACTIONS

For more detail and a more complete list of factions, see ***Factions of Fenspace***.

Major Factions (sorted by size)

Unaligned Fandom (*Neutrals, Generalists, Damn Neutrals*): Not really a "faction" as such, but the unaligned fen make up nearly 40% of the total population.

United Federation of Planets (*Trekkies, Trekkers*): One of the oldest, largest and best organized factions, the Trekkies are also the only faction to date with a permanent interstellar base. (Starbase 2, Alpha Centauri A IV) They're putting all their energy into second-generation handwavium research, trying to hammer out the worst of the quirks and establish a functional mass production line.

Galactic Republic (*Warsies*): The second-largest of the organized factions. The Warsies are also more militarily inclined, organizing along "Alliance Clone Trooper" battalions and engaging in exercise maneuvers to keep their edges sharp.

The Wizarding World (*Wizards, Potterites*): Not a faction most people would think was the third-largest one in Fenspace – Harry Potter is fantasy, after all – but the crackdowns on private ownership of "magic" handwavium forced a mass migration of Potterites to Fenspace. Wizards tend to set up their own districts in larger settlements and stations, while the leadership and teaching of new wizards is done at Hogwarts, in the Main Belt.

Interstellar Alliance (*Fivers, Rangers*): The Fivers are Fenspace's natural diplomats. Whenever there's a dispute between two factions, you'll find a Fiver in the middle trying to mediate and making a mess of things. Highly dispersed as a fandom, appearing in ones or twos though the general population. Rumors that they get their marching orders from Babylon .5 cannot be confirmed or denied.

Independent Faction (*Browncoats, Whedonites, Jossies*): The smallest of the one-fandom major factions, the Jossies are few but deeply devoted to their cause. In emulation of their icons, they've set up in the Jovian subsystem.

Crystal Millennium (*Senshi*): A coalition of "action girl" fandoms. The Senshi and the other magical-girl fandoms are at the top, combined with Buffy fans, Xenites, a handful of Dragonriders and a small contingent of mecha pilots. Their top priority is the Venus Terraforming Project.

Notable Minor Factions (sorted alphabetically)

Antis (Anti-'dane): The incredibly loosely organized (they aren't at all, really) "Anti" faction is a bundling term for those who aren't really fen, but are in space because they like weirdness and hate 'danish thoughts. An Anti may spend a week drawing from Star Trek in their projects, then turn around and put a combined B5/Star Wars spin on things, parking a Starfury in an Excelsior docking bay, and seeing nothing wrong with it. Antis are usually confused by factional rivalry.

Banzai Institute for Biomedical Research and Strategic Information (Blue Blazers): Disciples of the pulp hero Buckaroo Banzai, the Blue Blazers exist to help their fellow man. Most of the Institute's work actually takes place on Earth, where they're active in disaster relief and researching the use of handwavium for the betterment of humanity. The Banzai Institute and the Blue Blazers are not particularly factional in their factional status; it is not uncommon to see Browncoats, Supers, Trekkers, and others wearing a Banzai Institute "blue blaze."

Boskonians (*Black Hats, the Dark Kingdom, Death Eaters, Pirates, Reavers*, or less-flattering things, depending on the faction of the person you're asking): Politely, Boskonians "don't display the general ethics expected of Fen." More realistically, the Boskonians are Fenspace's criminal element. Drug-running, slaving, murder for hire... if it's anti-social but profitable, there's a Boskonian somewhere doing it for his or her own gain, and to hell with the rest of society. They're not really an organized faction - at least, the rest of Fenspace hopes they're not...

Gearheads: Mecha fans, which generally break out into three more or less inter-related subfactions: Gundamites, Macross/Robotechies, and Super Robot Sentai. Transforming-robot fans are generally lumped in with the Macross fen

Heinlein Society (*Heinleinians*): The formal collection of fans of Golden Age grandmaster Robert Heinlein. While in theory the Society runs the Heinleinian show, the actual situation breaks down into three major subfactions: *Church of All Worlds* (Nesters), *Howard Foundation* (Longs), and *Space Cadets* (Juvies, Sky Farmers).

Space Pirates (*Leijiites, Buccaneers*): Free men of Space, the Pirates hold themselves to the moral code expressed by their symbolic founder, the great Captain Harlock. Known best for protecting the weak in the asteroid belt, flamboyant

dress codes and melodramatic speeches.

Village Hidden in Asteroids (*Ninjas*): Founded by a coalition of *Naruto* fans, the Hidden Asteroid is considered the finest martial-arts center in all of Fenspace. It also has the highest concentration of fenkinder anywhere save the Pot-terite districts. They have an odd friendly rivalry with the Space Pirates.

NOTEWORTHY ORGANIZATIONS

The Church of Fenspace

(also known as the Fenchurch, particularly to Londoners and Douglas Adams fans)

Religion is closely tied to culture, community, and way of life. So it stands to reason that with the mass migration of people into space, new beliefs would evolve...or get created, as the case may be. The Church of Fenspace generally subscribes to the creation doctrine, on the basis that God clearly has a sense of humour.

The Church of Fenspace is the largest Christian organization existing off-planet, and the only one recognized by Christian churches back on Earth. However, "recognized" might be a strong term: the Vatican and several Protestant bodies regard the Fenchurch as a full-fledged denomination, albeit a strange one; many others denounce them as a cult, or worse. The actual situation is somewhat problematic, because "organization" is a bit of a stretch when describing the Fenchurch. "Organization" tends to be lacking in any Fen endeavor, and the Church is no exception. Individual worshipers vary greatly in their theology and conduct. In practical terms, the Church of Fenspace is pretty much a catch-all category for any Fen that professes to be Christian.

Conventions

The Convention is Fenspace's great experiment with direct democracy. The majority of fen come from Western liberal nations, so, despite any problems with mundane governments, most of them don't see government in and of itself as a bad thing. However, the scope of Fenspace – stretched out over the entire solar system – makes maintaining a central government difficult at best. Factional governments provide a local solution to this problem, but the factions can only work within their own fandoms, and 40% of the population aren't part of any faction.

The Convention formed out of the World Science Fiction Convention (or Worldcon), the oldest and most significant science fiction gathering in the pre-handwavium world. Worldcon was not just a meeting of fen, it was also one of the major business conferences for professional genre writers, giving it a veneer of serious undertakings.

Working Conventions are called once a year, the time and place determined at the previous meeting. As many fen as the designated meeting area can hold will make their presence known. People unable or unwilling to come will have limited interaction through the interwave.

Convention work takes place over several days after the opening, in the panel tracks. A Convention will have the usual fan- and genre-related panels, but it will also have panel tracks that feel more like congressional committee hearings. This is where Fenspace-spanning laws, interfactional and international agreements, etc. are drafted, redrafted and debated. Once the legislative panel tracks have concluded, the information is collated and sent to the Convention organizers, who then spend a day editing and arranging it into something resembling a mundane body of laws. This final Convention document is then distributed to the membership for review before a vote, which takes another day. The vote

is done by ballot or voice for attending members and secure interwave connections for non-attendees. Once the vote is concluded, counted, and announced, the organizers announce the date and place for the next Convention, there's one last big party and the fen head home for another year.

Any measure voted on by a Convention is considered binding by all members of the Convention, which by the nature of the thing means "all residents of Fenspace." Even non-attendees are allowed to vote on the

Convention Timeline:

2007: *Worldcon Yokohama*, not a Convention in the Fenspace terms, but the first public demonstration of handwavium.

2008: *Worldcon Denver*, last of the traditional World SF Conventions.

2009: *Worldcon Floating Island*, the first true Convention where the Fenspace standing constitution was ratified by the major factions.

2010: *KandorCon*, the first Convention to make solid diplomatic connections between Fenspace and Earth; the Kandor amnesty pardoning the original fen for handwavium-related crimes was signed here.

2011: *CrystalCon*, held in the just-completed skycity of Crystal Kyoto, Venus.

2012: *SOS-Con*, first Convention held under the emergency clause.

final document, and accepting it is much like accepting an EULA; even if you didn't read it you accept the terms of the agreement. This cuts down on the number of fen who think Fenspace's open border means complete freedom to do whatever. No major faction avoids the Convention, and they all enforce the enacted rules.

Conventions are rarely called off the annual plan – the organizers are careful to keep them spaced roughly one year apart. However, a clause in the standing Fenspace constitution allows a Convention to be called “by any group during a time of extreme crisis.”

Hermes Universal Deliveries

Formed because “it seemed like a good idea at the time,” the company was the first to capitalize on Fennish materialism and desire to be able to order takeout when still in orbit but doing “Something Important.” In a short while, both scope and range of effective delivery increased, and the original group started contracting out and networking with other Fen in a position to do the same. As a result, and after hiring on the first dozen or so “retaining members,” it became the first organized logistics company in space.

When anti-handwavium laws began to make the rounds, 'daneside relations with the US and most of Europe were discontinued, and business rerouted through Australia. Their 'daneside office is attached to Kingsford Smith International Spaceport.

Currently, Hermes consists of offices on Phobos, in Venus orbit, and on The Island, a steady flotilla of nearly three dozen smallcraft, five larger utility haulers, and a space-train, with more in production and a standing subcontracting offer for indie Fen.

The Metropolis Project

The Metropolis Project is a long-term plan to create an essentially AI homeland. Built around the large industrial complex on 74 Galatea, currently named Alphaville, which is being used as home base of a waved car-factory, communications satellite and oil tanker. Funded by and the brainchild of three Fen industrial concerns, it is hoped that with the building of Metropolis, the AIs of Fenspace will be integrated into a greater fendom and walk hand in hand with to a finer future.

Ninjaburger

Ninjaburger is the second-most profitable venture of the Village Hidden in the Asteroids, and one of the few subculture references physically implemented in Fenspace that is properly licensed with its owners in the 'Danelaw.

Ninjaburger existed in some form or another for several months before it went “public,” supplying cup ramen and cheeseburgers to workers building what would become the Village Hidden in the Asteroids. In 2009, Ninjaburger took on the mammoth job of catering to Worldcon Floating Island.

It wasn't until Kandor-Con the next year that Ninjaburger reconciled with the trademark owners back in the 'Danelaw, but once the legal status of Fenspace was adjudicated, the Ninjaburger Corporation licensed the rights to use the name indefinitely for a hefty cash sum. These days, Ninjaburger is a fixture, operating from “secret bases” (sometimes literally) and mobile shop-fronts (the infamous bright yellow buses) to deliver Ninja Burgers, Samurai Chicken Sandwiches and three different flavors of ramen to any fixed location in the Solar System except Earth (but including Danelaw spacestations) and to most mobile locations, although the latter do take a bit longer. How they track their target, customers is explained only as “Ninja Magic, honorable customer.”

THOSE MAGNIFICENT FEN AND THEIR FLYING MACHINES

Noteworthy Fen and Fendanes

For a more complete and more detailed list of Fen, see *People of Fenspace*.

“Blackstone”: Reluctant leader of the Blue Blazer Irregulars.

Col. Stephen Caldwell, USAF: Commander of TSAB station *Benjamin Franklin*, ranking American military officer and head of the United States Air Force contingent in Fenspace.

Cmdr. Tom Dodge, USN: Captain of the USS *Stingray*, the United States Navy's presence in Fenspace.

S. Malaclypse Fnord: Captain of the USSR *Ptichka*, and by default the SMOF's SMOF.

Jonathon Helscher: Self-appointed historian of Fenspace.

Chris Marsden: CEO of Rockhounds, Fenspace's major asteroid mining company.

"Mr. Morden": Fenspace's best-known "fixer".

The Professor: Fenspace's preeminent Mad Scientist.

Benjamin Rhodes: One of the top men on the Fenspace racing circuit.

Katz Schrödinger: The first Fan into space.

Noah Scott: The richest SOB in Fenspace, and the outright owner of space station *Stellvia*.

Haruhi Suzumiya: Probably a biomodded Fan, maybe something more... but definitely the guiding force behind Operation GREAT JUSTICE.

Wire Geek: The person in charge of foundry *Hephaestus*.

Eric Zhu: Leader-for-life of *The Island*, Fenspace's leading rest stop and shopping mall.

Noteworthy Fenships and Stations

For a more complete and more detailed list of ships and stations, see Ships of Fenspace.

Candy Apple Red's: A "station of ill repute," of very good repute.

Galaxy Express 999: The first locomotive train in Fenspace, captained by a woman known only as Matel.

Grover's Corners: The newest and largest of the Unreal Estate.

SS Hades: The farthest station from Sol in the Solar System.

Hephaestus: Fenspace's most reliable foundry, turning asteroid ore into usable metals.

Inelegant Truth: A converted crabber, now Jonathon Helscher's mobile base.

The Island: The oldest Unreal Estate, and Fenspace's largest shopping center.

The Jet Car: The fastest Fenship in atmosphere.

USS Miranda: Built by the only wide-spread privately funded space program that would ever exist, the *Miranda* is on a five-year mission to boldly go where no Fan has gone before, and to practice some Serious Astronomy.

Mission of Mercy: Based out of Kandor City Hospital, Fenspace's first ambulance.

USSR Ptichka: The only Space Shuttle in Fenspace.

Sol Bianca: The Professor's personal transport, and a fully-equipped hospital ship.

Starbase 2: Mankind's only extra-Solar colony.

Stellvia: the closest Fen space station to Earth.

USS Stingray: The US Navy's presence in Fenspace; a 'waved Seawolf-class nuclear attack submarine.

SuperBall: Home of a pirate radio station.

SS Uncertainty: The first Fen ship ever (literally; it's a pocket cruiser).

SC Virgil Samms: The fastest ship in Fenspace, but unusable unless you don't need to breathe.

Travel Times at 0.1c (10% light speed)			
Route	mean	closest	farthest
Earth-Mercury	83 minutes 11 sec	44 minutes 28 sec	2 hours 1 minute
Earth-Venus	83 minutes 13 sec	19 minutes 39 sec	2 hours 26 minutes
Earth-Luna	12 seconds	-	-
Earth-Mars	2 hours 6 minutes	30 minutes 31 sec	3 hours 43 minutes
Earth-Ceres	3 hours 50 minutes	2 hours 9 minutes	5 hours 30 minutes
Earth-Jupiter	7 hours 12 minutes	5 hours 27 minutes	8 hours 57 minutes
Earth-Saturn	13 hours 13 minutes	11 hours 6 minutes	15 hours 20 minutes
Earth-Uranus	26 hours 36 minutes	23 hours 59 minutes	29 hours 12 minutes
Earth-Neptune	1 day 17 hours	1 day 15 hours	1 day 19 hours
Earth-Pluto	2 days 6 hours	1 day 15 hours	2 days 21 hours
Earth-Eris	3 days 21 hours	2 days 3 hours	5 days 16 hours

MISCELLANEOUS

Ship Classifications

Given the diverse sources of hardware used for space travel by Fendom, any formal vessel classification would be problematic. However, some distinction is necessary for traffic control purposes, so the major Fen ports agreed to this nomenclature. Pilots are asked to use it when identifying themselves to request landing or launch clearance. As a courtesy, some Fen list their craft's name with the appropriate prefix.

Space Craft (SC): The most common space transports, Space Craft are any spacecraft that can be landed within a standard parking lot's space. The technical requirement is "less than 18 feet along a viable direction of thrust and less

than 9 feet horizontally perpendicular to this axis, with landing gear suitable to a flat surface." Craft between 9 and 18 feet wide and less than 9 feet long will have to demonstrate that they can fly sideways with reasonable precision before anyone believes that they count as Space Craft. Most Space Craft began life as automobiles.

Space Ship (SS): In general, Space Ships are anything mobile that falls between Space Craft and Space Vessels. Modified aircraft are fairly common in this class, but probably not a majority. Typically they function as mobile homes or as medium cargo transports but many other purposes exist.

Space Vessel (SV): This is the largest of craft – heavy cargo haulers and semi-mobile stations being the most common. In general, any space vessel that has a longest dimension in excess of 250 feet is classed as a Space Vessel, and most docking facilities insist that they do not make close approaches.

Space Port (SP): A Space Port is a station that can dock Space Craft without the use of specialist gear on the part of the Space Craft. (Stations that that require specialized docking gear to allow access without EVA are unofficially designated as *bloody rude*).

Space Dock (SD): Space Docks are stations that have a reasonable chance of docking Space Ships internally. While there are no guarantees, a good-faith effort will be made to dock anything less than a Space Vessel, and Space Craft are available for ferrying duty.

Communications

Radio

As interconnections via Interwave increase, more and more individual Fen are becoming FCC compliant.

FRS/GMRS: These cheap and readily available radios operate in the 462-467mhz range, and FRS is theoretically unlicensed by the U.S. FCC. Almost all FRS/GMRS radios started as handhelds, though many have been "modded into" installations or vehicles.

CB: Citizens Band radios, operating in the 26.965-27.405mhz range. The diversity and commonality of CB equipment meant that a fairly large chunk of 'Fen brought one with them. Handheld, "Mobile" and "Base" units are common.

Cellular: Cellphones came up as well, and surprisingly, many of them work. Many of the larger permanent structures are cell sites. Cingular wireless has moved into orbit as well, and has behaved surprisingly well, after a few complaints to begin with. Cingular's "sky prices" are actually somewhat cheaper than groundside. Cingular sites may be found at *The Island, Stellvia, Phobos, SV Gnarlycurl, Hephaestus*, and many of the permanent communities on Mars.

British Telecom is also "up," and has a storefront on Stellvia as well as a "roaming" agreement that allows their GSM users to participate on the far-more-widely deployed Cingular network. BT has identical pricing between their terrestrial and Fen offerings.

Amateur Radio: The massive amount of frequencies and equipment available to even an entry-level licensee, as well as the "*Hephaestus Grant*" (*Hephaestus* resells many brands of amateur radio gear at or below cost), have contributed to the acceptance and spread of the licenses and equipment. Also a factor is the FCC's attitude that "*General Mail, Stellvia, L5 Earth-Luna*" is a perfectly valid address for licensing purposes.

FTL Communications

In open space, radio signals travel at the speed of light. This causes problems involving communications lag. A number of Fen inventors have developed their own FTL radio systems; each is a bit different, but they all operate on the same principles as FTL travel.

The "standard" FTL radio in Fenspace has an estimated signal speed of 10,000.0c, bridging the gap from Earth to Pluto in just over a second. The FTL system's reliability and available bandwidth depend on what was handwaved to create the FTL transponder in the first place.

The system that's achieved the greatest penetration is the Interwave. Interwave transmitters are large and power-hungry, but provide enough bandwidth to act as the backbone for FanNet. Some notable Interwave nodes exist at Crystal Tokyo, Earth, Tranquility Base, *Stellvia, The Island, Grover's Corners, Mars, Phobos, Starbase 1, Starbase 2, Hephaestus*, and *Greenwood*.

Communications Security

Usually, there is none. Aside from cellphones, almost all public communications in Fenspace are unencrypted FM signals, providing very high voice quality. For those wanting privact, cellphones use an encrypted digital transmission scheme, while secure comms can use any number of encryption or obfuscation techniques, usually AI moderated. The most common method of "mediating" between different communications types is to have an AI take care of it.

Data Communications

While most of the previously named methods are almost exclusively voice, there can occasionally be heard a “data-burst,” sounding like a USRobotics modem being fed through a garbage disposal. This is usually two AIs communicating at high speed.

Then there’s the Internet. Shortly after it was clear that long-term habitats outside of Earth’s atmosphere were both here to stay, and connected, the IANA assigned the .space TLD. This met with resounding indifference. Applications for other TLDs were processed, and the current list of TLDs that are only available for people and organizations whose primary operations are off-planet is .merc (Mercury), .venus (Venus), .or (Earth orbit), .luna (Luna), .lib (Lagrange or Libration points), .mars (Mars and moons), .belt (Asteroid and Kuiper belt), .jup (Jupiter and moons), .sat (Saturn and moons), and .fen (for all things fennish and off-planet). The first .fen domain, Kandorcon.fen, went active January 10th, 2010.

ABRIDGED GLOSSARY

Acceleration Drive: A drive based on the concept of maximum acceleration, not speed. Fairly rare among the Fen. All Hard Tech spacecraft drives are acceleration drives by necessity.

Biomod: 1. n. Anyone who has ingested enough handwavium to trigger a one-time mutagenic reaction. Quite indeterminant in outcome but not typically fatal or crippling. 2. n. The result of any such mutagenic reaction. 3. v.t. To cause a mutagenic change in a living creature using handwavium.

Blue Blazer Irregulars: Followers of the teachings of Buckaroo Banzai, as set down by Earl Mac Rauch in *The Adventures of Buckaroo Banzai: Across the Eighth Dimension* and by W.D. Richter in the movie of the same name.

BNF: Big Name Fan. A fan who, as a result of his hard work and obsession, has developed his own fandom. In Fenspace, much the same, although Fenspace BNFs tend to have influence on matters of import and policy.

Boskonians: (Also *Black Hats*, *Death Eaters*, *Pirates*, or *Reavers*.) Pirates who don't display the general ethics expected of Fen. Term originated with Doc Smith/Lensman fandom.

Broadleaf: Notional source of thionite, the exact nature and origin of which is not yet completely determined, although authorities are confident it comes from Venus. Term originated with Doc Smith/Lensman fandom.

Cochrane Limit: The distance from a star, or other massive object where FTL travel becomes possible. For Sol the radius is about 40AU. More commonly called the C Limit, or just the Limit.

Colonials: Faction who are fans of *Battlestar Galactica* (both new and old, although the two subgroups don't always get along). Various members are trying to build Vipers, a Battlestar, and robot drones that look like Cylon Centurions.

Convention: The closest thing to a government possessed by the Fen. An annual gathering descended directly from WorldCon is held to modify, ratify and reassert what little law exists off-Earth. Furthermore, Conventions can be called by anyone in times of emergency.

Cybers: Folks who use 'wavium for prosthetics/kludged cybernetics. Vehemently a different faction from

"Cyb0rz." Poorly designed 'wavetech cybernetics turn into biomods.

'Dane: See *Mundane*.

'Danecrat: 1. (n) Government official of an Earthside or non-fannish nation. 2. (adj) Behaving in an authoritative and non-fun manner; ex.: "Quit being all 'danecrat, you're harshing my mellow." (syn. *'Danemagogue*.)

'Danelaw: short for *Mundane Law*. Refers to regions subject to the laws of terrestrial governments. Usually means the Earth and all regions within the bounds of the Van Allen radiation belts although there are enclaves on either side. It is not by coincidence that it mirrors the name for the northern, central, and eastern region of Anglo-Saxon England colonized by invading Danish armies in the late 9th century.

Faction: (Also *fraction*.) Any of the various organized fandoms that made it into space and operate as a semi-coherent group.

Fen: Notional plural of "fan," formed by analogy to "man/men." Standard usage within science fiction fandom for more than half a century. Since the early 2000s it also refers to the off-Earth culture that makes extensive use of handwavium.

Fendane: 1) (normal) Someone not a Fan, not a Mundane but somewhere in between the two. Most fendanes are individuals with an interest in Fandom but no access to handwavium or Fenspace. 2) (derogatory) Term used to describe a Fan whose loyalties remain with 'Danelaw powers.

Fenkinder: Children of fen, or children who are fen, who have made it to Fenspace. Anyone above the atmosphere and under 18.

Fenspace: Virtually everything between the top of Earth's atmosphere and the Cochrane Limit. Known space. Home to the Fen.

Fivers: Term for faction based around *Babylon 5* fandom.

Gearheads: General "Ain't-it-cool" Mecha fans. As a whole, undifferentiated giant robot fans. Inclusive term.

Generalists: As opposed to the specialist, single-fandom type, these are the jacks-of-all-trades of fandom. They do have favorites, sometimes a lot of them. They're just not as into any single one as a specialist fan might be, sacrific-

ing depth for a wider range of scope.

Gondola: Colloquial for a Fenspace vessel intended primarily for passenger runs along scenic routes, like the Cloud Seas of Venus or Saturn's Rings, to name a couple.

Gondolier: General description for the sort of easy-going, likable Fen who are naturals at playing tour guides around the Solar System. Those with the best reputation and presence are known as Undines.

Groundbounder: Teenaged rebellion, fen-style. Rejection of the Fenspace lifestyle in favor of a desire to live on Earth.

Guacamole: Semi-solid, semi-organic strain of Handwavium accidentally formed by seeding a bowl of dip at a convention. The primary known agent for biomodding. Also called green goo.

Handwavium: What lets everything interesting happen. A strange substance of indeterminate origin that when mixed with mundane technology can give it strange and useful properties.

Pure samples are capable of self-replication, albeit rather slowly and with some odd limits. There does not appear to be much if any danger of a Grey Goo disaster. The exact methods by which it works remain unknown.

Illegal to manufacture and use in the 'Danelaw.

Has any number of names, including *Plot Tech*, *Plotdevicite*, *Protoculture*, etc.

Hard Tech: Technology that does not require Handwavium to work. Also called *Solid State Tech*. What the 'Danes insist on using.

Heinleinians: Faction based around the works of Robert A. Heinlein.

Honey: (also *Mnemosyne's honey*) Name given to a "memory" strain of handwavium created by the Jason. Takes its name from its appearance, that of a thin, dark honey. Used in enhancing/creating data storage devices. What effect it might have on biological memory has yet to be fully explored.

Jossies: Alternate term for the Whedonite faction.

Kaboomite: Explosive of uncertain and unstable composition invented/produced by the android Li Kohran. Believed by some to be proof of the existence of Weapons-grade Handwavium.

Karasukage: (trans. "Black Shadow") The leader of the

Village Hidden in the Asteroids. The Shodaime Karasukage is Ivan "Maitovich" Solkin.

Kuni no Karasu: (trans. "Black Country") Hidden Asteroid nomenclature for parts of the Solar System distant from the actual planets.

LandTheft: Increasingly common term in the 'Danelaw for Unreal Estate, based on the argument that while land can be owned by individuals, removing it from the Earth is effectively stealing it from future generations - and (more importantly) eternally depriving whatever jurisdiction it came from of any future tax revenue on it.

Lensmen: Faction based around E.E. "Doc" Smith fandom. Technically a subset of the Pulpers, but they hold themselves separate from the other Golden Agers.

Limit, The: See Cochrane Limit.

Limit Break: Going FTL inside the Cochrane Limit. Considered the holy grail of engine research in Fenspace.

Mundane: Not fen. Person or persons uninterested in science fiction, fantasy, anime, space travel or anything else much beyond working a 9-to-5 job and amassing money, status and power. Among fen it carries connotations of being hidebound and reactionary, willfully dull and unimaginative, and possessing a determination to make sure everyone else is that way, too, except when doing so interferes with making money and/or amassing power.

Overfan, the: Hypothetical inventor/distributor of Handwavium. A mythical figure to whom all manner of powers and intentions are attributed. Speculation as to the Overfan's identity runs rampant, with the Professor most frequently named - he could have created the stuff and then completely forgotten having done so.

Paying 'Danegeld: 1. (v) Submitting to taxation and/or regulation by a 'Danelaw entity. 2. (v) To openly espouse loyalty to an Earthside/Mundane government.

Pirate: Fen faction who play at being mean, nasty space pirates, but who are actually quite nice, honorable folks. They get very upset when people call Boskonians "pirates."

Pirates' Code: The informal standards of the Space Pirate fraction. Broadly: be one of the "white hats," stay true to yourself and defend your ideals, live free or die trying.

Pratchett's Law: "Million to one chances happen nine times out of ten." One of the leading explanations for the

large amount of unique and useful Handwavium effects and the difficulty of reproducing them.

Prime Time Directive: "Put Things Back Where You Found Them."

Principia Universalis: In the same way that anyone can claim to be Discordian (hardliners disagree, and are summarily ignored), every Fan can claim the Principia Universalis and the Discordia Accords if they run across a situation they need some legalese or religious wiggle room to get out of. Within reason, of course (blatantly amoral acts don't fall under the Accords, and neither does slave-trade, Reaver-ism, and so on). If the situation can't be resolved by the Accords' invoker, a friendly branch of Her Church is willing to send negotiators to aid those in need by ways of debate and legalese-nonsense-induced confusion. It's not just a faux-belief. It's a state of being.

Pulpers: Faction based around Golden Age (and Golden Age-style) SF. Overlaps a bit with other factions/fandoms, including Warsies and Fivers.

Score (n., from *obscure*): A fan who follows a particularly obscure fandom.

Senshi: The Sailor Moon (and other Magical Girl or Girl Power) fandom. The cadre of the Venus Terraforming Project, their population is centered at Castle Magellan.

Slapstick Effect, The: The apparent inability of any 'Wavetech device to seriously harm a human being, regardless of its normal potential lethality. 'Wavetech miniguns, bombs and other weapons leave their "victims" soot-encrusted and stunned, but never actually damaged. Property, on the other hand, is not usually so lucky. This is believed by many to be definitive evidence of a Higher Purpose and origin for handwavium.

SMOF: "Secret Master(s) of Fandom." Faction leaders, either formal or informal.

SOS-con: The emergency con called by the SOS-dan.

Space Rock: A space station or other craft built from a hollowed-out asteroid. Frequent final product of asteroid mining schemes. In the proper orbit with a bit of renovation, often worth a good fraction of the value of the mined metals. Brokerage of said metals, and the Space Rocks, is the primary business of Rockhounds, Inc.

Speed Drive: A ship's drive that works based the concept of absolute speed. Most ships in SF and space opera on TV and in movies use speed drives.

Solids: Also sometimes referred to as Solid State Handwavium (not to be confused with Solid State Tech). There is speculation that this is simply an odd strain of Handwavium that crystallized. Exhibits many of the behaviors of its non-solid "cousin," as well as individual peculiarities such as, for example, having a power output.

Swede: *Syn.*, Fendane. Punnishly coined based on the reasoning that the Swedish are between the 'Danish and Fennish.

Technomages: Subfaction of the Fivers, who take their inspiration from their namesake. Usually work and play well with the Wizards.

Thionite: A drug derived from a plant notionally termed broadleaf and including microscopic quantities of Handwavium (not enough for a biomod effect without lethal doses). Rare and extraordinarily expensive. Like its namesake, it is overwhelmingly addictive and destructive. Term originated with Doc Smith/Lensman fandom.

Trekkies: Faction based around *Star Trek* fandom.

Trekkers: Alternate name for Trekkies. Usually used by factional leaders or BNFs who take themselves way too seriously than is healthy.

True Neutrals: People not tied to any one particular fandom, at all. They honestly don't have any favorites, but just enjoy it all.

Universal Adapter: Handwaved roll of duct tape. 'Nuff said.

Unreal Estate: Fen term for stations (and ships) like the *Island* and *Grover's Corners* – chunks of land that were boosted into space, and are still recognizable as Earth soil.

Warsies: Faction based around *Star Wars* fandom.

'Wavetech: Technology made with, or improved by, the application of handwavium. It works, but is notoriously quirky. Used mostly by people who don't mind if their toaster starts conspiring with their microwave to get them to eat better.

Whedonites: Faction based around fandom of Joss Whedon's *Firefly/Serenity*.

Wizards: Small but vocal *Harry Potter* faction, possessing a disproportionately large number of fenkinder. Allied with both the Senshi and the Fivers (who lump them in

with the Technomages).

Xenites: Xena The Warrior Princess fandom, a distinct subfaction of the Senshi.

Zwilnik: Dealers in narcotics, particularly thionite. Term originated with Doc Smith/Lensman fandom.