

Table of Contents

Level 13	907
Through the Never	907
➤ Then Never Comes.....	907
➤ The Air You Breathe.....	908
➤ Never Achievable	908
Send the Enterprise!	909
➤ Heard it Through the Grapevine	909
➤ Prime Timeline	910
➤ Dead Before the Opening Credits	910
➤ Punk Wood	910
Colonization	911
➤ Sardine Tins	911
➤ Colonies in a Can	913
➤ Canned Food	913
➤ Opening the Can Of...	914
➤ ...Vienna Sausages.....	915
Desperation	916
➤ La Bestia	916
➤ The Carricks of Whitehaven	917
Endnotes.....	918

See Appendix EXP – Expansion & Colonization Example
See Appendix IMT – Interstellar Movement Table
See Appendix T&C – Taxation & Census Example

*“On through the never
We must go
On through the never
Out to the
Edge of forever
We must go
On through the never
Then never comes!”*

– Metallica, “Through the Never” (1991)

Level 13: If participants wanted to add occult to a GGDM game, the movie *The Risen* (2017), and especially the ending, provides a good starting point. The puzzle-mystery-building part of the movie is important; the Concierge might be able to execute something similar in game. I do admit that I thought the dialogue sounded a little off and the fight scenes were oddly clunky (but not worse in either case than most RPG sessions), but I liked the movie – as for reviewers, they were mixed with some being very cruel and condescending as usual, and as usual, audience reviews were generally kinder. The movie seemed to be a live-action descendent of board games like *Level 7* (2010) and *Tannhäuser* (2007). I was also reminded of my first cooperative board game, *Vanished Planet* (2003) and even somewhat of the movie *Event Horizon* (1997).

- ✓ I wonder if the writers of *Event Horizon* (1997) were listening to “Through the Never” (1991) on repeat? Fan music video: “Through the Never”/Event Horizon.
- ✓ “Never mind that noise you heard, it’s just the beasts under your bed, in your closet, in your head!” – Metallica, “Enter Sandman” (1991).
- ✓ “The first time I ever saw a horror movie, I think I was in middle school, and we watched ‘I Know What You Did Last Summer’ and ‘It’ at a slumber party.” – Jessica Rothe (actress).
- ✓ See also *DEATH OF A YOUNG GROUNDHOG*, 4 Fallen to Earth, p. 1551, *infra*.

Through the Never: Any *Scout Ship* that:

- 1) Departs from any system (no Scene required),
 - 2) Whose destination is a system that does not have a supporting colony,
 - 3) Must do so by activation of the Expansion Power for the purpose of Scouting.
- **Then Never Comes:** Whenever a Scout (or any non-warship) arrives in any starsystem unexplored by its owner, a ten-sided die must be rolled, exploration attempts are automatic and do not require a separate Power Activation. ***Each ship entering at the same time must make a separate roll.*** On a result of 1-4 (or 1-5 for any other non-warship that may accidentally find itself in an unexplored system), the Scout is destroyed by unknown hazards in the system, or because the Scout’s systems failed, or just because whatever. If at least one Scout (or ship) survives the Hazard Roll, the system is automatically explored and planetary and other information is received for the system. See 2 Information generally, *infra*, regarding what information is received in GGDM. Additionally, a star must be placed on the Scout owner’s Public Space and the Scout is then placed on the star. Planets of the system are not placed on the Public Space until they are colonized or conquered.

- ✓ As noted previously in Exploration, 1 Expansion, p. 876, *supra*, Scout Ships are considered to have Constructural Elements and thus can benefit from Enlightenment in Hazard Rolls if the ship's Epistemological Constructural Element is active. Enlightenment must be assigned/attached to a Scout Ship individually whenever the Expansion Power is activated for the purpose of Scouting in order to be used during Hazard Rolls or Combat. It will be subtracted from the Colleges and remain with the Scout until a Hazard Roll (or Combat) situation causes it to be used or the Scout is destroyed.

Use of Enlightenment for Scouts is a trickish issue. A Scout that is destroyed is no longer out there and must be replaced with a new Scout, which must be constructed and moved to the frontier. A position that has lost most of its Scouts suffers a 'Scout drought' and is blinded; this is a situation that used to occur frequently mid-game in the Stellar Conquest board game. The use of Enlightenment on Scouts might help with surviving the poking around part. Scouting isn't 'honey badger don't care'! Scouts do take care.

- The Air You Breathe: It does not matter how many times the system has been explored by other positions previously, *the process of exploration is individual for each position due to the unique Native Population Type of each position's species (ut supra)*. The first time a system is explored, the Concierge will establish the number of planets in the system, which could be from zero to ten, and the orbit numbers those planets occupy. This data is completely objective, all positions exploring a system will see the same number of planets and the same orbital information; what is relative to the species is the other half of the planetary data: Each species will see only their own *subjective* Habitability Class and Maximum Habitability data for each planet. See Habitability and Day World, 3 Taxation & Census, pp. 315-316, *supra*.
 - ✓ As noted previously, the game does not naturally look for details beyond orbit number (for reference) and Maximum Habitability and Habitability Class; e.g., the game does not make a record of moons, asteroid belts, or solid or gaseous planets, or whether moons are habitable or made of blue cheese.
 - ✓ It is quite possible and quite probable for two positions to have completely different data on a planet, one may see it as a Garden of Eden, the other as the Gates of Hell. It just depends on the air you breathe.
- Never Achievable: Exploration is the primary culprit of spatial injustice in GGDM; there is, and is not intended to be, anything fair about it. It is probable during the game that some positions might have better or worse luck in finding colonization sites; they might be squeezed by decisions of other positions to expand in their direction, or they may have bad luck with Hazard Rolls that mean other positions get there first. The Concierge should avoid Intervention for the purpose of 'evening up' the game for any position or leveling the 'playing field' for all positions – either to aid or hinder expansion and exploration – rather, the participants should play the game out as the geography of the game develops (as any tile flipping exploration game), realizing that spatial injustice makes the game (if not life) more interesting.
 - ✓ "Perfectly even development, complete socio-spatial equality, pure distributional justice, as well as universal human rights are never achievable. Every geography in which we live has some degree of injustice embedded in it, making the selection of

sites of intervention a crucial decision.” – Edward Soja, “The City and Spatial Justice,” JSSJ, January 2009.

- ✓ See also ‘fairness’ discussion, Balancing the Pin, 2 Patents, p. 735, *supra*.

[Dr. Who opening monologue]

Question: *why do we talk out loud when we know we’re alone?*

Conjecture: *because we know we’re not. Evolution perfects survival skills. There are perfect hunters. There is perfect defense.*

Question: *why is there no such thing as perfect hiding?*

Answer: *how would you know? Logically, if evolution were to perfect a creature whose primary skill were to hide from view, how could you know it existed? It could be with us every second and we would never know. How would you detect it? Even sense it? Except in those moments when for no clear reason, you choose to speak aloud. What would such a creature want? What would it do?*

[Later] *Suppose that there are creatures that live to hide. That only show themselves to the very young or the very old or the mad! Or anyone who wouldn’t be believed.... “What’s that in the mirror, or the corner of your eye? What’s that footstep following but never passing by?”*

– Dr. Who, “Listen” (2014)

Send the Enterprise!: Warships may be used for exploration; Cargo Ships and Colony Ships are each respectively limited to destination systems that have a supporting colony (Cargo Ships) or that have a Scene (Colony Ships), thus can never be sent to an unexplored star by operation of the rules (e.g., see Colonization, 1 Expansion, p. 876, *supra* and Cargo Ships in Combat and Green Goods, 1 Commerce, pp. 1186, 1188, *infra*). Warships departing for any destination that does not have a supporting colony, must do so by activation of the Combat Power for the purpose of Combat Movement (see Move Out!, 1 Combat, p. 942, *infra*). Warships have a better chance than Scouts of surviving the hazards of exploration, but they are limited by current Operational Flight Limitations (OFL) and Operational Supply Limitations (OSL). Thus, a program of exploration with warships only would be slow and expensive, requiring the constant establishment and protection of new, sprawling ‘grapevine’ colonies to support the warships. But it may be a good or necessary strategy in some instances.

- ✓ Curiously, the peaceful near-utopian Federation always sent a warship commanded by a loud-mouthed, tin-plated captain with a star-system-sized ego “to explore strange new worlds and seek out new life and civilizations.” But not Klingons, of course, the Federation is prejudiced against Klingons. The Enterprise was eventually hauled away by a garbage scow.
- **Heard it Through the Grapevine:** ‘Grapevine’ colonies existed in the original Stellar Conquest board game (e.g., James G. Branaum, The Space Gamer #25, November 1979); they are small colonies placed at strategic stars to provide a supporting colony for interstellar flight Power Activations that require a supporting colony at the destination system. These outposts also provide a place to return before OSL expires and serve as a ‘tripwire’ when other position’s ships enter the system.

The concept soon became common language in sci-fi gaming:

- ✓ “Rather than moving the facility, Lucan increased its defenses, placing a small fleet in the system and several tripwire flotillas along likely avenues of approach. ... Dulinor, swinging through Massilia to come at Lucan from an unanticipated direction, swept aside Lucan’s screening forces in several short engagements. Although each battle was a clear victory for Dulinor, each trimmed his fleet back by a few more irreplaceable vessels, and the warning given by the screening forces gave Lucan time to assemble his reserves at Omicron...” – Dave Nilsen, “When Empires Fall II,” Challenge Magazine, Issue 69, February 1993.
- Prime Timeline: Participants may envision exploration with warships as being something akin to the missions of the Enterprise in the Star Trek Prime Timeline. However, the Federation’s warships were designed – along with officer training, crewing, and institutional outlook – for the dual role of combat and exploration and had the supporting technology for that mission whereas, *in GGDM, warships are mainly warships*, are warships first (like Klingon Birds of Prey), thus the support requirements. Fans of the franchise lamented the dark ending of ST: Deep Space 9 series and the ‘militarization of Starfleet’ brought about by the Dominion War. According to Memory Alpha wiki, in the post-millennial Star Trek reboot Kelvin Timeline (Star Trek: Into the Darkness) the Federation did have a Dreadnought-class ship, an AI-powered, minimum crew, heavy warship-only designed with the assistance of Khan Noonien Singh. Thus series drift into loud, colorful militant space opera continues.¹
- Dead Before the Opening Credits: Each warship entering an unexplored system must make the same Hazard Roll as Scouts. The difference is, that if a warship fails the Hazard Roll, it may reroll the Hazard Roll (the only time a warship is ‘enlightened’!), and is only destroyed if it failed all Hazard Rolls. A 1st Era Warship must reroll once if it fails the Hazard Roll, a 2nd Era Warship may reroll twice, and a 3rd Era Warship may reroll up to three times. Warship Hazard Roll rerolls stop as soon as the ship survives a Hazard Roll. As such, warships are increasingly less likely to be destroyed during exploration of new starsystems.
 - ✓ The Klingons would not have survived the encounter with the First Federation (ST:OS, “The Corbomite Maneuver”); they would have, as Lt. Bailey suggested, opened fire on the First Federation Flagship Fesarius. Klingon pride would not have accepted Balok’s xenophobic threats and overbearing bullying – because they are bullies too.
- Punk Wood: It is possible, by activation of the Combat Power for the purpose of Combat Movement, to send Log Ships to an unexplored system, either with or without escorting warships. For all Hazard Rolls, *Log Ships are the same as Scouts*, but a lot more expensive.
 - ✓ The alternative would have been to state that Log Ships may never be sent to an unexplored destination system. However, given their purpose in the game (see Logistical Support Ships, 3 Movement, p. 860 and Combat Resupply, 4 Movement, p. 868, *supra*), and that they need to be able to move with warships using Combat Movement (see Move Out!, 1 Combat, p. 942, *infra*), this would have been an artificial restriction meaning that warships doing exploration would need to go unsupported, forcing the position to spend another Combat Movement later to send the Log Ships to rendezvous with the warship after the system is explored (or bring the warship home).

“We live on an island surrounded by a sea of ignorance. As our island of knowledge grows, so does the shore of our ignorance.”

– John Archibald Wheeler, *Scientific American*, 1992, Vol. 267

Cooper: *You sent people out there looking for a new home?*


Prof. Brand: *The Lazarus missions.*

Cooper: *That sounds cheerful.*

Prof. Brand: *Lazarus came back from the dead.*

Cooper: *Sure, but he had to die in the first place.*

– *Interstellar* (2014)

Colonization: Suppose the leaders of an island village are looking for resources,² so they send a young person in a boat out to an island that can only barely be seen on a distant horizon from coastal fishing outriggers on very clear summer days. The young person arrives and sees arable land for farming, clean running streams, and trees that bear fruit and lumber. The scout also sees that no one else is living on the island, and eagerly rows back home to tell his tale. The elders are delighted, but the next problem is, how can they obtain the resources of the new island and bring them back for the people of their village? That would mean sending a working party to the island to harvest resources and bring them back to the village. Or it might mean splitting the village and sending part to the next , or moving the entire village to the next island. Either way, colonizing the next island is going to be a lot more complicated than sending a scout.

- ✓ For an interesting case study in European colonization and trade, look up the Darien Scheme (1698-1700), Scotland’s belated attempt at colonization and England’s and Spain’s machinations to block it.³ The Scheme cost Scotland (at that time, still a sovereign nation technically, but ruled by the King of England who was also King of Scotland) nearly 1/3 of its total national wealth and a significant number of its youth and tradesmen (about 2,000). The catastrophe likely contributed to the Acts of Union (1707) ten years later with payment of £398,085 10s sterling to Scotland to stabilize their economy and a fixed value for the shilling in relation to English currency.
- **Sardine Tins:** Colony Ships are the only ships that may Load and Transport population factors, the Colony Transport is the 1st Era Colony Ship. Population from any Friendly, Naturalized, or Converted colony (or Orbital City) owned by the ship’s owner, may be loaded onto Colony Ships if the ships began the Regular Turn at the location of the colony and the Expansion Power has been activated for the purpose of Loading Population. Uprooting a population from a planet (or Orbital City) and placing them on Colony Ships (or Orbital Cities) is a Herculean logistical task. Because of the vagaries of how much time is represented by a turn, how much population is represented by a population factor, politics, economics, and so forth (and the fact that some of the population might not want to be moved), a Loading Roll must be made for each population factor sought to be moved to Colony Ships or Orbital City in a Regular Turn.
 - ✓ Prior to attempting to Load the first population factor, a check must be made to see if the Expansion Power Activation for the purpose of Loading Populations is obeyed

(pursuant to Power Off, 2 Constructural Elements, p. 193, *supra*). *For this check only*, the status of the Constructural Elements on the origin colony are used, *no second check* is made for the Colony Ship(s); if the Power Activation is obeyed at the colony, Loading attempts may commence:

- The base chance of the first population being successfully loaded to a Colony Ship is 85%, and 5% is thereafter subtracted for each population that has been successfully loaded to Colony Ships at that location in the same Regular Turn.
- Positions may continue to load one population factor at a time during the same Regular Turn until a Loading Roll fails after which no more population may be transferred to Colony Ships at that location that turn. A Loading process can fail (15% chance) with no populations loaded.
- On Naturalized Colonies, the base chance is 75%, and on Converted or Conquered Colonies, the base chance is 65% with decreasing chances of success as described above. Population may never be Loaded from a Conquered Colony to Colony Ships *unless* the Conquered Colony is also Looted in the same turn (see Looting, 3 Commerce, p. 1210, *infra*).
 - See Colony Politics, 2 Order, p. 538, *supra*, regarding Colony Political Status; Political Status is the determining factor in Loading population to Colony Ships representing in this case incentives, trust, willingness (and desperation) of population.
- Loading Rolls are *location specific* to the colony and not the ships. Thus, when Loading Rolls have failed at the colony, the ships may not each attempt to Load more population. Application of Enlightenment (marketing, carrot & stick, propaganda...) to Loading Rolls depends on the status of the colony's Epistemological Constructural Element (see Skool Tyme, 2 Constructural Elements, p. 190, *supra*) and not those on any ship.
 - Failure of a Loading Roll may be interpreted as failure of political will, technical failure, refusal, resistance or reluctance of the population to be moved, ideological problems, or that time ran out in the current turn.
- A single Colony Ship or Orbital City may not contain population factors of different native population types due to environmental differences. This may, of course, eventually be overcome by technology developed during the game, but this is the baseline rule.
- Population successfully Loaded to Colony Ships will be placed on one Colony Ship until it is full, and then further successful Load Rolls will place population on the next available Colony Ship and so on. The Load Rolls *automatically fail* when the receiving Colony Ship(s) (or Orbital City) cannot accept more population (i.e. are full).
 - A Colony Transport can hold 3 population factors and an Orbital City can hold 15 population factors.

- The base chances described are just for game mechanical purposes, they have no realistic basis. The Concierge may alter the base chances; for example, evacuation of desperate populations from a doomed world.⁴

Loading population from a Balkanized planet with a non-sovereign **alien colony** may cause **apostasy** on the Colony Ship, see *Alieny Apostasy*, 3 Disruption, p. 283, *supra*.

Page | 913

- ✓ It is possible to fully evacuate, especially small colonies via Load Population. There are about a dozen ‘cat islands’ in Japan that had a population of 1,000 or less before WWII, who were either force-evacuated to the mainland for labor or migrated away after the war. Felines now outnumber humans on the islands by 10 to 1 and the remaining population is mostly elderly and declining. Caretakers and tourist feed them.
- Colonies in a Can: Population will remain on the Colony Ships until they are Landed or Unloaded; they will not grow if a Census occurs while the population is on the Colony Ships and will not produce resources during Taxation. In addition to being in population limbo, unarmed Colony Transports are extremely vulnerable in combat (they may never be armed or attack), and Colony Ships must obey all of the other rules concerning ships, including Operational Flight and Operational Supply Limitations (OSL/OFL).
 - ✓ “Eat recycled food for a happier healthier life, be kind and peaceful to each other, eat recycled food. Recycled food is good for the environment, and ok for you.” – food service drone, Judge Dredd (1995).

Population located on Colony Ships that are destroyed by any means are also lost. It is permissible to emergency Unload the population back onto the same colony that Loaded them, but this would be a monumental waste of previously-committed resources and time, and require another activation of the Expansion Power for the purpose of Unloading Population, and is generally counterproductive. Populations from Converted Colonies placed on Colony Ships **will not** automatically revert if not accompanied by a warship.

- ✓ See 3 Movement, pp. 855-856, *supra*, regarding OFL/OSL; Log Ships cannot supply Colony Ships. The underlying assumption is that populations on Colony Ships may exist indefinitely while located at a supporting colony either because a) they are frozen or in stasis, or b) their reproduction is limited to the space on the ships and they produce only what they need to survive, and have no growth or excess for taxation as a result. This is a necessary extension of the technological assumptions underlying the GGDM setting.
- ✓ Unfortunately, tuna cans and other cans that humans use, look like cat food cans to my cats. I wonder what your Colony Transports may look like to some predatory alien species? Sardine tins?
- Canned Food: Departure of Colony Ships from a system requires an activation of the Expansion Power for the purpose of Transport Population:
 - 1) A Scene is required on the star of the destination star system,
 - 2) This in turn, requires that the destination system be currently located on the position’s Public Space, and if the destination system has not yet been colonized, that would require that at least one ship be currently located in the destination system to place hold

the target/destination star on the Public Space (see On the Soapbox, 3 The Sidereal Stage, p. 122, *supra*),

- 3) This in turn, requires that the destination system has been successfully explored (pp. 907-909, *ut supra*), in order to have a guide ship waiting in the system.

Colony Ships may not depart for any system where *any* colony owned by the Colony Ships' owner is currently Besieged (see Besieged Colonies, 3 The Sidereal Stage, p. 124, *supra*).⁵ If a sovereign colony becomes Besieged while the Colony Ships are *en route*, there is no effect, except that they may need to run a Blockade upon arrival (see Blockade Running, 4 Commerce, p. 1233, *infra*) because they cannot be resupplied or Unloaded. The conditions precedent only apply to movement by Transport Population at the time it is initiated. If the destination system is removed from the Public Space or a colony becomes Besieged before arrival of the Colony Ships, they will still arrive (which will return the system to the Public Space).

Page | 914

- ✓ Colony Ships have their own Constructural Elements status, received at the time they were constructed (see Maiden Voyage, 3 Construction, p. 677, *supra*) independent of the Constructural Elements status of the population Loaded to them.
- ✓ For the purpose of determining whether each Colony Ship obeys the Expansion Power Activation for the purpose of Transport Population, the Constructural Elements of each ship are used in individual checks. If the Colony Ships are still at a Supporting Colony and fail to obey the Power Activation, a second check is made using the Supporting Colony's Constructural Elements in the same manner as described in Engines Offline, 1 Movement, p. 839, *supra*, for Movement Power Activations to see if the Supporting Colony gives them a good 'ol kick in the can (jump or die!).

There are thus two activation purposes of the Expansion Power that initiate interstellar flight: Scouting for Scout Ships (*ut supra*) and Transport Population for Colony Ships. Movement, Expansion, Combat, and Commerce are the four Powers (not to be confused with the Four Powers of the Cold War☺) whose activations initiate interstellar flight.

- Opening the Can Of...: The Unload Population activation of the Expansion Power, removes population from Colony Ships onto an existing colony (or eligible Orbital City) of their Native Population Type. Hence, there must be an existing colony.... (not the same as Landing).
 - ✓ Prior to the first population factor being Unloaded, a check is made to see if the receiving colony (*optionally*, an exception could be Low Population Colonies) and each ship involved obeys the Power Activation. These checks are made separately based on each's current Constructural Elements. If the Colony fails to obey the Power Activation no population may be unloaded to the colony and the other checks are unnecessary. If the colony obeys the Power Activation then each ship involved makes an individual check and those that obey commence downloading (note that this is different than Loading, where only the colony is checked, *ut supra*, p. 912).
 - ✓ Colonist may not be Unloaded onto a planet surface if the existing colony is at its Maximum Habitability unless there is room in Orbital Cities, and colonist Unloaded onto a planet assume the political status of the colony to which they are added.
 - ✓ Like Loading Population onto Colony Ships, there are equally problematical logistical issues in offloading population to an existing colony, for example, where will they

- live, what will they do, integrating the newcomers into the social, political and economic framework of the existing colony, inflation, prejudice, exploitation, District 9. At the least, they must have a way to live and survive.
- ✓ Despite the possible integration problems described previously, population Unloaded to an existing colony have no distinction in GGDM, are not separate in any calculation, and adopt the status of the Constructural Elements of the colony, for better or worse.
 - This is purely a concession to game convenience; for story purposes, the integration can be played out in News Events and Interventions. It may also be possible to ‘backdoor’ Cohering in this way by Unloading ‘refugee’ population from other colonies with poor Constructural Element status to colonies with better status. The ‘cohering cost’ is simply shifted to the Expansion activations, any gain would be minimal.
 - ✓ Therefore, an Unloading Roll must be made for each population factor sought to be transferred to the new colony. The Unloading Roll operates the same as the Loading Roll; that is, if the Unloading Roll fails, no additional populations may be Unloaded to the colony (or Orbital City) during that Regular Turn.
 - ✓ Unloading Population is also considered *location specific* to the colony and follows all the same rules as described previously for Load Population procedures, including application of Enlightenment for failed Power Activation checks or Unload Rolls.
 - ✓ Colony Ships are not ‘consumed’ (*unlike* Landing, see Pandorum, 4 Expansion, p. 923, *infra*) by Unloading Populations, they are simply emptied (like an unloaded Cargo Ship or Logistics Ship) and can continue operating.
 - There is an operational triangle here: Loading population from planet to Colony Ship or Orbital City, unloading population from Colony Ship to Orbital City or planet, loading or unloading population from Orbital City to Colony Ship or planet. All are governed by the same procedures.

The Unload Population activation may be used to transfer populations from Colony Ships to existing Orbital Cities (or from Orbital Cities to the planet surface) that are either empty or have the same Native Population Type. See Orbital City Existential Patent and Dayworld, 3 Taxation & Census, p. 315 and Orbital City, 2 Construction, p. 667, *supra*.

- ✓ Yes, it is possible to backdoor the Colony Naturalization rules (see Naturalization, 3 Order, p. 557, *supra*) in this way by moving populations from Converted Colonies to Naturalized Colonies. However, the cost in RPs, Acts, and Scenes, Power Activations, disruption checks (see The New Neighbors, 2 Disruption, p. 273, *supra*) and time expended probably would not make it cheaper or easier in most cases. Further, this is a situation ripe for handy Concierge Interventions, as the previous converted population might act as agitators, troublemakers, or become resentful.
- ...Vienna Sausages: In addition to the problems of moving populations, there is also an economic cost in the form of *disruption checks*, lost production, and the actual cost of the operations. Each Load or Unload roll costs 2 RPs (you knew it was going to cost RPs!☺), regardless of success or failure, and counts against the colony’s GDP limit for the Regular Turn (see Gross Domestic Product, 1 Construction, p. 662, *supra*). A colony may not exceed its

GDP, nor may the Treasury be exceeded, with the cost of Load and Unload Rolls. Thus, the Loading or Unloading process may also be stopped, without a failure result, by reaching the GDP turn limitations or by running out of RPs in the Treasury.

- ✓ Note that in any situation there can be only one failed roll, so that minimum cost of any Load or Unload activation is 2 RPs. The number of success rolls however, is variable with the maximum possible being a highly improbable 16 consecutive success rolls (see also Improbables discussion, 4 Colleges, p. 506, *supra*), costing 32 RPs, at a Friendly Colony with at least 16 population and sufficient GDP. Use of Enlightenment to reroll failed die rolls could inadvertently lead to costing more RPs!

Adding or subtracting population from a Friendly or Naturalized colony is a Disruption Event, triggering Disruption Checks on the colony (see Highschool Friends and The New Neighbors, 2 Disruptions, pp. 272-273, *supra*). It's a bit of a gray area, but moving populations to and from Orbital Cities is probably not a Disruption Event, as they have not been added to or subtracted from the colony as a whole.

- ✓ Finally, pursuant to Alieneity Apostasy, 3 Disruptions, p. 283, *supra*, Unloading Population – even to an Orbital City – at a Balkanized planet with a non-sovereign **alien colony** requires an **apostasy** check.

The processing sequence of Power Activations is important to managing the Treasury each Regular Turn, see Clockwork Universe, 3 The Streams of Time, p. 90, *supra*. Loading/Unloading Population costs one Act and one Scene, see Colonization, 1 Expansion, p. 876, *supra*.

“Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves.”

– Carl Sagan, [Pale Blue Dot: A Vision of the Human Future in Space](#) (1994)

Desperation: These two examples provide both a historical ‘real world’ example regarding loading rolls and difficulty of moving population over distances, and story material for Concierge use of Interventions. The process should in no way be considered smooth and reliable unless very special abilities or circumstances have developed. Mic drop.

- [La Bestia](#): “They gathered at dawn in this railyard in southern Mexico, contemplating their next move: catching a ride on the roof of La Bestia (the Beast) – the name migrants use for the notorious freight train that winds its way through Mexico toward the United States. ... He had heard about the dangers: the criminal mobs that terrorize travelers, the risk of falling and losing an arm or leg, or worse. Mexican police recently reported that ‘delinquents’ tossed several migrants from La Bestia in the state of Veracruz, leaving one dead and two with severed limbs.

But the train has reemerged in recent weeks as a preferred mode of travel for Central American migrants after the Mexican government, under pressure from the Trump administration, started making it more difficult for them to cross Mexico on their way to the U.S. border. ...

An assemblage of young men with sticks served as an ersatz security squad. Exhausted families gathered on scattered railway ties and a graffiti-splashed platform, waiting for the train to come to a halt. Women cradled infants in their arms.

Soon, many scrambled across the tracks into open boxcars, which were coated inside with cement dust, a remnant of the previous cargo. Women and children entered first. The men placed wooden ties and stones by the doors to keep them ajar. All were elated to be on their way, finally.

But then railroad security men decked out in black arrived and chased them away. They sealed the boxcars, warning of the danger of suffocation should the doors slam shut.

Now, the only option was to ride on top of the train, a death-defying endeavor. La Bestia is renowned for sharp curves and sudden braking, capable of sending rooftop passengers flying onto the rails. Low-lying branches can suddenly sweep riders off. There is no relief from the sun, rain or evening chill.

Reaching the top was itself a challenge. A gap of about 6 feet separated the top rungs of the ladders built into the boxcar exteriors and the roofs.

Daylight had broken. The yellow locomotive was running its engine. Some families had already formed human chains to mount the cars.

Abruptly, Galo and his group decided it was a go: Men clambered first to the top. Migrants standing beside the tracks or poised atop metal couplers between the cars tossed backpacks and plastic bags filled with clothes, water and food to comrades above. Galo and other men lay flat on their stomachs atop the boxcars, straining to extend arms to grasp women and children who were passed up, fire-brigade style. Children screamed. People shouted instructions, often contradictory or unintelligible in the cacophony. ...

Galo and the others used yellow plastic rope to help secure children and luggage atop the cars. Finally, La Bestia began lurching north, its rooftop stowaways flashing smiles of relief. Ahead lay a voyage teeming with peril, but also the hope of fresh beginnings.” – Patrick J. McDonnell, “Despite perils, more U.S.-bound migrants are turning to ‘La Bestia’ to cross Mexico,” Los Angeles Times, June 2, 2019.

- The Carricks of Whitehaven: “In March of 1847, nearly 200 people crammed inside a small, two-masted ship called the Carricks of Whitehaven, which was bound from Sligo, northwest Ireland, to Quebec City in Canada. Many were women or children. Some were sick with typhus, cholera or dysentery.

All of them were probably starving.

They were tenant farmers who had tilled the fields of Henry John Temple, known as Lord Palmerston, then the foreign secretary and the future prime minister of Britain, according to a forthcoming documentary called ‘Lost Children of the Carricks.’

Palmerston was one of the most powerful men in the U.K., with 20,000 acres and over 14,000 tenants, according to the film’s website. But even he had been affected by the potato blight that had begun to devastate Ireland two years earlier. As the crops withered and his tenants stopped paying rent, Palmerston evicted them but, unlike some other landlords, put them on boats bound for North America.

When the Carricks pulled out of Sligo harbor, it was one of hundreds of ships bound for Quebec from Ireland in ‘Black ’47,’ the peak of the Great Famine. Roughly a million people would flee the island during the Great Hunger, as it was also called. Another million would

die of disease or starvation. Between death and emigration, a quarter of Ireland's 8 million inhabitants would vanish over the course of just four years.

But a spot on a brig to North America was not sure salvation. The same diseases that had torn through famine-weakened Ireland followed the migrants onto the ship. So many died on the journey that the boats became known as 'coffin ships.'

Even if migrants escaped disease, there was also a good chance that their ship would never make it to North America. Of the nearly 400 ships that sailed toward Quebec in 1847 – most of them filled with Irish – 1 in 5 never made it, according to the *Globe and Mail*.

By April 28, 1847, the Carricks had been at sea for a month. But just as the ship neared the Cap-des-Rosiers – named after the wild rosebushes that covered its green hills and white-faced cliffs – a storm struck.

'The vessel encountered a strong gale ... and was driven, about two o'clock the next morning, on a dangerous shoal about sixty miles east of [Cap-des-Rosiers] and went to pieces in the course of two hours,' according to the British magazine *John Bull*, cited in the *Globe and Mail*.

Of the nearly 200 people onboard, only 48 survived, according to 'Lost Children of the Carricks.'" – Michael Miller, "A storm exposed children's bones on a Canadian beach, reviving a 170-year-old mystery," *The Washington Post*, June 17, 2019.

"Six sets of environmental variables affected the outcome of Polynesian development: island climate, geological type, marine resources, area, terrain fragmentation, and isolation. Climate in Polynesia varies from tropical to subantarctic, with some of the highest rainfall in certain areas, and near-arid climates on others. Geologically, island types range from small coral atolls and raised limestone islands with thin soil and no permanent fresh water, to geographically diverse islands like New Zealand, with iron, coal, gold, and jade. Marine resources vary from abundant reefs and lagoons, to rocky coasts and steeply dropping ocean bottoms.

As to area, some islands are only 100 acres, while others are 103,000 square miles. The habitable terrain of these islands ranges from fragmented valleys and ridges to rolling hills and plains. Finally, some islands are so remote that they developed in isolation for hundreds of years, while others were in more or less regular contact with other islands.... Thus, Polynesian societies differed greatly from one another, and did so in a relatively short time and from a common human ancestor."

– Jared Diamond, Summary of [Guns, Germs, and Steel](#), pp. 8-9, Kindle Edition

6

Endnotes.

¹ Commentary & Citation: To not mince words, I believe that Gene Roddenberry would be ill if he saw the 2015 21-minute proof-of-concept video "Prelude to Axanar" (on YouTube, for a crowd-funded, fan-made film) but Norman Spinrad would not be surprised at all. Although the video pays brief homage (about 10 seconds) to the original concept of Starfleet (saying something like, 'we didn't join Starfleet to fight a war'), clearly war sells movies and Axanar is Star Trek's version of a Battle of Midway or Battle of Cannae (see *In Open Space*, 7 Combat, p. 1036,

infra); the current drift of Star Trek has become slick, militant space-opera video franchise for a new generation. The Prelude video again features an arms race of starship design, with the Federation building its first true warships and testing them in battle against the Klingons.

- ✓ “‘Star Trek’ as a concept has voyaged far beyond science fiction and into the safe waters of space opera, but that doesn’t amaze me. The Gene Roddenberry years, when stories might play with questions of science, ideals or philosophy, have been replaced by stories reduced to loud and colorful action. Like so many franchises, it’s more concerned with repeating a successful formula than going boldly where no ‘Star Trek’ has gone before. ... I understand the Star Trek science has never been intended as plausible. I understand this is not science fiction but an Ark movie using a starship. I understand that the character types are as familiar as your favorite slippers. But the franchise has become much of a muchness. The new movie essentially intends to reboot the franchise with younger characters and carry on as before. The movie deals with narrative housekeeping. Perhaps the next one will engage these characters in a more challenging and devious story, one more about testing their personalities than re-establishing them. In the meantime, you want space opera, you got it.” – Roger Ebert review of Star Trek 2009, May 6, 2009 (3 out of 5 stars).
- ✓ Of the two movies, the “Prelude to Axanar” (2014) on YouTube demonstrates more play with ideals and engages the characters in a more challenging and devious story than Star Trek 2009. But it’s still far away.

² Citation: Stanley Kubrick, speaking about the title of 2001: A Space Odyssey said, “[i]t occurred to us that for the Greeks the vast stretches of the sea must have had the same sort of mystery and remoteness that space has for our generation.” – Jerome Agel, The Making of Kubrick’s 2001 (1970). See also ocean discussion, 2 Movement, EN 1, p. 852, *supra*.

³ Commentary: The Darien Scheme presents a mostly unexploited opportunity for great fiction, it could be used as a starting point for occult, horror, alternate history, fantasy, romance, adventure, or historical drama.

⁴ Citation & Commentary: “The story begins in a future world where global temperatures have risen so high that in most of the world it is unsafe to be outside without special cooling gear during daylight hours. In a desperate bid to preserve humanity and ease population burdens on Earth, the UN has initiated a ‘draft’ for colonizing the nearby planets, where conditions are so horrific and primitive that the unwilling colonists have fallen prey to a form of escapism involving the use of an illegal drug (Can-D) in concert with ‘layouts.’ Layouts are physical props intended to simulate a sort of alternate reality where life is easier than either the grim existence of the colonists in their marginal off-world colonies, or even Earth, where global warming has progressed to the point that Antarctica is prime vacation resort territory. The illegal drug Can-D allows people to ‘share’ their experience of the ‘Perky Pat’ (the name of the main female character in the simulated world) layouts. This ‘sharing’ has caused a pseudo-religious cult or series of cults to grow up around the layouts and the use of the drug. Up to the point where the novel begins, New York City-based Perky Pat (or P.P.) Layouts, Inc., has held a monopoly on this product, as well as on the illegal trade in the drug Can-D which makes the shared hallucinations possible.” – from Wikipedia article, “The Three Stigmata of Palmer Eldritch,” captured February 12, 2019.

- ✓ The Three Stigmata of Palmer Eldritch is a 1965 book by Philip K. Dick, where psychedelic drug culture meets global warming/climate change. Note then that global warming was a concept before I was born, and well before the millennia when it became a political denial hot-button (see previous Air that I Choke discussion 3 Taxation & Census, p. 318, *supra*). Dick’s book was contemporaneous with another book where psychedelic drugs met far-future starfaring civilization, Frank Herbert’s Dune (1965). Both predate virtual reality and if written today, would probably include instead a virtual reality, such as Ready Player One (2011), where a virtual reality world substitutes for widespread psychedelic drugs.
 - Dune is, in fact, an entire interstellar civilization built on drug addicts, where drug addiction passed from being a purely mental state to the ability to affect living organic and inorganic reality.

⁵ Commentary: Canned food is what the Magog (Andromeda TV series) call all other starships and space stations! Magog is a biblical word for the prophetic enemies of the people of God in the end of days. In the Andromeda TV series, the Magog were minions of the Abyss and contributed to the downfall of the Systems Commonwealth.

⁶ Citation: See also, Minimum Viable Population and Inbred Population, 4 Taxation & Census, p. 329-330, *supra*, for similarities in Caribbean island culture. This is fodder for Interventions.