High Frontier 4 All Living Rules

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# 4A. Module 4

As Factions settle the Solar System and adopt a commodity economy based upon isotope rocket fuel, humanity changes and augments itself to adapt to the space environment of low gravity and high radiation. The science of cybernetics allows human-machine hybrids to flourish. Terawatt technology enables rocket starship engines and augmented humanity makes it possible to expand to the stars. *Module 4 Exodus* plays with multiplayer and solitaire scenarios and only needs the Core *High Frontier 4* game including Module 0 to play, but can be combined with Modules 0 - 3. It expands *High Frontier* in scope but not in length:

**a. Contracts (All Games).** Enhance the early to mid-game, granting early Aquas and mission goals.

**b. New Spaceborn Colonist Queue (Modules 1 & 2)** represent Humans born in space whose bodies have atrophied to the point that they are largely mechanical.

**c. Augmentation Chits (Modules 1 & 2)** are gained by completing contracts and played on Colonists to upgrade them and allow them to Promote other cards or be promoted themselves.

**d. Enterprises (Modules 1 & 2)** are another path to augmentations, as humanity alters itself and its machines to better colonize the Solar System and reach the stars.

**e. A Starship Stack (Modules 1 & 2)** holds the isobank/starship’s repository of Isofuel and is the center of starship construction. If a starshot occurs, either in the spirit of expansion or to escape from bondage, a combination game into *Interstellar* is possible.

**f. New Solitaire Political Diagram (Module 0)** integrates contracts with the CEO and altruism solitaire games.

**g. Terms** being defined are listed in **bold**, or *italicized* if defined elsewhere. Capitalized terms are defined in the glossary. Rules in blue font are advanced rules that are ignored unless using the 6-7 Cycle game. The numerical prefix on a reference (e.g. [**1A3**](#a1A3)) signifies the Module number.

## 4A1. Core, Starship, & *Exodus* **Game Lengths**

*Module 4 Exodus* lasts from 4 to 7 solar cycles. The *Combined Game* leads into the next game: *Interstellar*.

**a. 4-5 Cycle Core Game (competitive).**

* **Modules.** Module 0 must be used, and optionally Modules 1, 2, and/or 3 (Conflict).
* **Ignore Rules in Blue Font.** Ignore rules in blue font unless using Modules 1 and 2 (including spaceborns, isotope monetization, enterprises, augmentations, and Project *Exodus*). Include rules labeled for Module 3 if using it.
* **Number of Players.** 2 to 6 competitive, or 1 solitaire **(**[**4G)**](#a4G)**)**.
* **Game Victory.** See [**4E2**](#a4E2)**.**

**b. 6-7 Cycle Games (competitive).**

* **Modules.** Modules 0, 1, and 2 with Futures, and optionally *Module 3* (Conflict).
* **Number of Players.** 2 to 6 competitive, or 1 solitaire **(**[**4G)**](#a4G)**)**. *Solitaire* is not supported if using *Module 3*.
* **Game Victory.** See [**4E2**](#a4E2).

**c. 5-7 Cycle Scenarios** using *Module 3* (competitive).

* **Exodus Conventional War (**[**4F1**](#a4F1)**).** Use *Module 3*, but additionally score per [**4E2**](#a4E2).
* **Exodus Union War (**[**4F2**](#a4F2)**).** Use *Module 3*, but additionally score per [**4E2**](#a4E2). War can break out, with the *Spacer* *Union* (including Robots) as the Independence ⊙ bloc and the others as the Loyalist ⊕ bloc.

**d. Interstellar Combined Game.** This is the same as a 7-Cycle game **(**[**4A1**](#a4A1)**b,c)**, but your accomplishments and augmented Colonists are imported into the next game in the series: *Interstellar*. See [**4E5**](#a4E5).

**e. Solitaire.** See **4G**. For victory conditions, including Combined Game solitaire, see [**4G4**](#a4G4).

## 4A2. Module 4 Components

**a. 1 Drawer Box.**

**b. 1 Rules Booklet.** You are reading it.

**c. 6 Reference Cards** (1 for each player, to house one’s fulfilled contracts and augmentation chits).

**d. 36 Contract Cards** which form the 3 *contract decks* **(**[**4B1**](#a4B1)**)**. Each has a blue-side and a gold-side.

**e. 6 Timepiece Chits** (1 for each of 6 player colors). Each has an clock side and a deadbeat (alarm) side.

**f. 1 Default Chit.**

**g. 1 Module 4 Placard.** This includes a player aid and space to store the 4 contract decks.

**h. 1 Starship Stack Placard** holds the isobank’s Isofuel belonging to each player and starship parts/Colonists. It becomes the **starship** if launched. The other side has the Alternative Solitaire Political Diagram.

**i. 6 Exodus Contract Cards** form the *Exodus contract* **(**[**4B1**](#a4B1)**c)** deck. Each side has a purple contract.

**j. 10 Spaceborn Colonist Cards.**

**k. 6 Robot Colonist Cards.**

**l. 1 Starship Token.** Place this at the base of a Bernal where the *isobank* is founded **(**[**4D2**](#a4D2)**).**

**m. 6 Child Chits** (1 for each of 6 player colors).

**n. 36 Augmentation Chits** (6 for each shape).

**o. 3 Medal Chits.** *Isobanker* **(**[**4D2**](#a4D2)**)**, *propulsion* **(**[**4D3**](#a4D3)**a)**, & *command* **(**[**4D3**](#a4D3)**b)**. Each is worth 4 VP.

## 4A3. Contract Card Anatomy

Contract cards are auctioned after a *fundraise operation* **(**[**O2**](#aO2)**b)**. Most have a blue-side and a gold-side, and start in one of 3 decks with the blue-side faceup. In games of 6 or more cycles, the decks flip to the gold-side when the first Isofuel (gold bead) is produced **(**[**4B1**](#a4B1)**b)**. A special contract deck of purple cards is the *Exodus contract* deck **(**[**4B1**](#a4B1)**c)**.

**a. Name.**

**b. Mass/Rad-hardness.** Use these when the contract is carried as a Stack Card, see [**4B2**](#a4B2).

**c. Type.**

**d. Humans on Board Icon.** See [**4B2**](#a4B2)**d**.

**e. “When Fulfilling” or “Fulfilled” Abilities.** See [**4B2**](#a4B2)**e**.

**f. Tophat/Felony.** See [**4B2**](#a4B2)**e**.

**g. Ideology Pair.** Individuality-freedom, honor-unity, or equality-authority. See [**4B3**](#a4B3)**c**.

**h. Cash Advance.** See [**4B3**](#a4B3)**h**.

**i. Destination.** See [**4B4**](#a4B4).

**j. Late Fee.** See [**4B5**](#a4B5)**c**.

**k. Cybernetics.** This icon is in the shape of an augmentation chit, allowing that chit to be implanted **(**[**4C4**](#a4C4)**c)**.

**l. Victory Points.** See [**4E2**](#a4E2)**b**.

## 4A4. Augmentation Chit Anatomy

Augmentation chits have two effects, one on each side. Only the face-up effect is active. They are placed upon a Colonist card via the *implant operation* **(**[**4C4**](#a4C4)**)**.

**a. Cybernetics & Shape.** Irregular (domesticated goo), hexagon (wardens), heart (life-support), jar-shaped (hibernation jars), battery-shaped (batteries), or triangle (engine).

**b. Abilities.** See [**4C3**](#a4C3)**a,b,c,d,e,f**.

## 4A5. Module 4 Setup

Setup is per Core **(C)** plus for the Modules used plus the following:

**a. Seniority Disks.** Four to seven, depending on the *game length* chosen **(**[**4A1**](#a4A1)**)**.

**b. Contract Decks.** Place the *Module 4 placard* **(**[**4A2**](#a4A2)**g)** next to the Political Assembly. Separate the contract cards with into 3 decks, one for each *ideology pair* **(**[**4A3**](#a4A3)**g)**, with the blue-side faceup. Shuffle each deck and place according to their ideology pair on the Module 4 placard.

**c. Timepiece & Default Chits.** Place these chits near the Sunspot Cycle placard.

**d. Starting Aqua (Modules 0, 3).** Contract decks are not patent decks and so do not affect starting Aqua **(**[**C5**](#aC5)**)**.

**e. Player Aids & Starship Stack.** Give one player aid to each player. The starship stack placard goes into a public area.

**f. Exodus Contract Deck (Modules 1 & 2).** Shuffle the *Exodus contracts* **(**[**4A2**](#a4A2)**i),** randomizing which side of each is faceup. Place them on the Module 4 placard with the *starship Token* **(**[**4A2**](#a4A2)**l)** on top to show the deck is locked.

**g. New Colonists (Module 2).** Shuffle the new Colonists (spaceborn and Robot), plus all Robots from Module 2, into a new spaceborn queue.

* **Queues.** *Module 4* uses 2 Colonist queues: earthborn and Robot/spaceborn **(**[**4C1**](#a4C1)**)**. “Earthborn” is slang for a non-Robot Colonist from *Module 2*.

**h. Augmentation & Child Chits (Module 2).** Each player adds to their Reserves the child chit of their color, and a set of augmentation chits of the 6 shapes.

**i. Module 3 Conflict.** If playing with this Module, decide if the War will be *conventional* **(**[**4F1**](#a4F1)**)** or *Union* **(**[**4F2**](#a4F2)**)**. Then additionally setup per [**3A2**](#a3A2).

## 4A6. Core/Module 0-3 Rules Changes

**a. Inspiration (**[**K2**](#aK2)**a).** This event is applied to both *Colonist queues* **(**[**2A2**](#a2A2)**b)** plus the *contract decks* **(**[**4A5**](#a4A5)**b)**, including the *Exodus contract deck* if it is active **(**[**4D2**](#a4D2)**c)**.

**b. Contract Fulfillment (add to G).** This new free action moves a completed contract card from a Stack to adjacent to your playmat. Completed contracts are called *enterprises* **(**[**4B8**](#a4B8)**)**.

**c. Negotiation Summary (add to N).** The following are negotiable: Possession of unfulfilled contract cards. *Fulfilled* *contract* Abilities **(**[**4B2**](#a4B2)**f)** that are specified negotiable. Transfer of Isotopes between isovaults **(**[**4D2**](#a4D2)**f)**. Fulfilled contract icons may be shared (see partnership delegates, [**4B8**](#a4B8)). Augmentation chits are not negotiable.

**d. Fundraise Operation (**[**O2**](#aO2) **of Module 0).** During this Operation, a partner delegate can be placed on an enterprise per [**4B8**](#a4B8)**a** in order to increase your portfolio. If you have an available *timepiece* **(**[**4A2**](#a4A2)**e)**, as the final step of this Operation, you may start a *contract auction* **(**[**4B3**](#a4B3)**)**, bidding in years for the top of the contract deck corresponding to the Active Law. May inspire the contract deck before bidding **(**[**4B3**](#a4B3)**d)**.

**e. FINAO (**[**H7**](#aH7)**e)**. *Failure Is Not An Option* cost changes after *isotope monetization* **(**[**3B5**](#a3B5)**,** [**4D1**](#a4D1)**)** when any player first establishes an *isostandard*.

**f. Starship Stack (add to** [**E3**](#aE3)**).** This new Stack is formed by the founding of the *isobank* **(**[**4D)**](#a4D)**)**, and is colocated with the isobank Bernal Stack. The *starship stack placard* **(**[**4A2**](#a4A2)**h)**, held by the isobanker, stores its cards and Isofuel. If a player makes a purchase using yellow beads at their Bank, these beads are stored in the unowned isovaults of the starship stack **(**[**4D2**](#a4D2)**d)**. Unowned yellow beads in the starship stack can be purchased for 10 Aqua per [**4D1**](#a4D1)**d**.

**g. Exomigration (**[**2A6**](#a2A6)**).** There are 2 queues instead of 1: earthborn and Robot/spaceborn **(**[**4A5**](#a4A5)**g)**. Once you have a Colony beyond your Home Bernal, you may choose to draw from the spaceborn queue and join the *Spacer Union* **(**[**4C2**](#a4C2)**c)**. This Decommissions all of your earthborn Colonists. Regardless if you hold Robot/ spaceborn Colonists, or Human Colonists, your Colonist limit is equal to the number of anchored Bernals (doubled for Promoted Bernals, see [**2Ca**](#a2Ca)).

**h. Robot Exomigration (**[**2A6**](#a2A6)**).** If multiple Robots are drawn during a single *exomigration* **(**[**2C2**](#a2C2)**a),** choose one to keep and Discard the rest, then shuffle the spaceborn queue.

**i. Promotion (**[**1A5**](#a1A5) **/** [**2A3**](#a2A3)**).** Promotion is the same as in Modules 1 and 2, except a Colonist (or Colonists) of yours must be present and implanted with a certain number of unique augmentation chits **(**[**4C7**](#a4C7)**e)**.

**j. Space Empire Shutdown (**[**3F4**](#a3F4)**).** Caused by certain Futures or a Loyalist War victory (Module 3). It dissolves the political assembly per [**4F2**](#a4F2)**f**. (This shuts down *contract auctions* **(**[**4B3**](#a4B3)**)** except *Exodus contracts* **(**[**4B1**](#a4B1)**c)**).

## 4A7. Core/Module 0-3 Rules Clarifications

**a. Bank (clarification).** Your Bank is the Space on the map where your Aqua and/or yellow beads on your playmat are located. It is located in LEO, a *Home Bernal* **(**[**2B3**](#a2B3)**)**, or (if *Module 3*) an *ET Home Bernal* **(**[**3F1**](#a3F1)**),** whichever is farthest from Earth. You may only have one Bank at a time. It is distinct from an *isobank* **(**[**4D2**](#a4D2)**)**.

**b. Powersat Stacking (clarification).** The thrust bonus conferred by Powersat does not stack and is limited to +1 excepting completion of the “Mass Beam” Future (where it becomes +2) and “MagBeam” robonaut (which always receives +3 thrust for itself only).

**c. Multiple Rerolls (clarification).** If multiple Abilities and/or rules grant rerolls for a particular roll, you may reroll once per such Ability/rule. After a reroll, you decide whether to keep it or roll again (if possible).

**d. Site/Space Descriptions (clarification).** Some cards in this Module use new methods of describing Sites:

* **Unexplored:** A Site without a Claim disk or Busted disk.
* **Flyby Space:** A Space with a flyby bonus printed on the map **(**[**B7**](#aB7)**d)**, including *solar oberth flyby* **(**[**H8**](#aH8)**e)**. The Venus flyby only counts during season blue.
* **Signposted:** Any Site with a colored route leading to it **(**[**B7**](#aB7)**i)**.
* **Space Elevator Site:** A Site connected to an elevator path printed on the map (e.g. phobos).
* **BEO Colony:** “Beyond Earth Orbit”; any Colony dome including ET Home Bernal other than one on a Home Bernal.

**e. The Martian (clarification).** A buggy can carry *manned contracts* **(**[**4B2**](#a4B2)**d**) as well as Crew or Colonists along a buggy road **(**[**H9**](#aH9)**b)**.

**f. Ownership (clarification).** References to Tokens and Stack items (cards, FTs, etc.) apply to those that you own or which you have permission to use (through negotiation, freedom to roam, Felony, etc.), except:

* **“Any” or “Any player’s”** means any such item regardless of permission.
* **“Your”** means only items that are in your playmat or are in your player color.

The “Fugitive” contract destination requires you to take the contract to “any player’s” BEO Colony. You do not need the EXAMPLE [[4A7](#a4A7)f] owner’s permission to visit this Colony. The “Planetary Rail Network” requires you to take the contract to “Your” Colony connected by buggy road to any Colony. You can’t use another player’s pair of connected Colonies, even during Freedom to Roam, to satisfy this contract.

**g. Order of Operations (clarification)**. When performing multiple steps of adding/subtracting and multiplying/dividing, use the following order:

* **Subtraction.**
* **Division / Multiplication** (but see [**4A8**](#a4A8)).
* **Addition.**
* **Round if necessary** (up or down as indicated).

## 4A8. Module 4 Refueling (modification to Core)

A central plot to *Module 4* is the accumulation of enough Isofuel to launch a starship to another star. To more accurately reflect this, Abilities and privileges which are stated to double refueling instead add to each other.

You are performing a site refuel using the “Femtochemistry” refinery ([2X](#a2X)site refuel) and the Dharma Refuel privilege (2x EXAMPLE [[4A8](#a4A8)] site refuel with glory chit). The combination of the two yields 3 Isotopes rather than 4. If you have a miner Colonist present (allows two site refuels), each site refuel yields 3, for a total of 6.

# 4B. Contracts & Enterprises

Contract decks are made up of contract cards representing available-for-hire work from various organizations. The winning bidder gets instant funding in return for a promise to complete the contract by a specific deadline, with penalties for being late. Fulfill a contract by taking its card to the specified location, and (if specified) returning it. Once fulfilled, a contract grants cybernetics icon(s) and (usually) an ongoing Ability, both representing a continuing partnership with a high-tech enterprise. A fulfilled contract is also worth VP at the endgame. Contracts start in 3 decks on their blue-side, and flip to their gold-side as soon as the first Isotope is produced.

**a. Ideology Pairs (**[**4A3**](#a4A3)**g).** Most contracts are available according to the Active Law.

* **Individuality-Freedom.** These carry human or avatar passengers, either tourists or trillionaires. Cybernetics: life-support or jars.
* **Honor-Unity.** Military contracts or government grants. Cybernetics: batteries or engine.
* **Equality-Authority.** Science projects or megaprojects. Cybernetics: wardens or goo.

**b. Discard.** This glossary term means to put a card (including contracts) to the bottom of its appropriate deck or queue.

## 4B1. Contract Decks

Contracts form three or four decks placed around the political assembly and use special rules for bidding and inspiration.

**a. Inspiration Event.** Like patent decks, all contract decks, except Exodus contracts if inactive, are inspired during the *inspiration Event Roll* **(**[**K2**](#aK2)**a)**.

**b. Isobank Contract Upheaval**. Each contract has two sides: blue and gold. As soon as any player establishes an **isostandard** (produced a yellow bead for your GW/TW thruster per [**1Cb**](#a1Cb)), flip all three non-Exodus contract decks so the bottom is on top and from now on the more ambitious gold-side is used.

**c. Exodus Contracts.** This fourth deck **(**[**4A5**](#a4A5)**f)** contains purple contracts which start on the *module 4 placard* **(**[**4A2**](#a4A2)**g)**. The deck starts covered by the *starship token* **(**[**4A2**](#a4A2)**i)** to indicate that it is locked (and not affected by inspiration events). Establishing the isobank removes this Token, indicating that its top contract is auctionable **(**[**4B3**](#a4B3)**c)**. Once activated, these contracts are auctioned and boosted as normal.

## 4B2. Contract Cards

Contract cards have Mass and rad-hardness and are carried in Stacks like other cards in play until their contract is fulfilled whereupon they are stored as *enterprises* **(**[**4B8**](#a4B8)**)**.

**a. Not Patents.** Contract cards do not count against *academia hand limit* **(**[**I2**](#aI2)**a)** and cannot be *sold* **(**[**I3**](#aI3)**a)** or *Discarded* **(**[**G6**](#aG6)**)**.

**b. Side Matters.** When boosting, a contract must be placed on the side (blue-side or gold-side, see [**4B1**](#a4B1)**b**) that was faceup when it was auctioned.

**c. Launch Surety Contracts.** Contract cards are immune to *pad explosion/space debris events* **(**[**K2**](#aK2)**c)** and *budget cuts events* **(**[**K2**](#aK2)**f)**.

**d. Manned Contracts.** The “Humans on Board” icon makes a contract Human (see glossary). This is significant for Glitch repairs, Felony defense, *colonization* **(**[**G3**](#aG3)**)**, Glory, or as a manned target during combat. Voluntary Decommission of a manned contract is a Felony. Any Decommission of a manned contract makes it *deadbeat* **(**[**4B5**](#a4B5)**d)**. You cannot bid on manned contracts if you have the *default chit* **(**[**4B6**](#a4B6)**)**.

**e. Contract Abilities** are of 3 types:

* **Tophat & Felony Abilities.** These 2 Abilities are active before fulfillment. A Stack containing a contract with the tophat icon can safely enter 1 Hazard per Turn without paying FINAO (the costs are thematically paid for by the trillionaire). A Stack containing a contract with the Felony icon may commit Felonies (see glossary).
* **“When Fulfilling” Abilities.** These Abilities occur once only, as the contract is fulfilled **(**[**4B4**](#a4B4)**f)**.
* **“Fulfilled” Ability.** These Abilities remain active after the contract is fulfilled and becomes an *enterprise* **(**[**4B8**](#a4B8)**)**. > You win the auction for the contract “Chiron Quest”, receiving the advance of 13 Aquas. You boost it to your Home Bernal, > and take the trillionaire’s avatar to his destination, Chiron (12:30 ♃). On the way, he pays for one FINAO a Turn. Upon arrival, > you gain 8 Aquas for his “When Fulfilling” Ability. Having fulfilled the contract, you place it next to your playmat and gain the fulfilled > ability, which is “Bailout” (immunity to budget cuts events).

**f. “Fulfilled” Ability Keywords:** (These Abilities stack with multiple copies of the Ability).

* **Insight.** After announcing a *research auction* **(**[**I2**](#aI2)**)**, you may initially choose one patent deck and move its top card to the bottom of its deck. Then choose any top card to auction. This Ability is inactive during *research grants* **(**[**O5**](#aO5)**e)**.
* **Bailout.** This Ability grants immunity from *budget cuts* **(**[**K2**](#aK2)**f)**. This is *negotiable* **(**[**N7**](#aN7)**)**.
* **Connections.** During a contract auction, select any contract deck where you have a corresponding delegate.
* **Secured.** During Anarchy, you retain your faction privilege and are immune to Felonies (superseding all other Felony Abilities such as Soldier Caste’s), but may commit them during Anarchy.
* **Shielded.** Minus 2 to Belt & CME Rolls to your Stacks (cumulative with multiple copies of this ability).
* **Transport.** Cargo transfer along a buggy road or between a Bernal and its Dirtside, (1/turn).
* **Hazard Ignore.** Ignore Crash Hazards of the type listed. Text in quotes means that Crash Hazards with that text in their description are ignored.
* **Aerobrake Ignore.** As Hazard Ignore (previous bullet), but for Aerobrake Hazards
* **Push.** Gain the Powersat faction privilege.

**g. Negotiation.** You may trade your unfulfilled contract as part of a *negotiation* **(N)** replacing your timepiece

You gain the insight Ability after fulfilling the contract “Hexapod Explorer”. You initiate a research auction, and apply EXAMPLE [[4B2](#a4B2)f] insight to the generator deck, hoping to reveal a pulse generator. But alas, the revealed generator is even worse. You are obliged to research something, so you put a Freighter up for auction.

with the other player’s timepiece and transferring any late fee Aqua on the contract. The contract card may be transferred via *cargo transfer* **(**[**G1**](#aG1)**)**, etc.

* **Contract Abilities** are not negotiable unless specified.

**h. Fulfilled Contract VP.** See [**4E2**](#a4E2)**b**.

**i. Unfulfilled Contract Penalty.** An unfulfilled contract suffers a VP penalty equal to how much you still owe **(**[**4E2**](#a4E2)**c)**.

**j. Cybernetics.** These icons (engine, batteries, jars, life-support, wardens, goo) are active after a contract is fulfilled and becomes an *enterprise* **(**[**4B8**](#a4B8)**).** They enable the *implant* of the corresponding augmentation chit **(**[**4C4**](#a4C4)**c)**.

## 4B3. Contract Auction (adds to the Fundraise Operation)

If your timepiece is not in the Sunspot Cycle, as the final step of a *fundraise operation* **(**[**O2**](#aO2)**b)** you may choose a contract deck to auction. This deck must share an ideology with an Active Law (or the Exodus deck if active, [**4A5**](#a4A5)**f**). After optionally Discarding the deck’s top card, you may auction the top card or abandon the auction:

**a. Partner Enterprise.** Whether or not there is a contract auction, a delegate from a fundraise can be used to form a *partner enterprise* per [**4B8**](#a4B8)**a** instead of being placed in the political assembly.

**b. Auction Prohibition.** Contract auctions cannot be held during War/Anarchy. You must have an available timepiece to initiate a contract auction.

**c. Deck Selection**. After performing the fundraise and associated *vote tally* **(**[**O2**](#aO2)**a)**, choose a contract deck sharing an ideology in its *ideology pair* **(**[**4A3**](#a4A3)**g)** with an Active Law. This choice cannot be lobbied.

* If the Active Law is in unity, multiple laws may be active; otherwise, only one is the Active Law.
* Once the *isobank* is built **(**[**4D2**](#a4D2)**c)**, you may choose the *Exodus contract deck* **(**[**4A5**](#a4A5)**f)** regardless of Active Law.

You perform a fundraise while the Active Law is freedom. You add a delegate into equality and move another delegate into

pair ([4A3](#a4A3)g) is the best one. Since the vote tally ([O3](#aO3)a) is tied, you can move the Active Law to unity and auction the top honor-unity contract.

**d. Proposal Review.** You may choose to Discard the top card from the chosen deck. Then choose to either initiate a contract auction for the top card or abandon the auction.

**e. Bid Media.** Bids are made in **years**, from where the Sunspot Cube is currently located. Bids must start at 10 years (highest) and can go as low as 0 years (lowest).

**f. Auction Procedure.** If you initiate this auction, you must start the bid at 10 years. Then, in any order, players whose timepiece is not on the Sunspot Cycle may bid. You must bid the same or lower as all other bidders. Continue until no player wishes to lower their bid. The lowest bid is the winner (minimum bid of 0 years).

**g. Ties.** As the initiator, the active player wins ties they are involved in. If they are not involved, they choose which of the tied players wins. The Marketeer faction privilege, if active, always wins ties.

Player Purple places the “Search For Life Center” contract up for auction, automatically bidding 10 years. Player Red has a contract; their timepiece is in the Sunspot Cycle and so is not available for bidding. Player Green bids 9 years; Player Purple responds with 9 (winning ties as the active player). Bidding goes down to 3 years until Player Green passes. Player Red is committed to founding the “Search For Life Center” in 3 years’ time.

**h. 3-step Win Procedure** for the auction winner:

* **Deadline.** The winner places their timepiece (“clock” faceup) into the Sunspot Cycle a number of steps into the future equal to their bid.
* **Cash Up Front.** The winner takes the *cash advance* **(**[**4A3**](#a4A3)**h)** in Aqua from the Pool.
* **Hand.** The winner takes the contract as a Hand Card. It ignores *academia hand limits, pad explosions,* or *budget* *cuts* **(**[**4B2**](#a4B2)**a,c)**.

**i. Finder’s Fee.** If the auction is won by a player other than the active player, the active player receives 1 Aqua from the Pool.

## 4B4. Contract Fulfillment (new free action)

Each step of a contract’s destination is fulfilled as a *free action* **(G)** by moving your Stack containing the contract to the listed *destination* **(**[**4A3**](#a4A3)**i)**, while satisfying any other listed conditions. If you fulfill the terms of the contract, move it to a space adjacent to your playmat, and return your timepiece from the Sunspot Cycle placard, which instantly lifts restrictions on contract auctions. Any “Fulfilled:” Abilities of the contract are now active **(**[**4B2**](#a4B2)**e)**.

**a. Contract Start.** All contracts are put onto the map via the boost operation, boosted to your choice of either your *Bank* **(**[**4A7**](#a4A7)**a)** or LEO.

**b. Representation.** The contract card and any other required cards must be part of the Stack which fulfills the contract or destination step.

* **Pass Through.** If the destination or step includes “Enter”, the Stack instead must have entered the listed location this Turn.

**c. Return.** If your destination specifies “Return,” after reaching the destination(s) listed, the contract must move to your *Bank* **(**[**4A7**](#a4A7)**a)** or LEO to fulfill. > A player is completing the “Search for Life Center” contract (visit echeclus and return). She lands on echeclus with the > EXAMPLE [[4B4](#a4B4)c] > contract and announces the completion of this part of the contract. On a later Turn, she brings the contract back to LEO, and > announces fulfillment of the contract.

**d. PR.** You must announce each step of a contract’s fulfillment if the contract specifies multiple destinations. > The tourist contract “Inner Tour” has a destination “Enter 4 different flyby spaces in 1 Turn.” Your Spacecraft, with the contract > EXAMPLE [[4B4](#a4B4)d] > aboard, navigates the Earth, Luna, Mercury, and Venus (requiring season blue) flybys in a single Turn. Because the contract > says “Enter”, you do not need to stop at the final flyby, but you must fulfill the contract on this Turn, or you will have to do the tour again!

**e. Glitch Trigger.** Contract fulfillment (including intermediate steps) is a Glitch Trigger.

**f. Contract Added to Your Contracts Fulfilled Area.** If this is the last (or only) destination, the contract is fulfilled. Orient/splay the card together with your other fulfilled contracts next to your playmat so that its *cybernetics* **(**[**4A3**](#a4A3)**l)** and *fulfilled ability* (if any, [**4A3**](#a4A3)**e**) are visible. Discard your timepiece to your Reserves and Discard any Aqua from late fees on the contract.

* **“When Fulfilling” Abilities.** These activate at this point (after removing the contract from its Stack).
* **“Colocated”** refers to the contract location at the start of fulfillment (even though the contract is no longer there).
* **Fulfilled Abilities:** These Abilities are now active **(**[**4B2**](#a4B2)**e)**.

## 4B5. Late Penalties

If the 1st player cube moves past your timepiece in the Sunspot Cycle, you are **late**, which flips the timepiece. Each Turn, either pay the late fee until the contract is fulfilled or its advance is paid off, or else default. Follow these steps:

**a. Flip To Deadbeat.** Flip your timepiece to its “deadbeat” (alarm) side. It remains in place until removed by *late* *fulfillment or debt repayment* (bullets c or e).

**b. Pay Late Fee (optional).** At the start of your Turn in which your timepiece is “deadbeat”, after Bernal profits, you may pay all or part of the **late fee** listed on the contract. Place all payments directly upon the late contract (wherever it is) to track how much you have spent.

* **No Overpayments.** You cannot pay more than the late fee each Turn.
* **Nonpayment.** Until the debt is paid, if you fail to pay the entire late fee of a Turn, then see [**4B5**](#a4B5)**d**.
* **Mishap Insurance.** If the Mishap Insurance Law is active when your timepiece flips to deadbeat, the first Late Fee is paid from the Pool (represents the insurance settlement). You may *lobby* **(**[**O4**](#aO4)**)** this Law.

**c. Late Fulfillment.** The instant a late contract is *fulfilled*, see [**4B4**](#a4B4)**f**. This Discards the payments and timepiece.

**d. Default Contract.** If you fail to pay the full late fee on a late contract, or you Decommission a manned contract, then place it into your Hand horizontally (retaining any Aqua) to show that it is a **default contract** **(**[**4B6**](#a4B6)**)** that can never be fulfilled. It will be Discarded after *debt repayment* **(**[**4B5**](#a4B5)**e)**.

**e. Debt Repayment.** The instant the payments on a late or default contract are equal to or greater than its *cash advance* **(**[**4A3**](#a4A3)**h)**, Discard the contract with its payments and remove your timepiece from the Sunspot Cycle. If the contract was never boosted, then the payments must equal twice the cash advance. In either case, Discarding the contract claims the *default chit* **(**[**4B6**](#a4B6)**)**. See the **Example** [**4B6**](#a4B6) (next page).

## 4B6. Default Contracts & Default Chit

If your contract is Discarded (returned unfulfilled to the bottom of its contract deck), you immediately claim the *default* *chit* **(**[**4A2**](#a4A2)**f)** from wherever it is. There is only one such chit, passed from player to player. It is claimed on its blue or its gold-side depending on the contract color.

**a. Decommission.** A Decommissioned unmanned contract is added to your Hand vertically with a second chance to boost it. However, a Decommissioned *manned contract* **(**[**4B2**](#a4B2)**d)** is added to your Hand horizontally (retaining any Aqua) to show that it is a **default contract** that can never be fulfilled. It will be Discarded after paying off its advance per [**4B5**](#a4B5)**e**, whereupon you claim the default chit.

You boost a tourist contract (manned), but it perishes in a solar flare, placing the contract into your Hand horizontally. On your next Turn, you decide not to pay anything on the contract. But eventually you start repaying, until the amount of Aqua on the contract finally equals the cash advance. The contract, payments, and timepiece are Discarded, and you receive the default chit.

**b. All Abilities** on a default contract (including *tophat* or *felony*, see [**4B2**](#a4B2)**e**) are deactivated.

**c. Default Stigma.** If you have the default chit, you are not allowed to bid on manned contracts.

**d. Endgame Scoring (**[**4E2**](#a4E2)**d).** The default chit subtracts 3 VP if on the blue-side or 6 VP if on the gold-side. > bid for the “Mercury Forge”

han you thought. past your timepiece. deadbeat side. ou pay the late fee of 4 Aqua

fee of 4 Aqua, added to the others

s still unfulfilled and you pay the

dvance (11 Aqua) are on a late 7MERCURY, NOT FOR BEGINNERS. Why is the closest planet to Sol one of the hardest and highest delta-v planets ng with its payments, and your to reach? First, it orbits swiftly (about 45 km/sec) and deeply in the Sol gravity field. Second, it is inclined at 7 the Sunspot Cycle. degrees from the ecliptic. Third, without an atmosphere, aerobrake is not an option. NASA was unable to attain bid on more contracts. a satellite orbit around Mercury until the MESSENGER Spacecraft of 2011, which needed 6 years and flyby of Earth, Venus, and Mercury. The programmer responsible was Robert Farquhar, a planetary trajectory pioneer who > [4B6](#a4B6)) from another player. designed some of the most esoteric and complex spacecraft trajectories ever attempted.

## 4B7. Contracts & War/Anarchy (Module 3)

With the Conflict Module, contract auctions and fulfillment are slightly different during War/Anarchy: contracts other than military contracts may be brought to LEO/Bernal without needing to pay, which obtains the default chit.

**a. War Outbreak Partner Dissolution.** If War occurs, or if during War an ally becomes an enemy, all partner delegates **(**[**4B8**](#a4B8)**b)** on enemy enterprises are Discarded. See [**4B8**](#a4B8)**c** for re-installing during War.

**b. Military Contracts.** These contracts remain unaffected by War/Anarchy, and ignore bullets c & d below.

**c. Auction Freeze.** No contract auctions (except military) are allowed during War/Anarchy.

**d. Abandonment.** A contract (except military) may be abandoned (without paying late fees or repayment but suffering the default chit) during War/Anarchy by taking its card to LEO or the Anchored Bernal of any player. Discard the contract and remove your timepiece from the Sunspot Cycle. > Anarchy occurs in Season Blue, and you worry that an opponent will attack your Rocket Stack carrying a trillionaire > EXAMPLE [[4B7](#a4B7)d] > contract to cause you to repay your advance. You dump the trillionaire at a nearby Bernal and receive the default chit.

## 4B8. Enterprises (Modules 1 & 2)

A completed contract stored adjacent to your playmat is called an **enterprise**. The 6 different types of cybernetics icons on them are important for implanting *augmentations* **(**[**4C3**](#a4C3)**)**.

**a. Delegates & Partner Enterprises.** During a *fundraise operation* **(**[**O2**](#aO2)**b)**, you may place a delegate on an opponent’s enterprise (see next bullet) instead of on the political assembly. An enterprise with your delegate is called a **partner enterprise**.

**b. Placing Partner Delegates.** You may place a partner on an enterprise in an opponent’s enterprise only with their negotiated permission. Partner delegates count as delegates during endgame scoring **(**[**4E2**](#a4E2)**a)**.

**c. Placing Partner Delegates (Module 3).** During War, you cannot place or retain partners on enemy enterprises, but you can place on allied enterprises, even without permission, as long as you pay the owner a *bribe* **(**[**3B1**](#a3B1)**)**.

**d. Portfolio.** The cybernetics icons on your enterprises and your partner enterprises is called your **portfolio**. This is important for the *implant operation* **(**[**4C4**](#a4C4)**)** and thus for the *Promotion Operation* **(**[**4C7**](#a4C7)**)**.

You wish to Promote your muddling GW thruster into a TW thruster, but only have 3 of the 4 implantations needed. Player EXAMPLE [[4B8](#a4B8)d] Gray has a jars cybernetics that you lack. During a fundraise, you place your delegate on his fulfilled contract. Then on the following Turn, you move your thrice-augmented Colonist to the Home Bernal of Player Gray to perform the 4th implantation as a negotiated on-site operation ([N6](#aN6)). In return for these services, you transfer ownership of your second Bernal to become his second Bernal.

# 4C. Spaceborns & Cybernetic Augmentations

Human Colonists come in two types: **earthborns** (comfortable in 1 gee planets and Bernals) and **spaceborns** (comfortable in zero-gee and high radiation). Colonists of all types become augmented if they are implanted with an **augmentation**, a chit that represents technological modifications for Humans, and biological modifications for Robots. Place them on a Colonist card via the *implant operation* **(**[**4C4**](#a4C4)**)** to enhance the Colonist’s capabilities.

## 4C1. Spaceborn Colonists

*Module 4* introduces new Colonist cards called **spaceborns**, cyborg Humans whose bodies have atrophied so severely in the space environment that they are inseparable from their augmented limbs, locomotion, and life support system. Unlike earthborns (Colonists introduced in Module 2), spaceborns have artificial blood and are cancer-immune. Although they are Human (see glossary), they support Robot equality during *emancipation* **(**[**2A6**](#a2A6)**b)**.

**a. Colonist Provenance.** Colonists may be spaceborn Humans, earthborn Humans, or Robots.

* **Emancipated Robots (**[**2A6**](#a2A6)**b)** count as Humans, Robots, and spaceborns.
* **“Colonist”** refers to any of the above. See diagram on page 19.

**b. Sterile.** Spaceborns and Robots cannot obtain the parenthood side of the heart augmentation.

## 4C2. Spaceborn Exomigration (new option for exomigration free action)

This Module plays with 2 *queues* **(**[**2A2**](#a2A2)**b)**: one for the Human Colonists of *Module 2* (called **earthborns**), and the other for all Human Colonists from this Module (called **spaceborns**) plus Robots from either Module. If you have at least one *BEO Colony* **(**[**4C2**](#a4C2)**a),** you may choose to exomigrate from the spaceborn queue. In doing so, you join the *Spacer Union*; you must Discard all earthborn Colonists. Once in the union, you cannot draw earthborn Colonists (unless you have no Colonists). Except per [**4C2**](#a4C2)**e** or [**4F2**](#a4F2)**f**, no player may hold Colonists from both queues.

**a. Beyond Earth Orbit Colony.** You may not exomigrate from the spaceborn queue unless since the beginning of the Turn you owned a *BEO Colony* **(**[**4A7**](#a4A7)**d)**.

You have a Home Bernal anchored, and then industrialize your first Factory. You use your Colonist to make it into a Colony, and then exomigrate a new Colonist. This new Colonist cannot be spaceborn, because this Colony is your first outside your Bernal, and did not exist as a BEO Colony since the start of the Turn (too soon to produce spaceborn).

**b. Spaceborn Exomigration.** Draw the top card of the spaceborn queue, following normal exomigration rules.

* **If Multiple Robots are Drawn,** choose one per [**4A6**](#a4A6)**h**, then Discard the others and shuffle the queue.

**c. Joining Spacer Union.** If you put a spaceborn into play, immediately Discard (not a Felony) all your earthborns in play and then *exomigrate* **(**[**2A6**](#a2A6)**)**, drawing from the spaceborn queue.

**d. Earthborn Exomigration.** If you hold any spaceborn Colonists, you are a member of the *Spacer Union* and are not allowed to exomigrate from the earthborn queue.

**e. Rank & File.** If the spaceborn queue is empty or contains only Robots when you attempt to draw from it, your exomigration emancipates the Robots per [**2A6**](#a2A6)**b**. If post-emancipation and the earthborn queue or the spaceborn queue is empty, players must exomigrate from the other queue (even if they do not meet the *space-based* requirement listed above). The *Spacer Union* is dissolved, so that [**4C2**](#a4C2)**c** and [**4C2**](#a4C2)**d** are ignored.

You establish a Colony on Ceres, and on a later Turn Anchor a Home Bernal. Your Ceres Colony allows you the option to exomigrate from the spaceborn queue. The first 3 cards that you draw are Robots, and finally you draw a Human which goes into your Bernal Stack. You examine the 3 Robots, choose one, and shuffle the 2 remaining back into the spaceborn queue.

COLONIST DIAGRAM [[4C1](#a4C1)a]Spacer Union ([4C2](#a4C2)c)

Human

## 4C3. Augmentation Chits

Augmentations are chits that come in 6 shapes, listed below. Augmentation chits are placed on and removed from Colonists via the *implant operation* **(**[**4C4**](#a4C4)**)**, they are also removed upon Decommission. The Ability granted depends on which side of the chit is *chosen* during implant **(**[**4C4**](#a4C4)**f)**, see table below.

**a. Chit Management.** Each player has 1 of each chit in their Reserves; if a chit is Discarded, it returns to that player’s Reserves. Chits are not negotiable.

[1AB](#a1AB)ILITY (side 1)ICON [2AB](#a2AB)ILITY (side 2)

A Colocated Factory may ET produce products of Spectral Class C in Adds 1 Hydration to Colocated Sites during prospecting addition to the Site’s Spectral Type.and site refuel operations.

Adds a Colocated raygun platform of ISRU = 1.Adds a Colocated buggy platform of ISRU = 2.

Can only be implanted on an earthborn Colonist & enables \_parent-\_During a fundraise op, allowed an extra delegate move. *hood* ([4C5](#a4C5)), allowing you to grow your own perfect Colonist.

This Colonist is Mass 0.Allows your FT’s anywhere to be spent for any FINAO.

Adds a Colocated On-board Pulse Generator.Adds a Colocated On-board Exotic Reactor.

A Colocated factory refuel that produces Isotopes receives an A Colocated site refuel that yields Aqua yields 2 more additional Isotope, applied after all other refuel modifications.Aqua, applied after all other refuel modifications.

A factory refuel at a Site with a miner Colonist generates 2 Isotopes (1, plus 1 for the Colonist). If the “Femtochemistry” EXAMPLE [[4C3](#a4C3)] refinery were present, each of those would be doubled by the refinery’s Ability, for 4 Isotopes overall. In either case, the engine augmentation would provide 1 extra Isotope (3 total with just the miner, 5 total with “Femtochemistry”).

## 4C4. Implant (new Operation)

This Operation places one or more augmentation chits onto any number of Colocated Colonists (earthborn, spaceborn, and/or Robot) at an Anchored Bernal. The chits are in **cybernetics shapes** (engine, batteries, jars, life- support, wardens, goo); you must have corresponding icons on fulfilled contracts in order to implant. Additionally, you must have at least one *BEO Colony* **(**[**4C2**](#a4C2)**a)** (simulates the space-based conditions that lead to augmentation).

**a. Location Requirements.** This Operation must be performed at your Anchored Bernal (or an opponent’s Bernal if negotiated or the Law is *freedom to roam* [**O5**](#aO5)**f**).

**b. Space-Based.** Since the start of your Turn, you must have had at least one *BEO Colony* **(**[**4C2**](#a4C2)**a)** to perform this Operation. If playing with Module 3, your ET Home Bernal qualifies.

**c. Portfolio Requirements.** You must have cybernetics in your portfolio (including *partner enterprises* [**4B8**](#a4B8)**a**) with icons for each of the chits you wish to implant.

**d. Implantation Limits.** Each Faction is limited to one augmentation chit of each shape.

**e. Augmentation Juggling.** Before an implant operation, you may remove augmentation chits from Colocated Colonists, which allows them to be implanted on the targeted Colonist(s) in the next bullet. Chits that are removed (via this op or Decommission) return to your supply for reuse.

**f. Choose Augmentation Side.** Place one or more valid augmentation chits on top of the targeted Colonist(s). You may choose side-1 or side-2 of each chit depending on the desired Ability **(**[**4C3**](#a4C3)**)**.

**g. Parenthood.** The parenthood side of the heart augmentation can only be implanted on earthborn **(**[**4C5**](#a4C5)**a)** and has immediate effects **(**[**4C5**](#a4C5)**b)**. if juggled, see [**4C5**](#a4C5)**f**.

You Anchor your “GEO Space Elevator” Home Bernal in GEO. Remember that this requires an Epic Hazard Roll ([2B4](#a2B4)i). This EXAMPLE [[4C4](#a4C4)] exomigrates the “Vatican Observers”. Since you have a Colony on Ceres, you are qualified to implant the observers. The cybernetics on your fulfilled contracts include two hearts and a hexagon, so you expend an Operation to implant the heart (parenthood-side up) and the wardens (raygun-side up), placed on the Colonist card. See the next example for the effects of the parenthood chit.

## 4C5. Parenthood

The life-support (heart-shaped) augmentation can only be implanted in earthborn Humans, because the genetics of spaceborn suffer from their high radiation environment. This augmentation enables **parenthood**:

**a. Reproduction Requirements.** The parenthood side of the heart chit can only be placed on an earthborn Colonist, and cannot be placed on Robots or spaceborns.

**b. Preteen Years.** When this chit is implanted, place your child chit on the Solar Sunspot Cycle 9 years into the future. During this period, the child Colonist is considered part of the heart augmentation of its parent.

**c. Coming of Age.** When the Sunspot Cube moves past the child chit, at the start of your next Turn the child is ten years old. The life-support Colonist is Decommissioned, and replaced in the same location by an *earthborn* **(**[**4C5**](#a4C5)**f)** Colonist of your choice. Look at the entire earthborn Colonist deck, and choose the one you wish to be the newborn. Shuffle the deck after examining it. This does not cause any delegate placement.

**d. Wunderkind.** If upon maturation the parent Colonist is at its *promotion colony* **(**[**2A3**](#a2A3)**a)**, the promotion colony of its child, or a *Lab* **(**[**2A3**](#a2A3)**c)**, or if the parent is Promoted, the child comes into play Promoted (Purple-Side).

**e. Inheritance.** The preteen inherits all the augmentations (including the heart but on its non-parenthood side) of the retired Colonist (its parent). Remove the child chit from the Solar Sunspot Cycle.

**f. Orphanage.** If the parenthood chit is removed (including if the Colonist is Decommissioned, or if parenthood is removed via *juggling* **(**[**4C4**](#a4C4)**e)**, the child chit is removed from the Solar Sunspot Cycle.

Your “Vatican Observers” from the previous example scandalously got pregnant in the last year of Season Blue. Place the EXAMPLE [[4C5](#a4C5)] child chit 9 years into the future, in the first year of the next Season Blue. When the Sunspot Cube moves into the 2nd year of Season Blue, the Vatican Observers at your Promoted Bernal are Decommissioned into their queue (perhaps the Pope was outraged). Because the Observers were at a Lab, you choose the wunderkind “Malcolm” as the successor, Promoted as “Renaissance Man”. He receives the heart Augmentation on its “delegate move” side.

## 4C6. Augmented Colonists

An **Augmented Colonist** is a Colonist (Human or Robot) implanted with at least one augmentation chit.

**a. Augmented Humans vs. Augmented Robots.** Humans (either earthborns or spaceborns) can prevent or cause Felonies, collect glory, can repair Glitches, and it is a Felony to voluntarily Decommission them. Robots don’t have these capacities unless *emancipated* **(**[**2A6**](#a2A6)**b)**. See Human and Robot in the glossary.

**b. Promotion.** If a Colonist is Promoted, move their augmentations onto the Colonist’s Purple-Side.

**c. Death or Colonization.** If a Colonist is Decommissioned (other than for parenthood), Discard their augmentations to your Reserves. This includes *colonization* **(**[**I7**](#aI7)**e)**. > During Anarchy, you decide to Murder/Suicide your Colonist left stranded on Mars after delivering a contract. > EXAMPLE [[4C6](#a4C6)c] > The Colonist’s jars augmentation is returned to your Reserves.

## 4C7. Promotion (Operation superseding the version in Modules 1 & 2)

This Operation flips a Stack card to its improved Purple-Side. [**4C7**](#a4C7)**a,b,c,d** are the same as Modules 1 and 2 ([**1A5**](#a1A5) & [**2A3**](#a2A3)), while [**4C7**](#a4C7)**e** is a new requirement unique to Module 4. In short, to perform the Promotion Operation, you must bring Colonist(s) with a certain number of unique augmentation chits as well as the card being Promoted to either a Promotion Colony or a Lab Bernal.

**a. Dome Icon.** This indicates the Colony type where a Promotion can take place. There are 5 types:

* **Spectral Colony** if at the specified Spectral Type (**D, H, S,** etc.)
* **Submarine Colony** (waves icon )
* **Astrobiology Colony** ()
* **Atmospheric Colony** (clouds icon )
* **Push Colony** (push icon )

**b. Lab Promotion Site.** A Promoted and Anchored Bernal is always a valid Promotion Colony for Colonist, Freighter, and GW thruster cards **(**[**2A3**](#a2A3)**c).**

**c. Negotiation.** To Promote, the Colony or Lab must either be your color or be an opponent’s color as a *negotiated on-site operation* **(**[**N6**](#aN6)**)**.

**d. Decommissioning Promoted Cards.** Except for Robot sales **(**[**2C2**](#a2C2)**a)** and Robot transfers **(Nb)**, Purple-Side cards cannot be sold on the free market **(**[**I3**](#aI3)**b)** or included in a stack transfer **(**[**N3**](#aN3)**)**. They can be involuntarily Decommissioned, but see [**1B7**](#a1B7) and [**2C2**](#a2C2). They can be voluntarily Decommissioned (Felony for Human Colonists) and then, if not Human, sold or transferred from your Hand. They return to play on their White-Side or Black-Side by being boosted (Bernals), exomigrated (Human Colonists), or ET Produced (Robots, Freighters, & GW thrusters).

**e. Augmented Colonists (new Promotion Requirement).** In order to Promote, a Colonist (or Colonists) of yours must be present with a certain number of unique augmentation chits:

* **To Promote Your Colonist.** The Colonist being Promoted must have at least 1 augmentation.
* **To Promote Your Freighter.** The Colonist(s) doing the Promotion need(s) at least 2 different augmentations.
* **To Promote Your Bernal.** The Colonist(s) doing the Promotion need(s) at least 3 different augmentations. The Promotion Colony must be a Dirtside.
* **To Promote Your GW Thruster to a TW Thruster.** The Colonist(s) doing the Promotion need(s) at least 4 different augmentations, You also must have completed at least 1 gold-side **(**[**4B1**](#a4B1)**b)** or *Exodus contract* **(**[**4B1**](#a4B1)**c)**.

You have 2 Colonists, one with a batteries and another with an engine augmentation. This is enough to Promote your Freighter. Your “Fusion Fragment Sail” has the Promotion Colony M. Accordingly, you fly it and the Colonists to your Colony on lutetia and spend a Promotion Operation to flip it to its Purple-Side.

# 4D. Isobank

**(Modules 1 & 2)**

The ready availability of Aqua to Earth and the mining of rare Isotope Fuels (Isofuels) causes the Aqua market to crash, making Isotopes the new standard. Inflation causes FINAO costs in Aqua to double. Isotopes are represented by yellow beads, and if stored at a Bank may be sold for 10 Aqua **(**[**4D1**](#a4D1)**d)**. Any Isotopes reserved for the starship, both owned and unowned) are permanently stored at the **isobank**, the locus for refueling and launching the *Exodus* starship.

## 4D1. Isotope Monetization (changed from Module 3 (3B5))

In Module 1, yellow beads representing starship Isotope Fuel can be *factory-refueled* **(**[**1C1**](#a1C1)**a)** at Factories matching the Spectral Type of your GW thruster, should you have one. This Spectral Type is called your **isostandard**. The first player who establishes their isostandard by producing the first yellow bead for their GW/TW thruster triggers isotope monetization. It can also be triggered per [**4D1**](#a4D1)**a**. This doubles the costs of FINAO for all players. Yellow beads transported to and stored at a player’s Bank can be used as currency (worth 10 Aqua each) for auctions, FINAO, etc.

**a.** [**2X**](#a2X)**FINAO Costs.** *Failure Is Not An Option* **(**[**H7**](#aH7)**e)** costs are instantly and permanently doubled for all players (including those with Open Source faction privilege) if one of these occurs:

* Either *Lofstrom Loop* **(**[**2B4**](#a2B4)**f)** or *GEO Space Elevator* **(**[**2B4**](#a2B4)**i)** is Anchored as a Home Bernal. The latter must be at GEO.
* The first yellow bead of Isotope Fuel is produced **(**[**1C1**](#a1C1)**a)**.
* (Module 3 only). The first *ET Home Bernal* **(**[**3F1**](#a3F1)**)** is Anchored.

**b. Debasement (Modified from Module 3).** If you have no *isostandard* and your Bank receives an Isotope in trade, immediately convert it into 10 Aqua. An Isotope can also be converted into 1 FT locally, see [**F4**](#aF4)**d** or [**G2**](#aG2).

**c. Isostandard Permanency.** See [**1Cb**](#a1Cb).

**d. Blue/Yellow Exchange (New for Module 4).** You may transport Isotopes to your Bank or isovault. As a free action or in a payment at your Bank, you may sell 1 yellow bead for 10 Aqua, (but not vice versa). Once the isobank is

founded, each yellow bead sold goes into its unowned isovault per [**4D2**](#a4D2)**f**. At the start of your Turn at your Bank, you > IS may purchase unowned yellow beads on the *starship stack placard* into your isovault for 10 Aqua each.

You have a “Mini-mag Orion” that you wish to take through a Hazard and need to pay the programmers. You isotope refuel EXAMPLE [[4D1](#a4D1)e]one yellow bead at your M Factory, and transport this by Freighter to the Bernal that is your Bank. Then you pay the

programmers 1 yellow bead, and receive 2 Aqua in change. If an isobank exists, the spent yellow bead is stored in its unowned isovault ([4D2](#a4D2)f).

## 4D2. Founding The Isobank (new in Module 4)

An isobank is the Fort Knox of the Solar System, a Bernal where all the Solar System’s reserves of Isotope Fuel (Isofuel, see glossary) are permanently stored for the interstellar rocket called Project *Exodus*. As the drydock for starship

construction, it activates *Exodus* contracts. The player owning the isobank Bernal is known as the **isobanker** and is

awarded the *isobanker medal* **(**[**4A2**](#a4A2)**o)**. During scoring, Isotopes in the isobank/starship count toward the *isototal* **(**[**4E3**](#a4E3)**a)**.

**a. Founding Bernal.** You may found the isobank as the isobanker, if, on your Turn, no isobank exists and you have:

* **An isostandard** (i.e. have produced Isofuel for your GW/TW thruster per [**1Cb**](#a1Cb)). This flips the contract deck per [**4B1**](#a4B1)**b**.
* **A BEO Bernal** (i.e. an Anchored non-Home Bernal, see [**4A7**](#a4A7)**d**) with a Dirtside matching your isostandard. (This can be at an opponent’s Dirtside). If using Module 3, an ET Home Bernal can be the isobank.

**b. Place Starship Token (**[**4A2**](#a4A2)**l).** Place this on the map next to the Bernal’s Token to show that it is the isobank. Even if this chit is separated to fly as a starship, the isobank and the isobanker role are permanent.

**c. Exodus Contracts Active (**[**4B1**](#a4B1)**c).** Removing the starship Token from the *Exodus contract deck* **(**[**4A5**](#a4A5)**f)** activates it; this deck is now available for *contract auctions* **(**[**4B3**](#a4B3)**c)**, and is now affected by inspiration events.

**d. Starship Stack Placard (**[**4A2**](#a4A2)**h)** is given to the isobank founder. It has a slot for the **starship stack** located at the isobank, and 6 **isovaults** for storing each player’s starship-dedicated isofuel, plus an isovault for unowned isofuel.

**e. Decommission.** The isobank Bernal, and the starship Stack and isovaults, may never be voluntarily Decommissioned. > You move your GW thruster to your Home Bernal, and transfer 3 yellow beads to your Bank there. You spend 1 yellow bead for > EXAMPLE [[4D3](#a4D3)e] > FINAO for your Freighter move. This yellow bead, instead of going into the Pool, goes into the unowned isovault of the isobank.

**f. Isofuel Transfer.** Like Aqua, yellow beads stored on a player’s playmat may be (virtually) transferred among Banks in transactions. Store yellow beads used for purchases (FINAO, boosting, patent auctions, unowned Isotopes) on the starship stack placard in the central (unowned) isovault (instead of the Pool). Unowned Isotopes can be purchased per [**4D1**](#a4D1)**d**. Isotopes in the isobank can be negotiated/purchased between the isovaults but cannot be moved outside the isobank.

**g. Mining Bonus.** *Isotope refuel operations* **(**[**1C1**](#a1C1)**a)** at the isobank or its Dirtsides by the isobanker receive 1 extra Isotope. This additional fueling is in addition to, but separate from, other refueling Abilities (e.g. miner colonists).

**h. Isobank Unanchor.** If the isobank’s Bernal becomes unanchored (either voluntarily or in combat), it can be *re-* *anchored* **(**[**2B6**](#a2B6)**e)** or moved to a new anchorage by the isobanker, either towed or as a Bernal. Each isotope in the isovaults adds 1 to its dry mass. The starship Token (carrying its Stack) remains with the Bernal as it moves.

* **Decommission** of the isobank Bernal also Decommissions its Isotopes, reverting the game to the pre-isobank state. > You ET produce an “Amat-catalyzed Fission-Fusion” GW thruster (Spectral Type S) and factory-refuel 1 yellow bead for it. Your > EXAMPLE [[4D2](#a4D2)] > 2nd Bernal, anchored at helene of Spectral Type S, becomes the isobank. Place the starship token next to your helene Bernal.

## 4D3. Desperation Starshots

If the *starship stack* **(**[**4D3**](#a4D3)**d)** has an Operational TW thruster and enough isofuel, the \_chosen commande\_r **(**[**4D3**](#a4D3)**b)** can launch it from the Anchored isobank as a **desperation starship**. It uses the starship Token to move on the map.

**a. Desperation Starship Requirements.** The starship launch requires the following requirements at the isobank:

* **TW Thruster** and the supports necessary to make it Operational without afterburning.
* **Augmented Colonist.** More than 1 can be carried, but only 1 per player. One will become the commander.
* **Fuel.** On departure and upon exiting the map, the *isototal* **(**[**4E3**](#a4E3)**a)** must be at a minimum “reckless”, see [**4E3**](#a4E3)**b**.

**b. Choose Commander.** The player with the most Isofuel in their isovault (isobanker breaks ties) and has completed an *Exodus contract* **(**[**4B1**](#a4B1)**c)** chooses an augmented Colonist (if willing) in the *starship stack* **(**[**4D3**](#a4D3)**d)** to be in **command**. That player receives the *command medal* **(**[**4A2**](#a4A2)**o)** and has until the end of the game to exit the starship off the map, or face *mutiny* **(**[**4D3**](#a4D3)**h)**. The commander must launch the starship on his Turn and make all flight decisions.

**c. Exodus Desperation Launch.** As a free action, the commander *cargo transfers* all *starship requirements* **(**[**4D3**](#a4D3)**a)** into the *starship stack placard* **(**[**4A2**](#a4A2)**h).** The launch moves the starship from the Anchored Bernal of the isobank.

* **Exodus Cargo** at launch can only include 1 TW thruster and 1 or more augmented Colonists. The card holders must allow their cards to be so used. The TW thruster must be the one present with the highest *base* *thrust* **(**[**B2**](#aB2)**d)** plus its supports. The owner of this thruster receives the *propulsion medal* **(**[**4A2**](#a4A2)**o)**. If playing the *combined game* **(**[**4E5**](#a4E5)**c)**, a Promoted Freighter and a Promoted Bernal may also be included at launch.
* **Exodus Isofuel.** The starship carries the entire *isototal* **(**[**4E3**](#a4E3)**a)**. This affects endgame scoring, see **Table** [**4E3**](#a4E3). All *isofuel* **(**[**4D3**](#a4D3)**c)** in the isovaults converts into the isostandard of the starship’s TW thruster.
* **Crew Selection.** Any augmented and colocated Colonist (of any player) may decide to join the starship stack. Each player can have only 1 Colonist in the starship stack. One becomes the commander.
* **Launch.** The launch moves the starship Token from next to the Bernal Token. This freezes the unowned isovaults and deactivates the Exodus contract decks until the starship Token exits the map per [**4D3**](#a4D3)**g** or is Decommissioned. The isovaults freeze means that any spent isofuel must be Discarded to the Pool as was before the isobank was founded. Contracts with the destination “isobank” are now destination “starship”.
* **Exodus Endgame.** Remove all Seniority Disks except one (so that the game ends at the next seniority threshold).

**d. Exodus Movement.** The commander flies the starship Token (containing the contents of the starship stack) as a new type of Spacecraft Stack, the **starship stack**. A starship’s Operational TW thruster provides a net thrust of 1, or 2 if afterburn (expends 1 gold bead from the commander’s or unowned isototal and provides no cooling). The starship has 3 Bonus Pivots, can use factory-assist, and cannot be towed or use Powersat.

* **Cargo Lock.** Once underway, the starship cannot change its Cargo (including cargo transfer, fuel, Decommission, exchange, and negotiation) except to receive additional Isotopes and/or augmented Colonists via cargo transfer.

**e. Exodus Anarchy.** Launching the starship causes Anarchy, which lasts until the starship exits the map.

**f. Starshot FINAO Doubled.** A starship pays double fees for Failure Is Not An Option (FINAO).

**g. Exodus Exit.** Once the starship takes one of the 3 *ad astra* map exits **(**[**1D1**](#a1D1)**b)**, its cards and Isotopes are frozen.

* **Sol-Oort Exit.** If you reach the heliopause (10:00 ♆), you are considered to have completed the Sol-Oort exit.
* **Jupiter-Sol-Jupiter Exit.** If you take this exit, move the starship to the *solar oberth* **(**[**H8**](#aH8)**e)** (but don’t apply its Crash Hazard since you have already done it in the exit path), where it remains for two Turns (and can, if using *Module 3*, be range or kamikaze attacked, similar to dropstones). At the end of the second Turn, if the starship still has an Operational TW thruster, it exits and the game ends at the next seniority threshold **(**[**4D3**](#a4D3)**c)**.

**h. Endgame Mutiny.** If the starship has not exited by the end of the game, give the commander the *default chit* **(**[**4B6**](#a4B6)**)**.

* **Dishonor.** The commander must also surrender their *isobanker medal* ([**4A2**](#a4A2)**o**, if they have it) and their *command* *medal* **(**[**4A2**](#a4A2)**o)** to the player with an on-board Colonist and the next most isofuel in their isovault, choosing if tied. If there no other passengers, Discard these medals.

# 4E. Module 4 Endgame

## 4E1. Module 4 Endgame

The game ends when the final Seniority Disk is taken.

## 4E2. Module 4 Endgame Scoring

Scoring is per the Core Game **(**[**M2**](#aM2)**)**, or [**3G1**](#a3G1) if using Module 3, but with these additions:

**a. Token VP.** *Partner delegates* **(**[**4B8**](#a4B8)**b)** of your color count as delegates at 1 VP each.

**b. Contract VP.** Each fulfilled contract scores VP as listed. (Module 3) Apply a multiplier as for bribe VP **(**[**3G1**](#a3G1)**a)**.

**c. Unfulfilled Contracts.** If you have an unfulfilled contract (whether late or default), you suffer -1 VP for each Aqua left unpaid towards the advance (or twice the advance if the contract was never boosted, see [**4B5**](#a4B5)**c,e**). Then Discard it and take the default chit (next bullet), with the player with the most debt Discarding last.

**d. Default Chit (**[**4B6**](#a4B6)**).** You suffer negative VP if you hold the default chit (-3 VP blue-side, -6 VP gold-side). > You end the post-isobank game with an unfulfilled blue-side late contract with a cash advance of 16 Aqua and no payments. > Your opponent also has an unfulfilled default contract, with a cash advance of 14 and with 10 Aqua of payments on the card. > You are more in debt than she and receive the default chit. You suffer a VP loss of 16 + 3 = 19, and she suffers a VP loss of 4.

**e. Project Exodus Starshot (**[**4E4**](#a4E4)**).** A **starshot** occurs with *Project Exodus scoring* **(**[**4E4**](#a4E4)**)** if there is an isobank containing a high enough *isototal* **(**[**4E3**](#a4E3)**a)**. Furthermore an Operational TW thruster must be at the isobank.

* **Desperation Starshot (**[**4D3**](#a4D3)**).** Project Exodus scoring also occurs if a desperation starship has exited the map.

**f. If Tied.** Resolve by most Aquas. Otherwise, share victory.

## 4E3. Exodus Fueling Table

Use this table to see if either the *desperation starshot* **(**[**4D3**](#a4D3)**c)** or endgame *starshot* requirements **(**[**4E2**](#a4E2)**e)** are met, triggering *Project Exodus scoring* **(**[**4E4**](#a4E4)**)**. It shows the minimum “reckless” amount of Isotope Fuel (Isofuel) required for a starshot to occur depending on player count. The player providing the most Isofuel chooses the starshot commander **(**[**4D3**](#a4D3)**b)**.

**a. Isototal** is total number of isofuel (yellow beads) stored in all 7 *isovaults* **(**[**4D2**](#a4D2)**d)** of the *starship stack placard* (including unowned Isotopes). Note that the isototal is reduced if Isofuel is lost during afterburning.

* **Ad Astra Future (**[**1D1**](#a1D1)**b).** For each of these Futures that you complete, add 4 Isotopes to your isovault as part of the isototal.

**b. Starshot Determination.** If the isototal at the endgame meets the minimum number in the “reckless” row for the appropriate column based on player count, a starshot can occur with *Project Exodus scoring* **(**[**4E4**](#a4E4)**)**.

**c. Fueling Bonus.** If there is a starshot, players receive an endgame VP bonus based on the isototal as shown in the final column of the *Exodus Fueling Table* (below).

**d. Interstellar Fuel Levels (Combined Game).** The first column shows the starting wet mass, depending on isototal and player count, in a continuing *Interstellar* combined game.

EXODUS FUELING TABLE [[4E3](#a4E3)]

Starting Wet Mass 1 Player 2 Players 3 Players 4 Players 5 Players 6 Players Module 4 in [4E5](#a4E5) Interstellar isototalisototalisototalisototalisototalisototalVP per lower Combined Gameranked player

Max (220 mass)15 or more29 or more41 or more51 or more61 or more71 or more4 VP

Crisis (130 mass)9 - 1417 - 2824 - 4031 - 5037 - 6042 - 703 VP

Reckless (80 mass)6 - 811 - 1616 - 2321 - 3024 - 3628 - 412 VP

No Launch0 - 50 - 100 - 150 - 200 - 230 - 270 VP

During the endgame starshot, in the isobank Player White has 8 Isotopes, Player Yellow has 2 Isotopes, and Player Green EXAMPLE [[4E3](#a4E3)] has 7 Isotopes plus 4 Isotopes earned for the completion of the “Lithiated Ammonia Ice Starship” Future (ad astra). There are also 2 unowned Isotopes. The isototal is 23 (“reckless” in a 3-Player game). With the most Isotopes, Player Green is awarded the command medal ([4E4](#a4E4)d).

## 4E4. Project Exodus Scoring

This endgame scoring is triggered at the end of the game by either of two conditions: (1) the isobank has exited as a *desperation starshot* **(**[**4D3**](#a4D3)**c)**, or (2) the number of Isotopes in the *isototal* **(**[**4E3**](#a4E3)**a)** is at least reckless. Both conditions require that the starship/isobank carry an Operational TW thruster. A desperation starship additionally requires at least one augmented Colonist and an completed Exodus contract. Project *Exodus* scoring awards players VP based on the isototal and a ranking based on their Isotopes in the isobank, see the final column in **Table** [**4E3**](#a4E3). Finally, the player with the most Isotopes is awarded the command medal, the highest thrust TW thruster gets the propulsion medal, and players receive VP for on-board augmented Colonists:

**a. Individual Isotope Count.** Each player counts the number of Isotopes in their *isovault* **(**[**4D2**](#a4D2)**d)** of the *starship stack placard* **(**[**4A2**](#a4A2)**h)**.

**b. Award Starship Rank VP.** Compare the *isototal* **(**[**4E3**](#a4E3)**a)** to the appropriate column on **Table** [**4E3**](#a4E3) based on player count. Each player receives the corresponding “VP per lower ranked player” for each player who contributed fewer Isotopes, see the final column in **Table** [**4E3**](#a4E3). In solo games, score as if there were one player of lower rank.

The starshot requirements are met in a 3-player game. Player A has 15 Isotopes, Player B has 15 Isotopes, and Player C has 5 Isotopes. With an isototal of 35, the starshot is at crisis fueling. Players A and B, tied at 15 Isotopes each, receive 3 VP each.

**c. Starshot Medals (4 VP each).** If Project Exodus scoring occurs, the isobanker receives the *isobanker* medal **(**[**4D2**](#a4D2)**)**. Per [**4D3**](#a4D3)**a,b**, the player with the most Isotopes in the isovaults gets the *command medal* **(**[**4A2**](#a4A2)**o)**. The player with the TW thruster with the highest *base thrust* **(**[**B2**](#aB2)**d)** gets the *propulsion medal.*

**d. Augmented Colonist (1 VP/augmentation).** If a starshot occurs, for each augmentation on your Colonist, you receive 1 extra VP. For a *desperation starship* **(**[**4D3**](#a4D3)**d)**, this Colonist must be aboard the starship, but for an endgame *starshot* **(**[**4E2**](#a4E2)**e)**, this Colonist may be any Colonist who you choose.

## 4E5. Combined Game Interstellar (6-7 cycles game only)

The next game in the grand saga is *Interstellar*, humankind’s journey to the stars. This competitive-cooperative game is sold separately, and is a complete game in itself. The game can continue into *Interstellar* if there is a *starshot* **(**[**4E2**](#a4E2)**e)**, including an exited *desperation starshot* **(**[**4D3**](#a4D3)**),** during Module 4. Any player may participate in *Interstellar* if they contributed any card in the starship stack or if they have isofuel in their isovault.

**a. Cyborgs** are augmented starship Colonists. Each player may contribute one Module 4 cyborg to the starshot.

**b. Summary Interstellar Perks (**[**C8**](#aC8)**).** The following give you advantages in *Interstellar*, either to maximize mission success or maximize game victory. See [**C8**](#aC8) in the *Interstellar* rulebook:

* **Isobanker (**[**C8**](#aC8)**b).** This awards the *isobanker* medal **(**[**4A2**](#a4A2)**o)** and you choose who is the first mate.
* **Having the Biggest Isovault (**[**C8**](#aC8)**c).** You choose the Colonist in command who is awarded the *command* medal.
* **Having the Highest Thrust TW Thruster (**[**C8**](#aC8)**d).** This awards the *propulsion* medal per [**4E4**](#a4E4)**c.**.
* **Having Augmentations (**[**C8**](#aC8)**e).** Cyborgs on *Exodus* start with the augmentations which that Colonist possessed in the endgame. These augmentations are given to the player who contributed the Colonist, regardless of the Colonist’s *politics* **(**[**2A8**](#a2A8)**j)**.

**c. Endgame Freighter/Bernal Selection.** Project *Exodus* may choose one Promoted Freighter and/or one Promoted Bernal that is in the desperation starship stack, or that exists during a *starshot* **(**[**4E2**](#a4E2)**e)**. If more than one Purple-Side Freighter or Bernal qualify, then the holder of the propulsion medallion (previous bullet) decides which ones are used, which cannot be himself (unless there is no other choice).

* **If Exodus has a Promoted Freighter (**[**C8**](#aC8)**g).** *Exodus* starts with a “skinny” wardens blueprint plus your shield.
* **If Exodus has a Promoted Bernal (**[**C8**](#aC8)**h).** *Exodus* starts with a “skinny” life-support blueprint plus your shield.

**d.** *Interstellar* **Starship Wet Mass (**[**C8**](#aC8)**l).** *Exodus* starts with a variable amount of isofuel, depending on how much the player’s have jointly contributed per [**4E3**](#a4E3)**d**.

Player Purple is both the isobanker and has the TW thruster (Daedalus) with the highest base thrust (11), and so claims the “isobanker” medal and the “propulsion” medal. Player White, with the most vaulted Isofuel, claims the command medal. All Players have Promoted Bernals and Freighters, and so Player Purple chooses Players Red and Gray, who are trailing in VP, to get the benefits of donating the Bernal and Freighter for Project Exodus.

# 4F. Exodus Scenarios

**(Module 3 competitive)**

These wargame variants require Module 3 (Conflict). They assume a total War between two implacable foes, and the loser is motivated to exit the Solar System entirely, and start over in a new system. Conversely the winners of the War are motivated to hinder the losers from building a starship and escaping.

**a. Sides.** One side (as specified) are the Loyalists and the other are the Independents. However, as this is an ideological rather than racial war, you are free to join the enemy side using defection **(**[**3B3**](#a3B3)**c)**.

**b. War/Anarchy Desperation.** During War or Anarchy, or during the year the War ends, either the isobanker or the player with the most Isotopes in their isovault can launch/pilot a *desperation starshot* **(**[**4D3**](#a4D3)**)**, even if they haven’t completed an Exodus contract. Other requirements **(**[**4D3**](#a4D3)**a)** still apply. This ends the game earlier per [**4D3**](#a4D3)**c**.

**c. Stillborn War.** If War breaks out with all the Factions and all the extremists in the same bloc, then the War ends without any War effect (including no space lord effects).

**d. Winning the War.** See [**3F4**](#a3F4).

**e. Winning the Game.** See [**4E2**](#a4E2), including contributions to Project *Exodus* **(**[**4E4**](#a4E4)**)**.

## 4F1. Exodus Conventional War

This game plays with all the rules of Module 3, but with scoring per [**4E2**](#a4E2).

**a. Isobank/Starship.** The Isotopes in the isovaults remain undisturbed even if they are owned by enemies of the isobanker. The *chosen commander* may launch the isobank as a starship per [**4D3**](#a4D3)**b**.

**b. Exodus Combat.** Combat may take place as per Module 3 rules. The isobank/starship defends as a space target owned by the isobanker. Once launched, the commander may use the starship’s Operational TW thruster as a *gun* **(**[**3E3**](#a3E3)**b)**. A Colonist in the starship stack is considered the color of its *politics* **(**[**2A8**](#a2A8)**j)**, and this player (if in the game) may use the Colonist’s weapons, but never upon another Colonist or card in the starship stack.

War has broken out in a 3-player game, and Player Yellow, fighting for the Loyalist ⊕ bloc, has the most Isotopes (10) in his isovault. He negotiates with the enemy, Player Gray fighting for the Independence ⊙ bloc, to send a TW thruster with an augmented Colonist to the isobank at Titan. Player Yellow appoints Player Gray’s Colonist as the commander, and Player Gray launches the isobank as the Starship Exodus. Since there are 3 other isotopes in the isovaults, Exodus flies with a reckless 13 Isotopes.

## 4F2. Exodus Union War

The game begins with Human Factions per Module 3, but if War breaks out (from any of the causes listed below), the Robots become introspectively conscious and join the spaceborns in a fight for recognition as fully human. Players are assigned to a bloc depending upon the Colonists they hold. Follow these steps:

**a. Indicate Bloc Allegiance.** When War breaks out, players with Robot/spaceborn Colonists (i.e. belonging to the *Spacer Union* **(**[**4C2**](#a4C2)**c)**) start as Independence. Players with earthborn Colonists start as Loyalist. Players with no Colonists must join either bloc, choosing secretly and simultaneously. Flip your propaganda chit to independence or loyalist without losing your extremist. Propaganda chits with no extremists are unaffected. > As Player Purple, you default as Loyalist when War breaks out. Yet you hold the “Gabonese Mining Consortium” Colonist > EXAMPLE [[4F2](#a4F2)a] > and thus are a member of the Spacer Union, which indicates that you start as Independence ⊙. Flip the propaganda in > authority to its Independence side, with your extremist on top.

**b. Desertion of Enemy Colonists (modifies** [**3C3**](#a3C3)**f).** All earthborn Colonists are members of the Loyalist bloc, and all Robot/spaceborn Colonists are members of Independence, regardless of ideology. If at the end of your Turn a Colonist of yours supports the bloc other then what your propaganda chit indicates, you must either:

* **Evade** the “No Enemy Colonists” restriction ([**3D5**](#a3D5)**d** honor).
* **Discard** this enemy Colonist to the bottom of its queue.

**c. War Outbreak.** There are 4 ways that War can occur:

* **A War Outbreak Roll** is made during each adjustment of the exploitation track per [**3C1**](#a3C1).
* **Empty Queue.** If there is an *exomigration* **(**[**2A6**](#a2A6)**)** but no cards are in the appropriate queue to draw from.
* **Uplift Future.** If a player completes the *uplift future* **(**[**1D5**](#a1D5)**n)**, they alone become the independence bloc.
* **Casus Belli.** These Futures can start Wars **(**[**1D2**](#a1D2)**c)**.

**d. Exomigration.** Independence can only *exomigrate* **(**[**2A6**](#a2A6)**)** from the Robot/spaceborn queue, and Loyalists can only exomigrate from the earthborn queue.

**e. Postbellum Space Republic.** If a Space Republic occurs as a result of a Future or Loyalist victory,

* **Anarchy Event.** Use [**K2**](#aK2)**e** (so no combat).
* **Luna.** You can Anchor Bernals to Luna, and no longer need permission from the 1st player to prospect Luna.
* **Pax Republica.** Any current Wars end with an Independence ⊙ Victory. There are no more Wars or war outbreak rolls.

**f. Postbellum Space Empire.** If a Space Empire occurs as a result of a Future or Loyalist ⊕ victory:

* **Anarchy Event.** If using Module 3, use the *Age of Piracy* variant **(**[**3Ad**](#a3Ad)**)** during Anarchy.
* **ET Home Bernals (**[**3F1**](#a3F1)**)** become ordinary Bernals.
* **Political Assembly Dissolved.** Remove the political placard. This Discards all delegates and the Active Law Token, propaganda, any bribes, and the placed (legacy vote) Seniority Disks. Module 0 is no longer used.
* **Spacer Union Dissolved.** This negates [**4C2**](#a4C2)**c** and [**4C2**](#a4C2)**d**, allowing players to hold both types of Colonists.
* **Unfulfilled Contracts Discarded.** No more contract auctions are allowed except for *Exodus contracts* **(**[**4A5**](#a4A5)**f)**.
* **Pax Tyrannica.** Any current Wars end with a Loyalist Victory. There are no more Wars or war outbreak rolls.

**g. Winning the Game.** See [**4E2**](#a4E2).

# 4G. Module 4 Solitaire Games

If you play a solo or a fully cooperative game, apply the following Module 4 rules:

**a. Alternative Solitaire Political Diagram (**[**4A2**](#a4A2)**h).** This is recommended, but since the Isobank placard is on the other side, you should keep your Isotopes separate from unowned Isotopes.

## 4G1. Contract Auctions Modifications

For all solitaire variants, fundraising still acquires contracts but the bidding is skipped and each contract has a flat 6 years to fulfill.

## 4G2. CEO Solitaire Modifications

If using *CEO Solitaire* **(**[**V6**](#aV6)**)**:

**a. Default** if acquired, add this to the demand pile as a *fatality disk* **(**[**V6**](#aV6)**c)**.

**b. Starshot VP.** For purposes of meeting KPI, making a *desperation starshot* **(**[**4D3**](#a4D3)**c)** or meeting the endgame *starshot* requirements **(**[**4E2**](#a4E2)**e)** counts as 8 VP (isototal = 6 - 8 “Reckless”), 16 VP (isototal = 9 - 14 “Crisis”), or 32 VP (isototal = 15+ “Max”) **(Table** [**4E3**](#a4E3)**)**.

**c. Victory Conditions.** See [**V6**](#aV6)**e** (do not use [**4G4**](#a4G4)). At least once before the final meeting you need to perform an *Exodus contract* **(**[**4B1**](#a4B1)**c)** plus either a Future or a starshot (previous bullet).

## 4G3. Module 0 Solitaire Variant

When playing any solitaire variant that includes Module 0, use the provided solitaire political assembly. This changes the *Laws* **(**[**O5**](#aO5)**)**, with the design goal to make all Ideologies relevant, and to reduce the randomness and luck-factor of the experience, so one can plan better for victory. The revised setup, and the new Laws and lobbies are:

**a. Setup.** Place an additional delegate of your faction color into centrist. All Solitaire Module 0 games must include all cards in each patent deck used.

**b. Lobby.** Pay 1 Aqua and Discard a delegate in an inactive Ideology to use its Law.

**c. Individuality Law “Launch Contracts”.** Boosting is a 1/Turn free action.

**d. Equality Law “Subsidized Research”.** Take the top card of a patent deck for free when initiating a research auction. You may take any bonus supports, paying 1 Aqua per support card.

**e. Authority Law “Regime Change”.** After an Event Roll, Discard a delegate here to change to or cancel inspiration. This may be the same delegate from a lobby action.

**f. Unity Law “Sol Unification”.** Lobby cost is 0 Aqua. Replace season blue Anarchy with “International Assistance.” FINAO cost is halved until the end of season blue.

**g. Freedom Law “Solo Free Trade Act”.** May sell 2 white cards for 6 Aqua with a free market operation.

## 4G4. Solitaire/Cooperative Victory Conditions

As a solitaire player (including combined game solitaire but not CEO solitaire), you win by exiting the map with a *desperation starshot* **(**[**4E2**](#a4E2)**e)** with the additional requirement that its *isototal* **(**[**4E3**](#a4E3)**a)** must be “Max” per the *Exodus* *Fueling Table* **(**[**4E3**](#a4E3)**)**. There are 3 “New World” victory levels:

**a. Polynesian (decisive victory).** Exit the map **(**[**4D3**](#a4D3)**g)** in 5 cycles. This is like sailing an outrigger canoe and discovering Hawaii or New Zealand.

**b. Columbus (victory).** Exit the map in 6 cycles. This is like sailing the Atlantic non-stop.

**c. Viking (marginal victory).** Exit the map in 7 cycles. This is like sailing the Atlantic with island hopping.

# 4H. Module 4 Strategy

**(Geoff Speare)**

Module 4 *Exodus* adds one new feature (contracts) for all games, and 3 others (augmentations, spaceborn Colonists, and the isobank) for longer games. Contracts change the game significantly by injecting a lot of Aqua into the early game (balanced by the need to spend time fulfilling their missions). A good strategy weaves contracts into your main goals of exploration and industrialization. Contracts should help achieve your core mission, not distract from it.

**a. Longer Games.** The need for augmentation chits changes the pace of promotions and gaining the all important TW thruster. At the same time, there’s a race to found the isobank, the competition over isototal, and the decision about whether to join the spacer union or stick with earthborn Colonists. Keep track of what your opponents are doing, or (in solitaire play) balance your priorities.

## 4H1. Contract Tips (4-Cycle Game)

Contracts can jump start your economy and missions, but can turn into distractions without proper planning:

**a. Early Rockets.** Boosting quickly allows nabbing the easy Glory chits, which makes *paleoconservative directive* **(**[**O5**](#aO5)**b)** extremely attractive. Module 4 adds new advantages to early missions. If you are the first player with an Operational Rocket, you will have an edge in bidding for and fulfilling contracts, providing funding, VP, and Abilities. Players without early Rockets may try to influence politics to keep those contracts unavailable.

**b. Sails.** Many contracts can be completed with Sails (especially with assistance from crew thrusters). If a Sail is available early, don’t hesitate to make a high bid. In testing, a 5-6 Aqua bid for an early Sail was common.

**c. Timing.** As contracts need to be boosted, it’s best to take a contract when you have something else to boost: your initial Rocket, an improved component, etc. The number of Operations you can perform in a game is limited, so do as much as you can with each one.

**d. Hazards.** When bidding on (and fulfilling) a contract, all of the concerns for any *High Frontier* mission apply: radiation hardness, Mass, Burns, Hazards, and landing/liftoff. In particular, don’t forget that the contract has its own Mass and rad hardness. If a contract with the “Humans on Board” icon suffers involuntary Decommission, you suffer the *default chit* **(**[**4B6**](#a4B6)**)**, the *default stigma* **(**[**4B6**](#a4B6)**b)**, and loss of equipment. Do not risk manned contracts on a Hazard, CME, or Belt Roll unless you are truly desperate.

**e. Turn Order.** Players after you in turn order have an advantage; they effectively get an extra Turn to complete the contract. Choose a Turn to bid when you are in a better position to complete the contract than your eligible opponents. If they do win, starting another auction next Turn is often a good idea - unless they complete their contract very quickly, they will be unable to bid.

**f. Bait.** Contract auctions are also great opportunities to encourage opponents to make a mistake, or to nudge them away from your mission goals. Tempting an opponent with the right contract may distract them from some other goal they should be pursuing - or even cause them to bid too aggressively and default. The price of acquiring the wrong contract is much higher than that of buying the wrong patent. Think carefully when you bid.

**g. The Best Contracts.** Contracts are central to Module 4. What makes one contract better than others?

* **Going My Way.** The best contracts are those that have low opportunity cost because you were planning to go in that area anyway. “Return” contracts are often easier to take in the early game because you’ll probably be returning to LEO anyway. Later in the game, contracts must be judged in terms of return on investment: what else could you be doing?
* **Abilities (**[**4B2**](#a4B2)**f).** Important in the early game. Bailout saves you 3 Aqua - or a critical card - each time budget cuts occurs. Insight (cycle a deck before a research auction) helps get the cards you need and/or buries cards your opponents want. Connections is more useful the earlier you get it. Other Abilities (such as on contracts involving Mercury) may change your plans entirely.
* **Aqua Advance.** Aqua is the scarcest resource at the start of the game. Watch for contracts that match what your opponents are doing and keep the Active Law away from them.
* **Victory Points (VP).** Contracts are worth Victory Points - but usually, building Factories and Colonies is worth more. If you pursue nothing but contracts, it is unlikely that you will win. Instead, try to leverage contracts to accelerate your industrialization efforts without letting them distract you from that goal.

## 4H2. Planning Tips (Modules 1 + 2 + 4 Games)

**a. Goals.** A Module 4 game has 3 extra steps that you may need to get into an advantageous endgame position:

* **Fulfill Contracts**. Enough to gain at least one of 4 different augmentations. Should include at least one gold-side contract.
* **Get Factories.** (VP, ET Produce)
* **Get Bernals.** (VP, Aqua; VP and Operations through Colonists)
* **Augment Colonists.** (Module 4)
* **Transport Augmented Colonists to Promotion Locations** (Module 4)
* **Get TW Thruster.** (Movement)
* **Get Futures.** (VP)

**b. Long-Range Planning.** Your Turns are often either Operation-limited or movement-limited. Try to combine both in a Turn, for instance ET producing cards while moving a contract to its destination.

* **Operations.** Contracts require Operations to acquire and boost (as with patents, it’s better for you to win an auction that someone else started, to save yourself an Operation), but give you Aqua - which in effect saves you Operations that you would have otherwise spent selling cards or fundraising.
* **Movement.** Fulfilling contracts requires a lot more Rocket movement. The more you can align that movement with other missions (industrializing, moving Bernals, etc.), or perform it when you are Operation- limited (such as while you are ET Producing, or buying cards to launch a Bernal), the faster your game will progress.

**c. Contract Variety.** With the contract requirements for augmentation (and thus for Promotions), choosing a variety of contracts is much more important than in Core+M0 games. Fortunately, there are multiple valid paths. Getting an early start on contract diversity can be quite useful. The Political Assembly can fill up quickly, making it harder to move the Active Law. If you can fulfill contracts before the Active Law gets stuck, or before the isobank, you are one step ahead. The new *connections* Ability **(**[**4B2**](#a4B2)**f)** is useful here. Alternatively, waiting for (or causing) Isotope production leads to contracts which are harder to fulfill, but which have more chit symbols on them. You’ll need at least one gold-side contract to promote your TW Thruster - make sure to plan for that.

**d. To Bernal or Not To Bernal.** *High Frontier 4* has great balance between “Bernal first” and “Factory first” strategies. Both are reasonable - and often, doing the one fewer people have chosen is the best option. Everyone needs a Bernal (probably a Home Bernal), and everyone needs Factories, but which has primacy is opportunistic. Module 4 changes this balance a bit:

* **Early Bernal.** If you focus on an early Bernal, you gain an early Colonist, and early Bernal profits which can be used while you launch your Factory mission. Since a Bernal is needed for the implant operation, you can pick and choose the right augmentations as they appear to augment your Colonists.
* **Early Elevator Bernal.** Anchoring one of the two elevator Bernals (GEO Elevator or Lofstrom Loop) are tremendously helpful with contracts, as you can boost directly to Bernal with no cost increase. Don’t forget about the Epic Hazard Roll when anchoring these in Home Orbits!
* **Early Rocket.** Since you need a Spacecraft to complete a contract, an early Rocket leads to early contracts and their advantages (see [**4H1**](#a4H1)**a**). You can also establish an early Colony in space (i.e. not a Home Bernal), which gives the option of going directly to spaceborn Colonists when you do Anchor your Bernal.

## 4H3. Augmentation Tips

Augmentation chits require an operation to move or remove, so consider carefully when implanting them.

**a. Early Promotion.** If you proceed with Parenthood, try to get the child Promoted via *wunderkind* **(**[**4C5**](#a4C5)**d)**. This saves an operation and gets you a much better Colonist.

**b. Life-Support (Parenthood)** is the most pivotal of augmentations. If you have access to it, staying with earthborn Colonists makes more sense. However, if multiple players are doing the same, the selection of child Colonists might not be as good as you like.

**c. Other Augmentations** can augment your strategy (lowering mass, filling gaps in your patent collection, etc.). Sometimes it makes sense to get a specific contract for it’s augmentation.

## 4H4. Earthborn vs. Spaceborn

The more people on a side, the more churn (and the less control).

**a. Earthborn Advantages.** Parenthood, more Isotope multipliers, more miners and engineers, better Futures VP.

**b. Spaceborn Advantages.** Get Robots, lower average Mass, higher average rad-hardness, more Industrialists and prospectors.

# 4I. List of Spaceborn Colonist Futures

**a. Vinge Future:** Req = This card at a Promoted Bernal and have completed an Exodus contract. Effects = *Space* *Empire* **(**[**4F2**](#a4F2)**f)** established, Robots emancipated (if not already emancipated), 10 VP.

**b. Exonet Future:** Req = Colonies in 4 Heliocentric Zones, with this card and another augmented Colonist at one of them. Effect = choose any contract deck when fundraising. Endgame Effect = 11 VP. This fundraising Ability is granted for the remainder of the game, regardless of the state of this card.

**c. Space Surveillance Future:** Req = Active Law in Freedom. Effects = *Space Republic* **(**[**4F2**](#a4F2)**e)** established, 9 VP.

**d. Union War Future:** Req = This card and another Promoted augmented Robot at your Colony on a Site of Size 7 or greater. Effect = *Casus belli* **(**[**1D2**](#a1D2)**)**, 9 VP. The War is a “War of Independence” (see core glossary) unless using Module 3, in which case it is an *Exodus Union War* **(**[**4F2**](#a4F2)**)**.

**e. TNO Lab Future:** Req = This card and 2 other augmented Colonists at your Colony in Neptune ♆ zone. Endgame Effect = +4 VP per Factory in Neptune ♆ zone.

**f. Von Neumann Future:** Req = Decommission this card & Operational refinery at your Synodic Comet Factory. This is not a Felony even if Robots are emancipated. Note that the refinery supports do not need to be Decommissioned (they are replicated). Effects = Your Robots are always Promoted (your existing Robots Promote regardless of augmentation chits and new Robots Promote upon being played), 9 VP. This Robot Ability is granted for the remainder of the game, regardless of the state of this card.

**g. Nanite Goo Future:** Reqs = This card at your non-Dirtside Push Colony. Effects = one free implant operation at this Site (immediately after completing the Future), 11 VP.

**h. Interstellar Exploration Future:** Reqs = This card and another augmented Colonist at EM Sunlens. Effects = one free *research grant* **(**[**O5**](#aO5)**e)** at no cost (immediately after completing the Future), 14 VP.

**i. Quantum Entanglement Future:** Reqs = This card at Haumea (10:10 ♆) with an Operational x reactor. Effects = Ability to make 1 reroll of a Crash Hazard Roll, 10 VP. Crash Hazards have the white skull (so not Aerobrake Hazards, Epic Hazards, etc.). If FINAO payment is made, it must be before the first roll. Make the reroll after seeing the first roll result. This reroll Ability is granted for the remainder of the game, regardless of the state of this card.

**j. Isotope Cartel Future:** This card and 15 Isotopes at your Promoted Anchored Bernal. Effects = Isotope exchange rate is now 12 Aqua for all players (in effect for the remainder of the game, regardless of the state of this card). Endgame effect = 9 VP.

**k. LIC Scan Future:** Reqs = This card and another Promoted Colonist at your Synodic Comet Factory. Effects = If you produce any isotopes as part of a site refuel operation, you may move 1 of them to your Bank, 9 VP. You have this Ability for the remainder of the game, regardless of the state of this card.

**l. Avatar Future:** Reqs = This card at Promoted Bernal with Neptune zone Dirtside, Active Law = Individuality. Effects = immune to Felonies (other players may not perform Felonies against you), 9 VP. This immunity Ability is granted for the remainder of the game, regardless of the state of this card.

**m. Warden Starshot Future (Ad Astra):** Req = *Ad astra* **(**[**1D1**](#a1D1)**b)** with TW thruster and Promoted Freighter. Effects = Your Freighter and Mobile Factories receive +1 net thrust; 7 VP. Your Freighter speed increase is granted for the remainder of the game, regardless of the state of this card.

**n. TW Commander Future:** Reqs = In the *isototal* **(**[**4E3**](#a4E3)**a)**, have at least 8 Isotopes plus have more than any opponent. Effects = Your delegates count as 2 votes during *vote tallies* **(**[**O3**](#aO3)**a)**, 9 VP. You have this delegate Ability for the remainder of the game, regardless of the state of this card.

**o. Exodus Future (Ad Astra):** Reqs = *Ad astra* **(**[**1D1**](#a1D1)**b)** with TW thruster and your Promoted Bernal. Effects = *Casus belli* **(**[**1D2**](#a1D2)**c)**, 12 VP.

**p. Vats Future:** Reqs=Your colonist with the life-support augmentation has a *wunderkind* **(**[**4C5**](#a4C5)**d)**. Effects = 9 VP.