

FAN EXPANSION
FOR
JACOB FRYXELIUS'
TERRAFORMING MARS



TERRAFORMING MARS
HIGH ORBIT

DESIGNED BY ADHAI GREY

HIGH ORBIT

a fan expansion for TERRAFORMING MARS

Introduction

The Terraforming of Mars would need vast space infrastructure in interplanetary space. There are opinions in scientific community, that it would be much easier to colonize space with space habitats (O'Neill Cylinders, etc.), than do actual terraforming.

There are also a couple of absent celestial bodies from Colonies, so these could-have-been Colonies are here.

In this fan expansion I provide some additional focus on interplanetary void.

- Adhai

Global Contest Compatibility

This fan expansion has the option for compatibility with the *Global Contest* fan expansion, in the form of additional copies of cards. These twenty-seven extra cards are labelled with the "6" icon.

WHAT'S NEW

- 49 new Infrastructure cards (silver),
- 5 new corporations;
- 5 new Colony Tiles;
- Variant Venus board;
- New Resources:



ORE;



WILD.

- New tags:



INFRASTRUCTURE;



CLONE.

RULES & GAME PLAY

Corporations

Shuffle the High Orbit corporation cards together with the other corporation cards

Variant: Let players draw one of the High Orbit Corporations, and one of the other corporations to choose from.

High Orbit *Fan Expansion*



Infrastructure (TAG)

This tag represents the orbital apparatus that the corporations have set up to facilitate the terraforming of the red planet.



Clone (TAG)

This tag allows you to copy the tag(s) of another, specific, card. This may copy multiple tags should the target card possess multiple tags.



Ore (RESOURCE)

High Orbit introduces a new resource: Ore. Ore represents unrefined matter that can become useful metals and alloys once processed. Ore is collected on cards and work in the same way as microbes and animals.



Wild (RESOURCE)

Wild resources allow you to decide exactly which resources you will gain! These can be any of the six resources present on the player mat, or those found only on cards such as Floaters, Animals, Microbes, Or, etc. If you gain several Wild resources at the same time, these may be mixed and matched freely.

Infrastructure Cards

There are seventeen different types of silver *Infrastructure* cards, with multiple copies of each.


These are played just like Project cards, but never form part of your hand.

Setup: Place each type of Infrastructure card in its own face-up pile next to the game board.

Playing an Infrastructure Card: As an Action (but NOT a Standard Project), you may play one Infrastructure card from those face-up next to the board.

 **Infrastructure Costs:** To

play an infrastructure card you must pay its cost. Most of these cards are NOT costed in MegaCredits, but instead use Titanium, as listed on the card.

 **Orbital Space Requirements:** Many of these cards may also have the requirements that you must have more Space tags than Infrastructure tags.

Investment: To make Infrastructure cards easier to play, you may substitute FOUR MegaCredits for each Titanium. As these are not standard projects, cards and effects that improve Titanium spending on Space Cards are not relevant in this case.

Interactions with other cards: Silver cards in play work in the same way to blue project cards, but do not count as blue project cards for any reason.

ROGUE COLONIES

The five "Rogue" Colony Tiles may be mixed in with, and used like, the other colonies. *Psyche* should only be used if playing with the Infrastructure cards from this expansion. The other four tiles may be use regardless whenever you use the Colonies Expansion

Option: When selecting colonies at the start of the game, include two of the new Rogue Colonies (and/or *Pathfinders* fan expansion colonies), and make up the remainder from those in the Colonies expansion. If playing with the Venus variant board, this then forms an extra colony in play.

Titania

Titania is the largest of the moons of Uranus and the eighth largest moon in the Solar System at a diameter of 1,578 kilometres. Discovered by William Herschel in 1787, Titania is named after the queen of the fairies in Shakespeare's A Midsummer Night's Dream. Its orbit lies inside Uranus's magnetosphere.

The placement bonus for Titania grants you VPs at the end of the game.

Titania grants MegaCredits.

Hygeia

10 Hygeia is a major asteroid located in the main asteroid belt. With somewhat oblong diameters of 350-500 kilometres and a mass estimated to be 2.9% of the total mass of the belt, is the fourth-largest asteroid in the Solar System by both volume and mass. In some spectral classifications it is the largest of the dark C-type asteroids with a carbonaceous surface, in others it is second after 1 Ceres. It thus forms a perfect hide-out for piratical raiders!

The Placement bonus for Hygeia allows you to cause one other player to discard a random card from their hand.

The Colony bonus for Hygeia allows you to look at the top four discards, and pick one to keep.

Hygeia's Trade Income works in a similar way to *Europa* from the base Colonies expansion, save that it allows you to steal the resources listed from another player. That player discards the listed resources, and you gain the number they discard.

High Orbit *Fan Expansion*

Mercury

Mercury is tidally locked with the Sun in a 3:2 spin-orbit resonance, and rotates in a way that is unique in the Solar System. As seen relative to the fixed stars, it rotates on its axis exactly three times for every two revolutions it makes around the Sun. As seen from the Sun, in a frame of reference that rotates with the orbital motion, it appears to rotate only once every two Mercurian years. An observer on Mercury would therefore see only one day every two Mercurian years.

The Mercury Colony represents concerted efforts to mine Mercury for useful resources

The placement bonus for Mercury allows you to gain the current Trade Income of any other colony in play. This does NOT cause that colony's marker to be moved down it's colony track.

Mercury's Trade Income works in a similar way to *Europa* from the base Colonies expansion.

Psyche

16 Psyche is one of the ten most massive asteroids in the asteroid belt. It is over 200 km in diameter and contains a little less than one percent of the mass of the entire asteroid belt. It is thought to be the exposed iron core of a protoplanet. It is the most massive metallic M-type asteroid. Psyche was discovered by the Italian astronomer Annibale de Gasparis on 17 March 1852 from Naples and named after the Greek mythological figure Psyche.

The placement bonus for Psyche allows you to place any one Infrastructure, for which you meet the play requirements, for free.

Psyche gives Ore.

Psyche starts with its white marker on the asteroid picture itself, and the marker is placed on the highlighted second step of the track immediately when there is any card in play that may collect Ore. You can not place a colony there, or trade there, until this happens. Like with other colonies that do not give standard resources, this may not be used until a player has the ability to store that resource.

*USE THIS COLONY ONLY IF ALSO PLAYING
WITH HIGH ORBIT CARDS FROM THIS
EXPANSION!*

High Orbit *Fan Expansion*

Vesta

Vesta is the second-most-massive and second-largest body in the asteroid belt, after the dwarf planet Ceres, and it contributes an estimated 9% of the mass of the asteroid belt. It is slightly larger than Pallas, though significantly more massive. Vesta is the only known remaining rocky protoplanet (with a differentiated interior) of the kind that formed the terrestrial planets. Numerous fragments of Vesta were ejected by collisions one and two billion years ago that left two enormous craters occupying much of Vesta's southern hemisphere.

The placement bonus for Vesta allows you to draw project Cards until you find a card with a Space tag. Add that card to your hand and discard the rest.

Vesta gives Steel *and* Titanium.

VENUS BOARD VARIANT

This variant board may be used in place of the standard Venus board at the start of the game.

Venus Colony tile: When playing with BOTH Venus Next and Colonies, Venus board may act as one of Colony tiles. This may be used as an additional Colony tile (thus number of tiles = number of players+2 +Venus board), or in place of one of standard Colony tiles (thus number of tiles = number of players+1 +Venus board).

The Venus Colony stays inactive until any non-event Venus-tagged card enters play. Put Colony marker on its' colony track at that point.

Colony Bonus: when this Colony is traded with, The Colony owner may decrease or increase a colony marker on any Colony tile by one step. This symbolises fuel economy when asteroid belt trade is conducted through Venus. If there are more than one colony, each must target different colony tile.

Trade income: This subtype of *wild resource*, *diverse wild resource* (with blue asterisk). Each unit of diverse wild resource received at one time must be of different type.

Rules version 2019-05-08

MEGACREDITS

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