

# the earthman's burden

## BACKGROUND

It is the not-too-distant future – next Sunday, AD – and Earth has been on the brink of war for decades. The Secretary-General uses the military and economic clout of the UN to enforce a fragile peace as best he can. This delicate balance is shattered by the invention of a functional, efficient and powerful Bussard ramjet engine capable of 1g throughout the Solar System. Within a few short years, and with the Outer Space Treaty quickly forgotten, the superpowers of Earth expand outward to claim, colonise, exploit and perhaps even invade the other worlds of the system.

It will take a clever commander to strike just the right balance. Rush to build an unstoppable armada? Husband your resources? Research ever-more-advanced technologies? Leap upon the hotly-contested inner system or play the long game in the outer worlds? When do you turn on that most treasured prize – Earth itself?

## TERMINOLOGY

- All **rolls** are made on d6; a **bonus** of  $+n$  to the roll adds  $n$  to the amount shown on each die, making it easier to achieve higher targets; a **penalty** of  $-n$  subtracts  $n$  similarly, making higher targets harder. All applicable boni and penalties are cumulative.
- The board consists of **worlds** (moons and rocky planets) and **trajectories**, among which each player has **units**, as do the UN.
- Worlds each have an **orbit** and between two and seven **regions**.
- Orbits and trajectories are connected by arrows. Moves **skyward** are made against arrows, towards the 'to anywhere' trajectory; moves **worldward** are made with arrows towards the worlds.
- Units occupying a region are **developments** are said to be **on** that world and **claiming** that region. A development may be either **stable** (right way up) or **at risk** (inverted), indicating that the development is in political or economic turmoil.
- Units occupying an orbit are **fleets** and are said to be **on** that world; units occupying a trajectory are also **fleets** but are **spaceborne**.
- The tracks board consists of the **Research Circuit**, the **AI Track** and the **Eschaton Track**. The technology grid shows the prerequisites for each **technology** and who has obtained which.
- The **Special Abilities** deck consists of mostly useless but some very powerful cards, which can be kept secret until needed.

## EXTRAORDINARY ACTIONS

At any time during the game:

- So long as your AI counter is not on node 0, you may after any roll has been made move your counter as many steps down the AI track towards node 0 as you like and re-roll or force to be re-rolled that many dice from the roll just made; the new result replaces the old. Your AI may affect rolls already affected by your AI or that of other players.
- You may move your counters on the AI or Eschaton tracks as many nodes closer to the 0 node or away from the Singularity as you like; you may move your counter on the Research track as far anticlockwise as you like so long as it does not cross the Research bar.
- You may reveal one of your special ability cards, unless you have conducted the secret research and are missing its prerequisites.

At any time during your turn or with the consent of the player whose turn it is:

- You may remove any of your developments which is not at risk and replace each with a fleet in orbit of that world.
- You may remove any of your fleets in orbit or developments from the board.

At any time during your turn or that of the player with whom you are exchanging or to whom you are gifting units:

- You may with another player's consent give him ownership of any of your fleets in orbit or any of your developments. Fleets and developments transferred to another player in this manner may not move or act, nor return fire, until after the next time the receiving player's turn has ended. The UN will automatically accept any units thus gifted.
- You may allow any player to copy any technology which you know and to which he has any and all prerequisites, just as if he had researched it. The UN will automatically accept any technologies thus gifted.

## THE UNITED NATIONS

Should the UN have any units when an Attack or Overthrow action is declared on Earth against you, you may count the UN units as yours when checking whether you outnumber your attacker and may make use of the UN fleets as well as any of your own when returning fire against an Attack action.\* The UN will return fire in full as if they were a player if you open fire upon them.

Should the UN have any developments on Earth in your Civilian Actions phase, any one group of your developments on Earth each turn may either construct one fleet or may automatically pacify one of your developments, without needing to roll in either case.† Furthermore, should you have developments at risk on Earth, risk only spreads on a roll of 1 at the start of the Civilian Actions phase.

Should the UN have any developments on Earth at the end of your turn, they will automatically claim any unclaimed regions on Earth with new developments; they have no need to roll; should they also have fewer than 12 fleets, they will construct one new fleet on Earth without needing to roll.

*\* If the attacker has the Ear of the United Nations special ability, the UN does not help you outnumber him and will not return fire for you.*

*† If you have Ear of the United Nations, you may instead count UN fleets as yours when performing pacification, overthrow & espionage.*

## VICTORY

It is difficult to win without a special ability, especially if another player has one. Do your research.

Should all players with units remaining on the board agree that you have won, then you have won by conquest and all other players have lost.

Should you have claimed all seven regions of Earth at the start of three consecutive turns, then you have won by blockade and all other players have lost.

*If you have both Paradox Circuits and The Eschaton and your counter on the Eschaton track reaches the Singularity node, then you have brought about the Singularity and all other players have lost.*

Should all players with units remaining on the board declare a cessation of hostilities, then peace in our time has been brought about; however, all players without units remaining on the board have lost.

## OPTIONAL RULES

All players must agree the use of any optional rules before the game starts.

**Basic Game:** Players may not use the Research action, nor gain access to any technology or special ability.

**Minigame:** Use with four or fewer players only. Players may not place any fleets in the 'towards anywhere' trajectory, and thus may not move units to Jupiter or Saturn. If playing with special abilities, remove Mass Drivers and Secret Strait, and four no-ability cards.

## OPTIONAL RULES CONTD.

**Advanced Hydroponics:** Players may not win by blockade.

**Standard Abilities:** Remove the special ability deck, and make any combination of special abilities automatically available to all players, for example: a) none, b) just Advanced Von Neumann Engines, c) Advanced Von Neumann Engines and the AI Singularity, or d) all of them. A roll of 6 during a research re-roll does nothing.

**Assisted Research:** Technologies may not be copied as an extraordinary action, and cannot be donated to the UN. However, once per turn, one of your groups of developments taking the research action may, instead of rolling and proceeding around the research circuit, copy one technology of another willing player, provided you have all necessary prerequisites.

**Loyal Subjects:** You may not give another player your fleets or developments or allow him to copy any of your technologies (save with the Overthrow or Espionage actions respectively).

**Seven Players:** If you can find counters in a seventh colour, you can play with seven players. If there are no UN developments on Earth when play begins, place one UN development in an imaginary region in the centre of the Earth and have it act as one normal UN development. This imaginary region ceases to exist if for whatever reason the development occupying it ceases to exist or ceases to belong to the UN or if for whatever reason the UN gain any other developments on Earth.

**Assassination:** Each player places a Commander in Earth's orbit before setup commences. A Commander may move like a fleet; a Commander acts in the Military phase and in the Civilian phase just as if it were two fleets acting in whichever group to which the Commander is assigned (it rolls twice instead of once for each fleet action it takes, contributes one whole roll to any development it assists, counts as two units for the purposes of outnumbering and so forth). You may only choose to assign damage to your Commander should there be no other units to which you could assign the damage; it still takes only one hit to destroy the Commander, as if it were only one fleet. Should your Commander be removed for any reason, you are out of the game and have lost. All your fleets are immediately removed from the board; your developments and technologies remain as neutral pieces which can be acted against but which never act (not even in response to Overthrow or Espionage attempts).

**Resignation:** Should a player leave the game for any reason other than destruction, treat his units as if the Assassination rules were in effect and his Commander had just been destroyed.

## SETUP

Shuffle the special abilities deck and remove the two blank cards.

Select a player at random. Starting with this player and proceeding anticlockwise, each player takes setup rounds until each player has taken four setup rounds.

- In the first setup round only, you may either claim one region on Earth with a development, or place three fleets in Earth's orbit, or place three fleets in any one trajectory any number of rings directly skyward of Earth, towards the 'to anywhere' trajectory, or research any one technology which has no prerequisites.
- In the second, third and fourth rounds of setup, you may either place three fleets in Earth's orbit, or place three fleets in any one trajectory any number of rings directly skyward of Earth, towards the 'to anywhere' trajectory, or research any one technology for which you have any and all prerequisites.

Place 12 UN fleets in Earth's orbit and place UN developments in any and all unclaimed regions on Earth.

Place a counter for each player on node 0 of the AI track, on the Start node of the Research circuit and on the Start node of the Eschaton track.

Turns begin with the last player to take a setup round and proceed clockwise.

## THE TURN

In your turn, the phases, and each stage within that phase, are resolved in the order shown below, with the exception of civilian actions, which can be resolved in any order as the player chooses. Extraordinary actions, as listed on page 2, may be taken at times allowed by their individual rules. Movement does not count as an action.

### << phase 1: background >>

Resolve these background stages in order.

- If you have both **Artificial Intelligence** and **Cognition Circuits**, place your AI counter on node 2 of the AI track. If you have both **Advanced AI** and **Abstraction Circuits**, put it on node 5 instead.*
- If, in addition to the above, you have the **AI Singularity** special ability and have researched both of its technologies, and you have at least one unit on any world, roll once. On a **5+**, move your Singularity counter one space along the Eschaton track.*

## << phase 2: movements through space >>

Resolve these movements in order for all your fleets, system-wide at each stage. If a fleet starts a stage on a world, then its move may take it any number of rings skyward, against the connecting arrow(s), towards the 'to anywhere' trajectory. If a fleet starts a stage in a trajectory, then its move takes it one ring outwards, along (one of) the connecting arrow(s), worldward towards a world.

- a. *If you have **Orion Engines**, you may as many times as you like sacrifice one unit on a world in order to move five or fewer fleets starting the stage on that world.*
- b. *If you have **Fusion Engines**, you may as many times as you like sacrifice one unit in a trajectory in order to move five or fewer fleets starting the stage in that trajectory. No fleet may be affected more than once per turn by Fusion Engines.*
- c. Each fleet starting this stage on a world **may** move; each fleet starting this stage in a trajectory **must** move.
- d. *If you have **Solar Sails**, you may roll three dice; if you have **Refraction Fields**, you may instead roll five dice. For each **4+**, you may move up to five fleets starting the stage in any one trajectory; if you have **Refraction Fields**, each **6** instead allows you to move such a group twice rather than once. No fleet may be affected more than once per turn by Solar Sails or Refraction Fields.*

## << phase 3: military actions >>

Resolve these actions in the following order for your fleets on worlds, one world at a time. When attacking, returning fire or exploring, a 6 before modification always succeeds, while a 1 before modification never does.

- a. Any group of your fleets on the world may nominate a target player with units on that world and **Attack** him.
  - Roll one die per fleet. If on that world the target's units in total outnumber yours, take a -1 penalty to each roll. *If you have **Heavy Weapons** or **Advanced Weapons**, take a +1 bonus for each; if your target has **Shielding** or **Advanced Shielding**, take a -1 penalty for each.*
  - For each roll of **4+ after modification**, the target must remove one of his units from that world (his choice which).
  - The target may then **return fire** with all his fleets on that world, taking a -1 penalty to all his rolls in addition to any of the other modifiers. *If your target has **Defensive Grid**, he may also roll three attacks, with all the same modifiers, for each development he has on that world. If your target has **Tracking Systems**, he takes a +1 bonus to all his rolls.*

- b. Any group of your fleets on the world which have not yet acted may attempt **Exploration**.
  - Roll one die per fleet taking the action. *If you have **Drone Networking**, take a +1 bonus to each roll.*
  - Resolve one unit at a time; use lowest successful rolls first. At the time of placing each development, take a +1 bonus for every two unclaimed regions on the world at that time.
  - For each roll of **5+ after modification**, you may remove one of your fleets from that world and place a new development in one of the world's unclaimed regions.
  - Developments thus created are considered to be new units which have not yet acted this turn.
- c. *If you have **Von Neumann Engines** and there are any unclaimed regions on the world, roll one die, taking a +1 bonus for each development you have on that world. If the total is 7 or more, place a new development on that world.*

## << phase 4: resolve risk >>

Resolve these stages one world at a time, and in this order.

- a. For each world, roll per development which was at risk at the start of the stage. Each **roll of 3 or less** puts another development on that world at risk if possible; if no stable developments remain, it destroys a development.
- b. **Acid rain:** Roll per development you have on Venus. For each roll of **1**, either remove an at-risk development from Venus or set at risk a stable development (your choice). *If any player with a development on Venus has **Terraform Venus**, skip this step.*
- c. *If you have **Nanotechnology** then, for each world roll one die, taking a +1 bonus for each development you have on that world. If the total is 7 or more, place a new fleet on that world without risk.*

## << phase 5: civilian actions >>

For each world, one world at a time, resolve the actions on the next two pages in any order you like. For each action, form a group of units on the world which has not taken any military or civilian actions yet this turn. *If you have **Mass Drivers**, instead resolve one planet at a time (e.g. Earth and moon together, or Jupiter).*

When pacifying, overthrowing or spying, a 6 before modification always succeeds, while a 1 before modification never does.

- Any group of your developments and fleets on each world which have not yet acted may attempt **Pacification**.
  - Roll one die per development and one die per two fleets (rounded down). *If you have **Infrastructure**, take a +1 bonus; with **Advanced Infrastructure**, take a further +1 bonus.*
  - For each roll of **5+ after modification**, you may stabilise any one development from among those taking the action.
- Any group of your developments and fleets on each world which have not yet acted may attempt **Overthrow**.
  - Nominate a target faction with at least one development on the world.
  - Roll one die per development taking the action and one die per two fleets (rounded down) taking the action.
  - Take a -1 penalty to each roll if the target's units in total on that world outnumber yours; take a -1 penalty to each roll if you have no developments there. *If you have **Intrigue** or **Machinations**, take a +1 bonus for each; if your target has **Security** or **Advanced Security**, take a -1 penalty for each.*
  - For each roll of **4+ after modification**, you may either set one of the target's developments on that world at risk or replace one of the target's developments on that world which is at risk with a new development of your own (also at risk).
- Any group of your developments and fleets on each world which have not yet acted may attempt **Espionage**.
  - Nominate a target faction with at least one unit on the world.
  - Roll one die per development taking the action and one die per two fleets (rounded down) taking the action.
  - Take a +1 bonus to each roll if at least one of the target's developments on that world is at risk; take a -1 penalty if the target has no developments there; also take all of the bonuses and penalties that apply to the Overthrow action, except for the outnumbering rule.
  - For each roll of **4+ after modification**, your agents have located a lead and may follow it up. To do so, roll once per lead; for each **5+ when following up** you may do any one of the following:
    - view any special ability card for which the target has obtained the secret research technology
    - research any one technology which the target has and you do not and for which you have any and all prerequisites, provided you already know what the technology is



- remove the target's knowledge of any one technology to which he has access, so long as it leaves all his remaining technologies with any and all of their prerequisites
- move the target's counter on the Eschaton track one space back, away from the Singularity
- Any group of your developments *and, if you have **Advanced Von Neumann Engines**, fleets* around the world (or planet) which have not yet acted may attempt **Construction**.
  - Nominate how many fleets the group will attempt to construct.
  - Roll one die per development *and, if you have **Nanofactories**, one further die per two developments (rounding down) and, if you have **Advanced Von Neumann Engines**, one die per two fleets (rounded down).*
  - For **each roll of 3+**, you may construct a fleet, **up to a maximum** of the number you nominated. **However**, for each fleet you nominated but were unable to construct, one of the developments taking the action is put at risk; if no developments in that group remain which are not at risk, you must lose a development from that group. You choose which development is affected. Fleets may not take or assist with an action in the turn in which they are constructed. *If you have **Advanced Von Neumann Engines** and a fleet is put at risk (if both fleets and developments are involved, you may choose which is put at risk for each failure), then resolve fire against yourself as if from two of your own fleets on that world, though you need not return fire. All your technologies apply to both sides; you can, of course, never outnumber yourself.*
- Any group of your developments around the world (or planet) which have not yet acted may attempt **Research**.
  - Roll one die per development.
  - For **each roll of 5+**, you may advance your counter clockwise on the Research circuit by one node. Furthermore, **if you make any rolls of 6** among these, you have made a scientific breakthrough and the whole group may roll again. Should your counter on the Research circuit pass the Research bar, immediately gain any one technology of your choice for which you have the prerequisites.
  - If, on your re-roll, you roll **at least one 6**, do not roll a third time but do take a card face-down from the Special Abilities deck and read it.

## SPECIAL ABILITIES

- You may reveal any special ability card as an extraordinary action, in general at any time, unless you have performed the secret research and you do not have its prerequisites, or unless the card says otherwise. After revealing, it stays revealed.
- If your card confers no special ability, you may **not** reveal it during the game. Nor can you show any card to less than all of the players, except as a result of successful espionage.
- You may, regardless of whether there is a technology available on the face of the card, use a lap around the Research Circuit to claim a **Secret Research** technology on the back of any of your unrevealed special ability cards. The token thus applied can only be redeemed for one technology on the face of the same card, and only at the moment of revelation. You may perform the secret research without the prerequisites for the technology that you will redeem it for, but in that case you may not reveal the ability until you have the necessary prerequisites.
- You can have multiple Secret Research technologies at once, but only one per special ability card.
- Special ability cards with secret research tokens on them may not be moved for the purpose of obscuring which card is which.
- Secret Research can be destroyed through espionage, just like any other technology. It doesn't have to be examined first.
- Secret Research cannot be copied as an extraordinary action, but it can be discovered through espionage, and having done so, can be copied through more espionage by the same aggressor.
- If you have obtained the Secret Research technology on another player's face-down special ability card, and the special ability provides only one technology, you may reveal the ability, forcing the player whose card it was to reveal it immediately after you.
- The technology **Exotic Matter** (which has no space on the front of the card) is required to reveal Secret Strait of Saturn, but the locations revealed on it are immediately accessible to all players. See page 11 for what to do if two players have this ability card.
- To make use of revealed special abilities other than Secret Strait of Saturn and Ear of the United Nations, players not holding the ability cards need only obtain the technologies on them, by diplomacy or espionage; the card confers upon its holder the ability to research the technology directly.

## CLARIFICATIONS

### **What does ‘resolve one at a time’ mean in the Exploration rules? Why does it say to use lowest successful rolls first?**

For example, if a world has 4 unclaimed regions and two fleets roll 3 and 3 to explore, the first may be swapped for a development (3 + 2 bonus = 5) but the second may not, since there are now only 3 unclaimed regions and therefore a bonus of only 1 (had the initial roll been 3 and 4, therefore, two regions could have been claimed).

### **What does “boni and penalties are cumulative” mean?**

Suppose you attempt overthrow with five of your seven fleets on Venus against a player who has six developments and two fleets there. You have Intrigue; he has Security and Advanced Security.

- You roll two dice (one per two fleets, rounded down).
- You have a -1 penalty because his eight units total on Venus outnumber your seven. You have a -1 penalty because you have no developments on that world. You have a +1 bonus because you have Intrigue. You have a -2 penalty because he has Security and Advanced Security. Overall, that is a -3 penalty.
- A -3 penalty means that a die would need to roll 7 or more for it to be 4+ after modification and therefore generate a success. Obviously, this is impossible, but remember that a natural 6, before any modifications are applied always succeeds, so you still have a slim chance of putting his developments at risk or even overthrowing one.

### **What happens if two players have Secret Strait of Saturn?**

Say Alice obtains Exotic Matter (as Secret Research) and reveals Secret Strait of Saturn. She must *reveal an ability card* to get the benefits; Exotic Matter is no use to anyone on a face-up card.

**If Alice has any units on Titan** when she reveals it, then the other card can't be revealed later. But if Bob had already obtained Exotic matter on a special ability card that was face-down before she did, he may reveal immediately after her, and indeed must if his Secret Research token was on the card that she revealed. Alice follows the instructions first; other players who had Exotic Matter on face-down special ability cards then perform steps 2 and 3 in clockwise order. If Bob is the last player to do so, and Titan is fully occupied, and only by players who have just revealed, Bob need not roll for step 3 but may simply claim any vacant regions on Aurora.

If Alice **did not have any units** on Titan, then there is no effect on other players revealing later, save that only one card goes on the board and you can't claim a development if there isn't a free region.