

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 bonuses and penalties are cumulative.
- The board consists of **worlds** 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 centre of the Solar Disc; moves **worldward** are made with arrows towards the rim of the Disc.
- Units occupying a region are **developments** and are said to be **on** that world and **claiming** that region. A development may be inverted to show that it is **at risk**, which shows 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 **advances board** consists of the **Research Circuit**, the **AI Track**, the **Intrigue Track** and the **Singularity Track** – on which players keep track of their various scientific and political advances – and the **technology grid**, which shows which technologies have which prerequisites and which players have access to each one.
- The **espionage pot** is filled with counters in each colour, which is used for tracking your agents. Each player has one **agency pot** in which their influence is kept secret.

SETUP

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 centre of the Solar Disc, *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 centre of the Solar Disc, *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 node 0 of the Intrigue track, on the Starting node of the Research circuit and on the Starting 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. Extraordinary actions, as listed after the main stages of the turn, may be taken at any time allowed by their individual rules.

<< phase 1: background >>

Resolve these background stages in order.

- If you have **both Artificial Intelligence and Cognition Circuits**, you may place your AI counter on node 2 of the AI track. If you have **both Advanced AI and Abstraction Circuits**, you may instead place it on node 5 of the AI track.
- If you have **both the Eschaton and Paradox Circuits** and you have at least one unit on any world, you may roll once. On a 5+, you may move your Singularity counter one space along the Singularity 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 directly inward, against the connecting arrow(s), skyward towards the centre of the Solar Disc. 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 the rim of the Solar Disc.

- If you have **Orion Engines**, you may as many times as you like sacrifice one unit on a world in order to move with up to five fleets starting the stage on that world.
- If you have **Fusion Engines**, you may as many times as you like sacrifice one unit in a trajectory in order to move with up to five fleets starting the stage in that trajectory. No fleet may be affected more than once per turn by Fusion Engines.
- Each fleet starting this stage on a world **may** move; each fleet starting this stage in a trajectory **must** move.
- 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: actions on worlds >>

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

- Any group of your fleets on the world which have not yet acted 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**, take a +1 bonus; if you have **Advanced Weapons**, take a further +1 bonus; if your target has **Shielding**, take a –1 penalty; if your target has **Advanced Shielding**, take a further –1 penalty.
 - 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.
- Any group of your fleets on the world which have not yet acted may attempt **Exploration**.
 - Roll one die per fleet taking the action; for every two unclaimed regions on the world, take a +1 bonus **sequentially**. If you have **Drone Networking**, take a +1 bonus.
 - 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.

- If you have **Von Neumann Engines** and there are any unclaimed regions on the world, you may now roll one die. If you roll less than or equal to the number of your developments on that world, you may place a new development on that world in one of the unclaimed regions.
- If you have **Nanotechnology**, you may now roll one die. If you roll less than or equal to the number of your developments on that world, you may place a new fleet on that world without risk.
- You **must** now roll once per development which was at risk at the start of the stage. **Each roll of 3 or less** puts one other development on that world at risk; if no developments on that world remain which are not at risk, you must lose a development from that world.
- Any group of your developments and fleets on the 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; if you have **Advanced Infrastructure**, take a further +1 bonus.*
 - For **each roll of 5+ after modification**, you may cancel the at-risk status of any one development from among those taking the action.
- Any group of your developments which have not yet acted may attempt **Intrigue**.
 - Roll one die per development.
 - For **each roll of 6**, you may move your counter one space up the Intrigue track, as you run successful propaganda campaigns, infiltrate your competitors with agents and saboteurs, blackmail opposing politicians and the like.
- Any group of your developments *and, if you have **Advanced Von Neumann Engines**, fleets* on the world 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. 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 on the world 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 (though no group may make more than one breakthrough per turn). Should your counter on the Research circuit pass the Research bar, immediately gain access to any one technology of your choice for which you have the prerequisites; you have the prerequisites for a technology if you have all the technologies whose arrows lead into it on the technology grid (should there be any).

<< 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.
- So long as your Intrigue counter is not on node 0, you may move your counter one place down the Intrigue track, nominate a target and a world on which your target has at least one unit. If on the nominated world the target's units outnumber yours, take a -1 penalty; if on the nominated world you have no units whatsoever, take a further -1 penalty. *If you have **Machinations**, take a +1 bonus; if you have **Advanced Machinations**, take a further +1 bonus. If the target has **Security**, take a -1 penalty; if the target has **Advanced Security**, take a further -1 penalty.* A 6 before modification always succeeds, while a 1 before modification never does; **on a roll of 4+ after modification**, you may take one of the following actions against the target.
 - **Insurrection** may be used at any time. Roll once; you may this many times either set one of the target's developments on that world at risk or replace one of his developments at risk with a development of your own (also at risk).
 - **Mutiny** may be used at any time. Roll once; you may claim ownership of this many of the target's fleets on that world.
 - **Schematics** may be used at any time except in between an action being declared and its being resolved. Gain access to any one technology to which your target has access, so long as you have all the prerequisites for that technology.
 - **Computer Virus** may be used at any time except in between an action being declared and its being resolved. Remove the target's access to any one technology, so long as it is not a prerequisite for any other technology to which he has access.
 - **False Orders** may be used in the Movement phase in your turn. Roll twice and add the results; you may issue false orders to this many of the target's fleets which started the phase on that world or in any one trajectory directly skyward of that world. You may move them as if it were their movement phase (including using any of the target's technologies applicable to movement), in which case each fleet moved in this manner may not then move for any reason in the target's next turn; alternatively, you may instead issue them orders to abort their mission, in which case they may in their next turn move under their owner's control as normal but may not act in any way in the target's next Actions phase.
 - **Counter-espionage** may be used in direct response to the target taking an Intrigue action against you; you may choose whether to use it after he rolls to see whether he is successful. He does not get to take his Intrigue action.
- You may move your counter on the AI track as many nodes closer to the 0 node 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 move your counter on the Eschaton track as many nodes away from the Singularity as you like.

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 in any way until after the next time that player's turn has ended. The UN will automatically accept any units thus gifted, but will never surrender any of its own.
- You may allow any player to copy any technology which you know and to which he has any and all prerequisites (as described in the Research action), just as if he had researched it. The UN will automatically accept any technologies thus gifted, but will never surrender any of its own.

THE UNITED NATIONS

Should the UN have any units when an Attack action or Intrigue extraordinary 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. Finally, players rolling to see how many developments they can affect with a successful Insurrection action take a -2 penalty to any such rolls made on Earth (which may result in no developments being put at risk or claimed).

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 also they have fewer than 12 fleets, they will construct one new fleet on Earth without needing to roll.

VICTORY

Should all other players (if there are any) 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.

Should your counter on the Eschaton track reach the Singularity node, then you have won by bringing about **the Singularity** and all other players have lost.

Should all other 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 research technologies at any time, use the Research action, use the Espionage action or win by bringing about the Singularity.

No True AI: Players may not research the Eschaton or Paradox Circuits and cannot win by bringing about the Singularity.

Advanced Hydroponics: Players may not win by blockade.

Minigame: Use with four or fewer players only. Players may not place any fleets in or more any fleets to the central trajectory of the Solar Disc, and may not therefore move units to Jupiter or Saturn in any way.

Seven Players: If you can find counters in a seventh colour, you may 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.

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).

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.

CLARIFICATIONS

What does "sequentially" mean in the Exploration rules?

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).

How does this "boni and penalties are cumulative" business work?

Let us say that you attempt overthrow with five of your seven fleets on Venus against a player who has six developments and two fleets on that world. You have Intrigue, but he has Security and Advanced Security.

- You roll two dice (one per two fleets taking the action, 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 -1 penalty because he has Security. You have a -1 penalty because he has 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.