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

The board has ten **worlds**, each with between two and seven **regions** and one **locale**. Units occupying a world's region or in its locale are **on** that world.

The board also has ten **trajectories**, connected to each other and to the worlds' locales by arrows. Travelling outward one ring, with the flow of the arrows, is one move **worldward**; travelling inward one ring, against the flow of the arrows, is one move **skyward**.

Units occupying a region are **claiming** it and are called **developments.** Units in a world's locale or in a trajectory are called **fleets**.

Unit counters may also be used on each player's **AI miniboard**, in the **research pool** and on the **technologies miniboard**; these are but markers and are described in the relevant rules.

SETUP

Start with a randomly-determined player; setup rounds proceed anticlockwise.

In the first round of setup, each player may **either** claim a region on Earth with a development **or** place three fleets on Earth **or** place three fleets in any one trajectory any number of moves skyward of Earth **or** claim a technology with no prerequisites.

In the subsequent three rounds of setup, players may not place developments but may take any of the other setup actions.

When all four setup rounds have been taken by all players, fill any unclaimed regions on Earth with UN developments and place 10 UN fleets on Earth.

The last player to take a Setup round takes the first turn; turns then proceed clockwise.

THE TURN

<< phase 1: movement >>

A fleet which starts the phase on a world **may** make any number of moves skyward. A fleet which does not start the phase on a world **must** make one move worldward.

<< phase 2: actions >>

On each world on which you have units, you may first perform as many fleet actions and then as many development actions as you like and are able, as follows. See the *Actions section* for full details. Units are only eligible to perform actions when on worlds.

You may, as many times as you like, form a group of **fleet(s)** on the world, none of which have taken any actions save movement since the end of your last turn, and perform one of the following actions with this group: **Attack**, **Exploration**.

You may then, as many times as you like, form a group of **development(s)** on the world (including any constructed earlier in the phase), none of which have taken any actions since the end of your last turn, and perform one of the following actions with this group: **Overthrow**, **Espionage**, **Data Destruction**, **Construction**, **Research**. Furthermore, any fleets on the world which were eligible to act this turn but did not do so may each as their action assist any one Overthrow, Espionage or Data Destruction action.

If an action has a target, the target may respond with any or all of the available Response actions as described in the *Actions section*; if the action does not have a target, any player with units on that world may do so. Units taking a response action against you must be on the same world and may not (as described at the beginning of this section) take any actions in their next turn or any further response actions before their next turn. In all cases, responses to your actions which do not explicitly counter your rolls must be targeted against you (where applicable). You may not yourself respond to actions taken in response to your own actions.

<< extraordinary actions >>

As many extraordinary actions as you like may be taken at any time save between an action being declared and its resolution, in your turn or that of another player.

Any of your units which is on a world and which has taken no actions since the end of your last turn may be given to another player (as trade or as a gift). You may similarly grant any player access to a technology to which you have access and for which he has any and all prerequisites.

Any of your units on a world or your access to any technology you have may be removed. Any of your developments may be removed and replaced with a fleet on that world. This does not count as an action, but this fleet may only act before your next turn if the development would have been able to. Three of your counters may be expended from the research pool; if you do this, you immediately gain access to any one technology of your choice for which you have any and all prerequisites. See the *Technologies section* for full details.

THE UNITED NATIONS

Whilst the UN still have fleet(s) on Earth, the UN will, regardless of any previous actions on their part, contribute half their remaining fleets (rounding up) to a Defence action and half (rounding down) to an Attack action in response to any and all Attack actions made on Earth.

Whilst the UN still have development(s) on Earth, the UN will similarly contribute all their remaining developments and all their remaining fleets to a Security action in response to any and all Overthrow, Espionage and Sabotage actions made on Earth.

Whilst both you and the UN still have development(s) on Earth, you may use all your Earthly development(s) in one group (no matter how many you have) to construct one fleet without needing to make a Construction roll. This counts as the action that turn for all your Earthly development(s). Whilst the UN still have development(s) on Earth, they will at the end of your turn and without needing to roll claim any unclaimed regions on Earth with development(s) and, should they have at that time fewer than 10 fleets, construct one new fleet there.

ACTIONS

Attack: Nominate a target faction with unit(s) on the world. **Responses: Attack, Defence.** Roll once per fleet taking the action. Each roll of 4+ destroys a unit belonging to the target (his choice which). Each natural 6 additionally allows you another roll, just as if you had another fleet participating in the action.

Exploration: *Responses: Sabotage.* Roll once per fleet taking the action. Each roll less than or equal to the number of unclaimed regions on the world at the start of the action allows you to remove one of the fleets taking the action and replace it with a new development on that world, so long as there are unclaimed regions for the developments to claim.

Overthrow: Nominate a target faction with development(s) on the world. **Responses: Security.** Roll once per development taking the action and once per two fleets assisting (rounding down). Two or more rolls of 4+ allow you to remove one of the target's developments on the world and replace it with a new development of your own. Each natural 6 additionally allows you another roll, just as if you had another development participating in the action.

Espionage: Nominate a target faction with development(s) on the world. *Responses: Security.* Roll once per development taking the action and once per two fleets assisting (rounding down). Two or more rolls of 4+ allow you to gain access to any one technology of your choice to which your target has access, so long as you have any and all prerequisites for that technology. Each natural 6 additionally allows you another roll, just as if you had another development participating in the action.

Data Destruction: Nominate a target faction with development(s) on the world. **Responses: Security.** Roll once per development taking the action and once per two fleets assisting (rounding down). Two or more rolls of 4+ allow you to remove the target's access to any one technology of your choice, so long as that technology is not a prerequisite for any other technology to which he has access. Each natural 6 additionally allows you another roll, just as if you had another development participating in the action.

Construction: *Responses: Sabotage.* Roll once per development taking the action. One or more roll(s) of 3+ allow you to construct a fleet on the world with no loss. Should you gain no rolls of 3+, though, you must lose one of the developments taking the action (to over-exploitation) but may still construct a fleet.

Research: *Responses: Sabotage.* Roll once per development taking the action. One or more roll(s) of 3+ allow you to place a new counter in the research pool.

Defence: Roll once per fleet taking the action. Each roll of 4+ negates and cancels one such roll of the force attacking you. Each natural 6 additionally allows you another roll, just as if you had another fleet participating in the action.

Security: Roll once per development taking the action and once per two fleets assisting (rounding down). Each roll of 4+ negates and cancels one such roll of the force attempting an action against you. Each natural 6 additionally allows you another roll, just as if you had another development participating in the action.

Sabotage: Roll once per fleet or development taking the action. Each roll of 6 negates and cancels one successful roll (one roll of 3+ in the case of Construction or Research; one roll of less than or equal to the number of unclaimed regions on the world in the case of Exploration).

TECHNOLOGIES

Access to a technology is indicated by placing a counter on that technology's slot on the miniboard.

Artifical Intelligence: You may at the start of each of your turns (re)set your AI miniboard to one counter. You may as an extraordinary action expend a counter from your AI miniboard immediately after you or any other player roll any die or dice; you may re-roll or force to be re-rolled one die of your choice.

Cognition Circuits: This has no direct in-game effect, but is a prerequisite for later technologies.

Heavy Weapons: Take a +1 bonus to all your rolls for Attack and Defence (a natural 1 always fails).

Overcharge: Each fleet taking an Attack action may (but need not) roll two dice instead of one, just as if it were two fleets with all your other technologies. If it chooses to, however, each natural 1 from its rolls destroys one of your fleets on that world.

Superconductors: When taking an Attack or Defence action, a natural 5+ permits another roll just as a natural 6 does normally.

Bombardment: When taking an Attack action, you may choose to take a -1 penalty to your rolls (a natural 6 always succeeds) and force your target to lose developments rather than ships to any unblocked successes; in addition, all rolls for Defence which the target makes in response to such an action take a -1 penalty (a natural 6 always succeeds).

Shielding: Other factions take a –1 penalty to all their rolls for Attack and Defence against you (a natural 6 always succeeds).

Defensive Grid: When an Attack action is taken against you, you may automatically take an Attack action in response (or add to any Attack action you are already taking in response) with one roll for each development you have on that world. This is fully automated and therefore does not count as the development's action for the turn.

Intrigue: Take a +1 bonus to all your rolls for Overthrow, Espionage, Data Destruction or Security (a natural 1 always fails).

Orion Engines: Before your Movement Phase, you may as many times as you like sacrifice one unit on any world to move one group of up to five fleets on that world as many moves skyward as you like; this counts neither as their movement nor their action. All fleets in any one such group must

Solar Sails: After your Movement Phase, you may roll three dice. For each roll of 4+, you may move one group of up to five fleets in any trajectory one move worldward. All fleets in any one such group must move together, and no fleet may move twice in the same turn due to Solar Sails.

Spectrometry: You may re-roll once the whole of your first Exploration roll in each turn which allows you to claim no regions.

Advanced Production: You may re-roll once the whole of your first Construction roll each turn which causes you to lose a development.

Nanotech: This has no direct in-game effect, but is a prerequisite for later technologies.

- **> Advanced AI** (*Prerequisites: Artificial Intelligence, Cognition Circuits*): You may at the start of each of your turns (re)set your AI miniboard to three counters instead of one.
- **> Quantum Circuits (Prerequisites: Cognition Circuits):** This has no direct in-game effect, but is a prerequisite for later technologies.
- > Advanced Weapons (*Prerequisites: Heavy Weapons*): Take a further +1 bonus to all your rolls for Attack and Defence (a natural 1 always fails).
- > Advanced Shielding (*Prerequisites: Shielding*): Other factions take a further –1 penalty bonus to all their rolls for Attack and Defence against you (a natural 6 always succeeds).
- > Advanced Intel (*Prerequisites: Intrigue*): Take a further +1 bonus to all your rolls for Overthrow, Espionage, Data Destruction or Security (a natural 1 always fails).
- > Refraction Fields (*Prerequisites: Shielding, Solar Sails*): Roll five dice instead of three when rolling for Solar Sails. Furthermore, any natural 6 in your Solar Sail roll allows you to move one group two moves worldward rather than one.
- **> Von Neumann Engines (***Prerequisites: Spectrometry, Nanotech***):** Any natural 1 when taking an Exploration action allows you to claim one further region (so long as there is one available), at no additional cost in fleets.
- > Nanofactories (*Prerequisites: Advanced Construction, Nanotech*): Any natural 6 when taking a Construction action allows you to construct two fleets from that action instead of one.
- >> Advanced Von Neumann Engines (*Prerequisites: Von Neumann Engines, Superconductors*): Fleets which did not act in the Fleets part of the Actions phase may assist with or initiate constructions as if they were developments (including being lost in place of a development should no rolls of 3+ be made).
 >> The Eschaton (*Prerequisites: Advanced AI, Quantum Circuits*): You may as an extraordinary action
- expend a counter from your AI miniboard and roll once. On a natural 6, you immanentise the Eschaton and bring about the Singularity; see the *Victory section*.

VICTORY

A player shall be declared victorious if he fulfils one or more of the following conditions.

Conquest: If all other player(s) with units remaining on the board agree that a player has won, then he has won. Note that this may be achieved simply by eliminating the units of all other player(s) from the board.

Supremacy: If a player holds all seven regions on Earth at the start of any three consecutive turns of his, then he has won. If you hold the whole Earth, you can maintain a blockade; technology has not yet advanced to the stage where it is possible for a balanced ecosystem to survive with absolutely no assistance from the homeworld.

The Singularity: If a player has access to the Eschaton technology and passes an Eschaton roll, then he has won. This represents breaching the technological singularity; your competitors will be left far behind the exponential growth in power and intelligence of your Als, far beyond that of their creators.

OPTIONAL RULES

Victory Conditions: Players may by mutual consent and before the game starts choose which of the above-listed victory conditions are actually applicable to the game, though the Conquest condition must always be in effect.

Basic Game: Players may by mutual consent and before the game starts choose not to use technologies. In this case, do not give players AI miniboards, and do not deploy the technologies board or the research pool. The actions Research, Espionage and Sabotage are no longer accessible, and players may not choose to claim a technology as a setup action.

Assassination: Each player places a Commander on Earth before setup commences. A Commander may move like a fleet; a Commander acts in the Fleets part of the Actions phase just as if it were a fleet, save that it rolls twice instead of once for each fleet action it takes, or contributes one whole roll to any development it assists. 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 remain as neutral pieces which can be acted against but which never act (not even to defend themselves).