SUPERCAT

a procedural non-player system for solo Arcs

version 0.4.1

This is a non-player system, or "bot", for playing the board game Arcs. It is intended for solo play, i.e. one player versus one or more bots. It can also work as the 3rd or 4th opponent in a multiplayer game. There are two versions of the this document; this is the campaign version. (*Note: it currently only supports "A" Fates through Act I*)

Components

You will need some way to track several numbers per bot, for instance dice of different colors rotated to show a different numbered face. For a solo game vs 3 bots, you will need 3 dice each of red, blue, yellow, and white, and 3 dice each of two other colors.

Setup (Act I)

Choose a difficulty mode (see page 3) which will determine turn order. Set up the game according to the Blighted Reach rulebook, but make changes at the steps listed below.

- **1.B.** If playing on "normal" or "harder" difficulty, give the initiative marker to a bot, and seat the player(s) last in turn order.
- **2.B.** Assign "A" Fates using any method you like. Suggestion: Each player draws 2 "A" Fate cards and chooses one secretly as in a multiplayer game, then assign each bot an "A" Fate card selected randomly from the remaining cards.
- **2.G-H.** When the bot places a building, randomly select an empty building slot from among those eligible. The first building each bot places will be a city and the second will be a starport. *If* a bot is the Believer, check that Fate's procedures for special instructions.
- **2.J.** Deal 6 action cards to each player, but do not deal action cards to the bots, instead place a counter on each bot board, showing a value of 6.
- **2.K.** All action cards not in player hands form a single face down stack near the board.

Playing a chapter

The counter on the bot board represents the number of cards in the bot's hand. On the bot's turn, reveal two cards from the face down stack, and decrement the counter. The bot will play one of these cards, and discard the other. The procedures on the following pages will instruct you on how to select a card, and how to execute the bot's turn.

If at any time the stack runs out, shuffle the discard pile (excluding Event cards) before revealing 2 cards. If at any time the bot gains an action card, place the card near the bot's board, and increment the hand counter. Include any extra card(s) with those drawn on each bot turn when considering its options. When the bot seizes initiative, decrement the counter to represent the bot discarding an extra card. Continue until the player has no cards and each bot's hand counter is at zero.

At the end of the chapter, shuffle all action cards from the discard pile, any remaining in the stack, and any set aside Event cards before dealing cards to the player(s).

How to follow the procedures

Start with "Bot Turn" and follow the instructions, executing statements if possible. When posed with a question, evaluate the situation and follow the nested steps. For more detailed explanation of interpreting nested procedures, see "Questions" at the end of the rules.

When directed, use "General Priorities" to select a card: Lead, Pivot, or Copy with the indicated suit from bot's options. If suit is not available, proceed to next question. Once a card has been selected, go to the page for the selected card's suit.

When multiple actions are available, first spend actions according to highest priority, then if actions remaining, restart the procedure from the top of the page.

The procedures use some special vocabulary that is specific to SUPERCAT. See the "Terminology" page for explanations of words like **contend**. When rounding fractions, round down unless otherwise specified.

Aside from the changes to card play described above, the negotiation minigame, some special handling of certain Fate abilities, and the additional advantages below, the bot will follow every rule in the game.

Difficulty mode (Optional but recommended)

For a more challenging game, start each game with the player last in turn order, and give the bot some additional advantages when it does not have more power than the player:

- Efficient Logistics: bot performs 1 extra action per card
- Elite Pilots: bot collects 1 extra die during Battle

Note: If the bot is tied with the player, it does not have more power, and will gain these advantages, including at the start of the game when all power markers are tied at zero.

Relative power should be evaluated per bot, so in a game with 2 bots, if one bot is ahead of the player, and the other is behind, apply these only to the losing bot. In a multiplayer game, check power between bots and players: grant the bot advantages when it is behind all players.

For an even harder game:

- Apply the above advantages even if the bot is ahead in power.
- The bot with the most power starts every chapter with initiative.

Grievances (Optional but recommended)

This should be considered an optional but recommended rule. It will add a little bit of extra friction for the solo player as well as some texture to the negotiation minigame.

Each bot will have a grievance counter matching the colors of all other bots and players. For instance, in a game with 1 player and 3 bots, a bot using the red pieces will track grievances in white, blue, and yellow. At the beginning of the game, the value of these is all zero.

Certain actions taken against a bot, by a player or other bot, will result in a grievance. The target of the action will gain one or more grievance matching the source. Each of the following results in the target gaining one grievance:

- Battle action with bot as the defender
- destroy one or more bot pieces (limit 1 per action)
- steal a resource or guild card from the bot (limit 1 per action)
- target bot city with a Tax action
- take one or more bot agents captive (limit 1 per action)

Event Cards

After an Event card is played, do not add it to the discard pile. Instead, set played Event cards aside and only shuffle them with the action cards prior to dealing at the start of the next chapter.

(Since the bot may reshuffle the action card deck this is to ensure Event cards do not occur more frequently than in multiplayer games)

Edicts

If the bot is the First Regent, check the bot's Fate to determine if it will change the policy. If Fate does not dictate which policy to change to, choose a policy aligned with an ambition the bot is currently contending. While enforcing the policy, if a rival has no pieces for Imperial Demand and has no agent, roll 1d6 and make the rival an Outlaw on 5 or 6.

Summits

If bot is given the opportunity to call a Summit, via Event card or the Imperial Council, roll 1d6 and apply DRMs below. Bot will call a Summit on a result of 5 or 6.

• +1 for each favor the bot has

If bot calls a Summit and has one or more favors, during the "Call to Order" phase, follow these procedures:

- **Return Favors**: Follow these priorities to select negotiation actions. Return as many as possible, using favors as efficiently as possible.
 - contend a declared or undeclared ambition
 - o **contend** advance objective directly or indirectly
 - cause rival to stop <u>contending</u> for a declared ambition
- Petition the Council, Leave the Empire, Revive the Empire: Check Fate

Negotiations

During a Summit, the player will have an opportunity offer the bots negotiation actions, and each bot may do the same with other bots. This takes the form of a new, solo-specific minigame. This alternative enables a solo player to engage with all of the mechanics of the campaign. This also makes it possible for the Magnate to be played by a player or bot.

Negotiation Minigame

- determine the number of rounds (1d6 +1 per bot)
- player(s) may settle grievances with favors:
 - if a player returns a favor to a bot, or gives one of their agents as a favor, reduce the bot's grievances matching the player by one
- starting with the bot or player with the initiative, conduct negotiation rounds
- on a player's round, that player may attempt a trade with a bot
 - o if successful, must pass to next player or bot in turn order
 - o if 3 consecutive failures, must pass to next player or bot in turn order
- during a bot's negotiation round, it will attempt one negotiation with another bot, then pass
- after each player and bot as had a turn, end minigame (even if rounds remain)

Each negotiation round is a single trade attempt:

- player or bot will offer to exchange one or more negotiation actions with a target bot
- player or bot will commit to an offer, then roll 1d6 to determine if the target bot accepts
- the target bot will accept on a modified roll of a 5 or 6

(Note: bots do not offer trades to the player, only to other bots.)

Apply the following DRMs to the roll:

- -1 for each successive failed attempt
- -1 for each matching grievance
- -1 if trade would cause target to **contend** a declared ambition
- -X if bot is **contending** a declared ambition. X=power bot would gain from the ambition
- +1 for each negotiation action offered above an even trade
- +1 if trade would cause bot to contend a declared ambition
- +1 if trade would cause bot to advance objective

To determine bot-bot offers, examine each rival bot in turn order, and identify what the current bot "wants" from the other bot. Use these priorities, and if none apply, pass next player or bot, but still count the round as having occurred:

- resource, trophy, or captive which would cause bot to contend a declared ambition
- exchanges which would directly or indirectly advance bot's objective

The active bot will offer the target resources and favors such that the final DRM is +2. Bot will not offer resources matching declared ambition bot is currently **contending**.

Faithful Cards

Since Faithful cards enable any type of action, they are not selected normally via "General Priorities". If the bot needs to use "General Priorities" to select between a Faithful card and any other card, read down the procedures as normal until identifying the bot's priority. If the bot can take the prioritized action using the Faithful card, select that card and turn to the page for the Faithful suit.

Golems

Golem Actions - Warrior

If any bot has the Warrior Golem, it will use the Prelude ability if the resulting trophies would result in the bot **contending** for warlord (whether declared or not)

Golem Actions - Protector

If any bot has the Protector Golem, it will use the Prelude ability if it has any damaged ships.

Golem Actions - Seeker

If any bot has the Seeker Golem, it will use the Prelude ability like a Fuel resource (for a **Combat card**)

Golem Actions - Harvester

If any bot has the Harvester Golem, it will use the Prelude ability to gain a resource to **contend** a declared ambition

Fates

Each Fate has its own special procedures and priorities on the following pages. When directed to refer to "General Priorities" note that the first line on that page instructs you to check the bot's Fate for initial priorities. Consult the page for the Fate, which will examine the board state and may direct the bot to a line of play. If the procedures apply, select the card indicated.

By default, the bot will take a number of actions from its Fate page **equal to half the number of available actions, rounded up.** It will then proceed to the page for the selected suit and spend the remaining actions, if any. Note that some Fates may spend more or fewer actions from their specific procedures if possible.

Steward (Act I)

- ◆ Can bot use Dealmakers' **Bargain (Secure)** ability?
 - Use **Bargain (Secure)**. Use these priorities to select a card for rival to Secure and subsequent Influence and Secure actions:
 - Imperial Council and Council Intrigue (Select target which allows bot to Influence and Secure either of these cards, or prevent rival from Securing)
 - Protect loyal agents
 - Check "Influence Doctrine" for additional priorities
- **♦** Is the Imperial Council "In Session"?
 - Yes: Can bot Secure or Influence the Imperial Council? (check "Influence Doctrine")
 - No: Is bot no longer the First Regent?
 - Can bot Influence or Secure "Council Intrigue"?

Events

If bot is no longer the First Regent, and the Imperial Council is "Decided", Events are considered **effective**.

Founder (Act I)

- **♦** Is bot a Regent?
 - Can bot Influence or Secure the Imperial Council?
 - Can bot Influence or Secure a card which would enable it to declare an ambition?
- ◆ Can bot Build, Repair, or Move to take control of a system?
- ◆ Can bot **favorable combat** to take control of a system? (use all available actions if needed)

Parade Fleets

Place ships where bot would gain control. If bot is a Regent, always become an Outlaw.

Events

If bot is a Regent, Event cards are always **effective**.

Summits

If bot is a Regent, when given the opportunity to hold a Summit, it will always hold the Summit. During the "Call to Order" phase the bot will leave the Empire.

Magnate (Act I)

- ◆ Is the Imperial Council in session?
 - Can bot Influence or Secure the Imperial Council?
- ◆ Can bot tax for any resource?

Event cards

Event cards are always considered **effective**.

Summit Negotiations

During the negotiation minigame, on the bot's turn it will use 2 negotiation rounds instead of only 1. The bot will use this second round even if the first round succeeds. The bot will offer according to procedures described in the minigame, however the bot will only accept resources or favors.

Export to the Galactic Core

If the bot has 3 or more resources at the end of the negotiation minigame, then discard 3 resources to advance objective, unless bot is currently winning a declared ambition matching those resources.

Prelude

Do not spend resources for any Prelude actions if bot has 3 or fewer resources.

Advocate (Act 1)

- ◆ Can bot Influence or Secure a Guild card with a Prelude action that discards itself?
 - Check "Influence Doctrine" in case of multiple options
- ◆ Can bot use Guild Investigators' **Recover (Move)** ability?
- ◆ Can bot **favorable combat** to steal a Guild card with a Prelude action that discards itself?

Prelude

Only use the Prelude action of a Guild card that discards itself if bot is in first or second place for a declared ambition.

Caretaker (Act I)

- ◆ Can bot use Golem Beacon's **Awaken (Influence)** ability?
 - If bot is not winning a declared ambition, check if bot can take Prelude or other actions
 which would cause bot to be winning a declared ambition, then take Golems. Otherwise just
 take Golems.
- ◆ Can bot Move, Build, Repair, or **favorable combat** to take control of any Golems on the map?

Stone Speakers

If bot is winning an ambition it just declared, and bot has no Golems, use Stone-Speakers' ability.

Partisan (Act 1)

- ◆ Can bot Influence or Secure a card which would enable it to gain the initiative?
- ◆ Can bot Influence or Secure a card which would give the bot an additional action card?
- ◆ Does bot have 4 or more cards and can bot use Informants' **Spy (Influence)** ability? *(limit once per chapter)*

Informants

To use this ability when the player is the Partisan, choose a bot to target. Draw a number of action cards equal to the bot's hand counter. Place your action card with the highest number on the bot board and take the card with the highest number from those drawn. Shuffle the rest back into the stack. If bot uses the ability, do the same but always target the player.

Partisan Seizing

If the bot is the Partisan, use a seize counter and check for seizing the initiative as described on the "Bot Turn" page. Add 1 to the roll for each outraged resource type. If the seize check passes (roll is less than seize counter) instead of decrementing the hand counter, outrage a resource. Select resource based on least impact.

Admiral (Act I)

- ◆ If bot does not have a piece matching the current Imperial Demand, can bot gain one via Tax or favorable combat?
- ◆ Can bot **favorable combat** for trophies with Imperial Ships?
 - Yes:
 - Use "Combat Doctrine" to resolve
 - No:
 - Use <u>partial move</u> to acquire targets for future <u>favorable combat</u> for trophies with Imperial Ships, if possible.
- ◆ Are there any loyal starports in systems without loyal ships?
 - Move or Build to get at least one loyal ship to each loyal starport without loyal ships
- **♦** Does bot have unbuilt starports and at least one **claim**?
 - Build one new starport (max one new starport per card)

Believer (Act I)

Spend as many actions as possible here before turning to selected card's suit.

- ◆ Can bot use **Teach (Influence)**? (attach a Faithful card to a Guild card in the court)
 - Prefer:
 - guild card with loyal agents
- ♦ Are there remaining cards in the Faithful action cards stack?
 - Are there any suits which bot does not have a matching loyal city, and can bot get a **claim** on a planet with that suit?
 - Move to get new **claim**

Setup

Place 2 cities instead of a city and a starport. Prefer:

- planets matching suits on guild cards in the initial court
- planets with 2 different suits

Bot turn (START HERE)

- ◆ If bot has no cards left (check hand counter) then pass.
- ◆ Draw 2 cards. Decrement hand counter. Use procedures below to select a card. Then go to the page for selected card's suit and discard the other card.
- **♦** Does bot have initiative?
 - Remove seize counter, if present.
 - Is one or more card an Event?
 - Draw until there are 2 non-Event cards to choose from, or no more cards.
 - Shuffle drawn Event cards back into stack and select from drawn non-Event cards.
 - Is bot winning or tied for first place for a matching ambition?
 - Is there an ambition marker available?
 - Select matching card and declare, if bot is winning or ambition not yet declared.
 - o Otherwise, use General Priorities to select card.
- ◆ Can bot surpass with either card?
 - Yes:
 - Select card which surpasses. Prefer: higher number
 - No:
 - If seize counter is on bot's board, increment it, else place seize counter, with a value of 1.
 - If hand counter is 2 or greater and initiative was not already seized this round, check for seize:
 - Roll 1d6, and subtract 1 for each <u>undeclared ambition</u> that bot is winning, subtract 1 again if holding Event or one played earlier, and if Event is <u>effective</u>.
 Seize initiative if result is less than seize counter. Decrement hand counter to represent bot discarding an extra card.
 - If one of the cards is an Event, and an Event has not been played this round, play it.
 Otherwise: Use General Priorities to select card.

General Priorities

- ◆ Check bot's Fate for initial priorities. If no card selected, return to this page.
- **♦** Can bot Tax/Secure to **contend** declared ambition? → Administration/Aggression
- ◆ Can bot Secure an <u>effective</u> Vox card, the Imperial Council, or Secure a card with an attached Faithful or Guild card? → Aggression
- **♦** Can bot **favorable combat** to **contend** declared ambition? → **Combat card**
- ◆ Does bot have no starport?
 - Does bot have a **claim**?
 - ∘ Yes: → Construction
 - ∘ No: → Mobilization/Aggression
- ◆ Are any loyal buildings in a system controlled by a rival?
 - Can bot Move or **favorable combat** to change control? → Mobilization/Aggression
 - Can bot Build or Repair to change control? → Construction/Administration
- ◆ Does bot have unbuilt cities?
 - Does bot have fewer **claims** than half number of **unbuilt cities**, rounded down?
 - Yes: Can bot move to get a new <u>claim</u>? → Mobilization/Aggression
 - No: Does bot have at least one claim? → Construction
- ◆ Can bot Tax/Secure to **contend undeclared ambition**, take captives, or grow a lead in a declared ambition?
- → Administration/Aggression
- ◆ Can bot Influence a card with more agents than rivals? → Mobilization/Administration
- ◆ Would bot <u>contend</u> a declared ambition with the Imperial Trust, and can bot Influence the Imperial Council with more agents than rivals? → Mobilization/Administration
- **♦** Can bot Move or **favorable combat** to take control of rival city or Free city?
- → Mobilization/Aggression
- **♦** Can bot Build or Repair ships? → Construction/Administration

Prelude

Restrictions

Bot will spend resources and guild cards according to these guidelines. If bot is **contending** a declared ambition and spending a resource or guild card will take it out of contention, it will not spend that resource or guild card.

Specifically:

- if tycoon is declared AND bot is **contending** for tycoon then do not spend fuel or material resources or guild cards
- if empath is declared AND bot is **contending** for empath then do not spend psionic resources or guild cards
- if seeker is declared AND bot is <u>contending</u> for seeker then do not spend relic resources or guild cards, UNLESS securing another relic card

Resources

Material: spend to Build a starport if none on map, otherwise Build cities, then ships

Fuel and Weapon: spend for Combat card

Relic: Secure for captives, contend a declared ambition, or effective Vox card.

Psionic: Tax/Secure to **contend** for a declared ambition, or spend for **Combat card**

Guild cards

Bot will discard some guild card for their prelude effect at the first opportunity.

Bot will discard a Weapon guild card for effect, if it has 3 ships available. Place ships at starport with most fresh ships, otherwise with **task force**.

Bot will discard a Union card for effect. Place action card in bot's play area, and increment bot's hand counter.

Administration - Tax | Repair | Influence

- **♦** Can bot Tax to **contend** a declared ambition?
- ◆ Can bot Repair ships to change control in a system with a loyal building or take control in a system with a rival building?
 - Prefer:
 - Take or neutralize control in a system with a loyal building
 - Take control in a system with a rival building
- **♦** Can bot Tax to **contend** an **undeclared ambition** or Tax a rival city and captives?
- ◆ Can bot Influence an <u>uncontested card</u> which would <u>contend</u> a declared ambition, if Secured?
- ◆ Can bot Influence a **contested card**? (Check "Influence Doctrine")
- ◆ Would bot <u>contend</u> a declared ambition with the Imperial Trust, and can bot Influence the Imperial Council with more agents than rivals?
- **♦** Can bot Repair any ships or buildings?
 - Prefer:
 - ships in **task force**, then other ships
 - o starport, if only one on map
 - o cities
 - other starports
- ◆ Can bot Tax to grow a lead in a declared ambition?
- **♦** Can bot Influence an **uncontested card** which would **contend** an **undeclared ambition**, if Secured?
- ◆ Can bot Influence any other card? (Check "Influence Doctrine")
- **♦** Can bot Tax for **new resources**?
- ♦ Can bot Tax for other resources?

Influence Doctrine

When influencing cards in the court, the bot will follow these guidelines.

If possible, influence <u>uncontested</u> cards with 2 agents. Otherwise, influence <u>uncontested</u> cards with 1 agent. In other words, if the bot has 2 actions and 2 available agents, and procedures direct the bot to influence an <u>uncontested</u> card, bot will spend 2 actions to place 2 agents.

If possible, influence a **contested** card with one more agent than the most rival agents. Otherwise, check if the bot has enough agents: if the bot could influence with agents up to the most rival agents, and still have agents in its supply left over, then influence the card to match rival agents. Otherwise, do not influence the card.

Priorities

When choosing between options which are otherwise equal in priority, use the following priorities to select a card to influence.

- Lore card
- · card with attached Faithful card
- · card with attached Guild card
- Weapon icon
- Union card, "Call to Action" (Vox card)
- Effective Vox card
- Captives
 - i.e. any card where bot could influence with more agents than rival
- Other Vox card
- Icon to grow a lead in a declared ambition
- "Loyal" card matching outraged resource (e.g "Loyal Engineers" if bot outraged Material)

If further tie breaking is necessary, prefer the card with more keys.

Aggression - Move | Battle | Secure

- **♦** Can bot Secure a card to **contend** a declared ambition?
- ◆ Can bot Secure an **effective** Vox card, Imperial Council, or an attached Faithful or Guild card?
- **♦** Can bot **favorable combat** to **contend** a declared ambition?
- ◆ If bot have no starport and no **claims**, can bot Move to get at least one new **claim**?
- ◆ Are any systems with a loyal building controlled by a rival?
 - Can bot Move or **favorable combat** to change control?
- ◆ Does bot have **unbuilt cities** and fewer **claims** than half number of **unbuilt cities**?
 - Can bot Move to get at least one new **claim**?
 - Move to get new <u>claims</u>, until bot has as many <u>claims</u> as half number of <u>unbuilt</u>
 <u>cities</u>, rounded down. Prefer:
 - new resources
 - unclaimed
 - two slot planets
- ◆ Can bot Secure a card to **contend** an **undeclared ambition**, or Secure a card to grow a lead in a declared ambition?
- **♦** Can bot Move or **favorable combat** to take control of rival city or Free city?
- ◆ Can bot <u>favorable combat</u> for control in a system with any loyal buildings, or <u>favorable</u> <u>combat</u> vs Blight?
- ◆ Are there any <u>undeclared ambition</u>s and can bot <u>favorable combat</u> for trophies?
- **♦** Can bot Secure a card to grow a lead in an **undeclared ambition** or Secure another card?
- ◆ Can bot take control of a gate adjacent to a loyal starport or rival starport?
- ◆ Are there ships not controlling gates or **claims** or rival buildings?
 - Concentrate ships towards **task force** (use **partial move**)
 - If **task force** not at loyal starport, move towards loyal starport (use **partial move**)

Combat Doctrine

When asked if bot can **favorable combat** to achieve some result, first identify the goal, then refer to the corresponding section below. Goal will always be one of:

- Trophies for warlord
- Raid for resource(s) or card(s) to **contend** an ambition
- · Control of a system

Bot will spend resources in prelude to maximize available actions during combat.

Battle is not considered favorable if outrage would cause bot to stop **contending** a declared ambition. Otherwise, Battle risking outrage is favorable if bot could ransack the court.

If bot can re-roll, first re-roll any intercepts, then re-roll blanks.

Trophies

A Battle for trophies is considered favorable if bot has at least 1:1 ratio of fresh ships or can roll 2 dice vs Blight.

If bot has multiple actions, first roll skirmish dice until ratio of fresh ships is better than 1:1, or only 1 action left. Then roll all assault dice if ratio is better than 1:1, or select half assault dice and the rest skirmish dice. Allocate hits prioritizing trophies.

Raid

A raid is considered favorable if bot can roll raid dice equal to 2x the number of keys on the target AND bot has better than 1:1 ratio of fresh ships to defender OR has 1:1 ratio AND more than one Battle action available after moving to the target.

If favorable, the bot will first spend actions to roll dice like a trophies Battle, up to the last action available, when it will roll raid dice.

Control

A Battle for control is favorable is bot can roll at least 1 die per fresh defending ship. If favorable, bot will select dice like a trophies Battle. Bot will allocate hits to take control, then allocate hits to take trophies.

Construction - Build | Repair

- ◆ Does bot have no starport and a loyal piece at planet with an empty slot?
 - · Build a starport
 - Prefer system with:
 - o bot control
 - most loyal ships
 - o neutral control
 - least rival ships
- ◆ Are any loyal buildings controlled by rival, and can bot Build or Repair to change control?
 - Build or Repair ships to change control
 - Take control if possible
- ◆ Does bot have **unbuilt cities** and at least one **claim**?
 - Build cities at claims
 - Only Build **double city** if winning a declared ambition and uncovering power bonus
- ◆ Can bot Build or Repair to take control of rival building?
- ◆ Can bot Build or Repair to defend any undefended buildings?
 - Build or Repair until at least 1 fresh ship defending planets with buildings
- ♦ Can bot Build ships?
 - Prefer: With <u>task force</u>, Fresh ships
- ◆ Can bot Build other starports?
 - Prefer: With <u>task force</u>, Controlled system
- **♦** Can bot Repair any ships or buildings?
 - Prefer:
 - ships in **task force**, then other ships
 - o starport, if only one on map
 - cities
 - other starports

Mobilization - Move | Influence

- ◆ Are any loyal buildings controlled by a rival?
 - Can bot change control by moving?
 - Move to change control (Check "Movement Doctrine")
 - Prefer:
 - Take control if possible
 - Neutralize control
- ◆ Does bot have **unbuilt cities** and fewer **claims** than half number of **unbuilt cities**?
 - Could bot Move to control any open slots?
 - Move until bot has as many **claims** as half number of **unbuilt cities**. Prefer:
 - new resources
 - unclaimed
 - two slot planets
- **♦** Can bot Influence a card?
 - Prefer:
 - uncontested card to contend declared ambition
 - o contested card
 - Imperial Council, if bot would **contend** a declared ambition with the Imperial Trust
 - uncontested card to contend undeclared ambition
 - other cards (Check "Influence Doctrine" for priorities)
- ◆ Can bot change control of a gate?
 - Prefer:
 - Take control if possible
 - Adjacent to loyal starport
 - Adjacent to rival starport
- ◆ Can bot Move or **favorable combat** to take control of rival city or Free city?
- ◆ Are there any ships which are not in the <u>task force</u>, and not controlling gates or <u>claims</u> or rival cities?
 - Concentrate ships towards <u>task force</u> (use <u>partial move</u>)
 - Move <u>task force</u> towards loyal starport if not already at a starport (use <u>partial move</u>)

Movement Doctrine

When moving ships, the bot will follow these guidelines.

Each movement has an origin, a destination, and a goal. The procedures will define a specific goal, for example changing control of a system with loyal buildings. The goal will define one or more destinations. The specific destination and origin should be selected according to the priorities below.

In rare cases, the bot will not reach its destination on a single card. These are called **partial moves** and the bot will only make moves like this if explicitly instructed to. In these circumstances, evaluate destinations and goals independently each time the bot plays a card, as the priorities may change on a future movement.

Priorities:

Use <u>task force</u> for any moves, if possible. Otherwise, move as many ships as possible while following other priorities, including damaged ships.

When possible, retain control of the origin system. If it's not possible to reach the destination and achieve the goal while retaining control of the origin, check for other origins. If it's not possible to retain control of any origin, abandon control.

If multiple origins and destinations meet above criteria, use these priorities:

- shortest path (i.e. spend fewest action)
- if goal is not new **claims**, prefer destinations which result in new **claims**
- if goal is not control, prefer destinations which result in bot control of rival or Free city.

When destination contains Blight and Imperial ships not present at destination, bring Imperial ships if possible. Otherwise, leave Imperial ships to retain Empire control if including them in the move would give rival control of loyal building.

Faithful Wisdom - Build | Repair | Secure

- **♦** Can bot Secure a card to **contend** a declared ambition?
- ◆ Does bot have no starport and can bot build a starport?
- ◆ Are any loyal buildings controlled by rival, and can bot Build or Repair to change control?
- ◆ Does bot have **unbuilt cities** and at least one **claim**?
 - Build cities at claims
 - Only Build **double city** if winning a declared ambition and uncovering power bonus
- ◆ Can bot Secure a card to **contend** an **undeclared ambition**, or Secure a card to grow a lead in a declared ambition?

Faithful Zeal - Move | Influence | Battle | Tax

- **♦** Can bot Tax to **contend** a declared ambition?
- **♦** Can bot **favorable combat** to **contend** a declared ambition?
- **♦** If bot have no starport and no **claims**, can bot Move to get at least one new **claim**?
- ◆ Are any systems with a loyal building controlled by a rival?
 - Can bot Move or **favorable combat** to change control?
- ◆ Does bot have <u>unbuilt cities</u>, fewer <u>claims</u> than half number of <u>unbuilt cities</u>, and can bot Move to get at least one new <u>claim</u>?
- **♦** Can bot Tax to **contend** an **undeclared ambition** or Tax a rival city and captives?
- ◆ Are there any <u>undeclared ambition</u>s and can bot <u>favorable combat</u> for trophies?
- ◆ Can bot Influence any other card? (Check "Influence Doctrine")

Vox Cards

The bot will Secure a Vox card if it is **effective** or if Securing the card will take captives. In general, a Vox card is **effective** if its **When Secured** text can be fully carried out. The following clarifies specific Vox cards and gives instructions for how to perform the text for the bot.

Mass Uprising

<u>Effective</u> if the bot has 4 or more ships in its supply. Choose the cluster with the <u>task</u> <u>force</u>. If no <u>task force</u>, then choose randomly.

Populist Demands

Effective if the bot is winning or tied for first in an **undeclared** ambition. Choose an ambition the bot is winning, if possible. If only Securing for captives, do not choose an ambition.

Outrage Spreads

Effective if outrage would cause a player to stop winning a declared ambition. If multiple options, choose whichever resource bot has fewest of. If unable to stop a player from winning an ambition, do not trigger outrage.

Song of Freedom

Effective if the bot controls a rival city and it's possible to seize the initiative. If not possible to seize the initiative, secure only for captives.

Guild Struggle

Effective if rivals have any guild cards. Steal a guild card to **contend** a declared ambition or **contend** an undeclared ambition. Otherwise use "Influence Doctrine".

Call to Action

Always effective

Council Intrigue

Check Fate to determine whether **effective**. When resolving, move agents to other cards in the court according to "Influence Doctrine".

Diplomatic Fiasco

Effective if at least one rival would be impacted by the Crisis. During the Crisis, select Guild cards for bot to discard which do not match declared ambitions.

Blight Looms

Effective if there is any damaged Blight in a cluster with loyal pieces, and if trophies gained would contend for warlord (whether or not it is declared). During resolution, if more than one cluster, choose the cluster with more damaged Blight.

Questions

Every question should have a yes or no answer. There are four types of questions. Use the following guide if you are confused how to follow the procedures.

Type 1: This type of question will be a single line like this:

Can bot take some action to achieve some goal?

If the bot is able to take the action, following all the rules of the game, to achieve the stated goal, then take the action. If the answer is "no", continue reading to the next section.

Type 2: This type of question will have one nested subsection that is not marked.

Question about the game state?

• Action to take, or other question to evaluate, if answer to first question was "yes"

If the answer is "yes", follow the nested procedures. If the answer is "no", then continue reading to the next section.

Type 3: This type of question will have two nested subsections, one marked "yes" and the other marked "no".

Question about the game state?

- Yes:
 - o Action to take, or other question to evaluate, if answer to first question was "yes"
- *No*:
 - o Action to take, or other question to evaluate, if answer to first question was "no"

If the answer is "yes", continue with subsection marked "yes", otherwise continue with the subsection marked "no".

Type 4: This type of question is only used on the General Priorities page.

Can bot take some action? \rightarrow Card suit

In this case, if the answer is "yes" AND the bot has a card of the indicated suit available (either one of 2 cards draw, or the lead card to copy), then select that card. Proceed to the page for the selected suit.

Clarifications

The concept of **contending** ambitions is important. This is a special keyword in the context of this non-player system: to **contend** an ambition means take any action which improves the bot's position for that ambition resulting in the bot taking second or first place, including ties.

There is an important difference between **contending** an ambition and "winning or tied for first place", which is that **contending** also includes second place and tied for second place. Note that the bot will only declare an **undeclared ambition** if it is winning or tied for first place; it will not declare an ambition if it is in second place.

Furthermore, the bot will only declare an ambition already declared (i.e. double or triple declare to add second or third marker) if it is winning the ambition. It will not double or triple declare if it is tied for first place.

Terminology

claim

open building slot in a system with bot's loyal pieces

combat card

any card combined with fuel and a weapon, or an Aggression card. use Aggression procedures to resolve

contend

take an action causing bot to improve its position with respect to an ambition AND bot will be either winning or tied for first or second place. (see "Clarifications")

contested card

court card with bot agents and rival agents, and more rival agents than bot agents

double city

a second loyal city on planet that already has a loyal city

effective

a Vox card is **effective** if its **When Secured** text can be fully carried out (see "Vox Cards")some Fates consider Event cards effective

favorable combat

a series of Move and Battle actions that the bot considers likely to result in a specific goal (see "Combat Doctrine")

new resources

type of resource that bot does not have OR type of planet bot does not have a city on

partial move

a bot Move which does not reach a destination on a single card (see "Movement Doctrine")

task force

group of bot ships with the most fresh ships

unbuilt city

a loyal city on bot's board (not a destroyed city in a rival's trophy area)

unclaimed

system that is not controlled by a rival

uncontested card

court card with no agents

undeclared ambition

ambition that has not been declared yet AND there are markers available