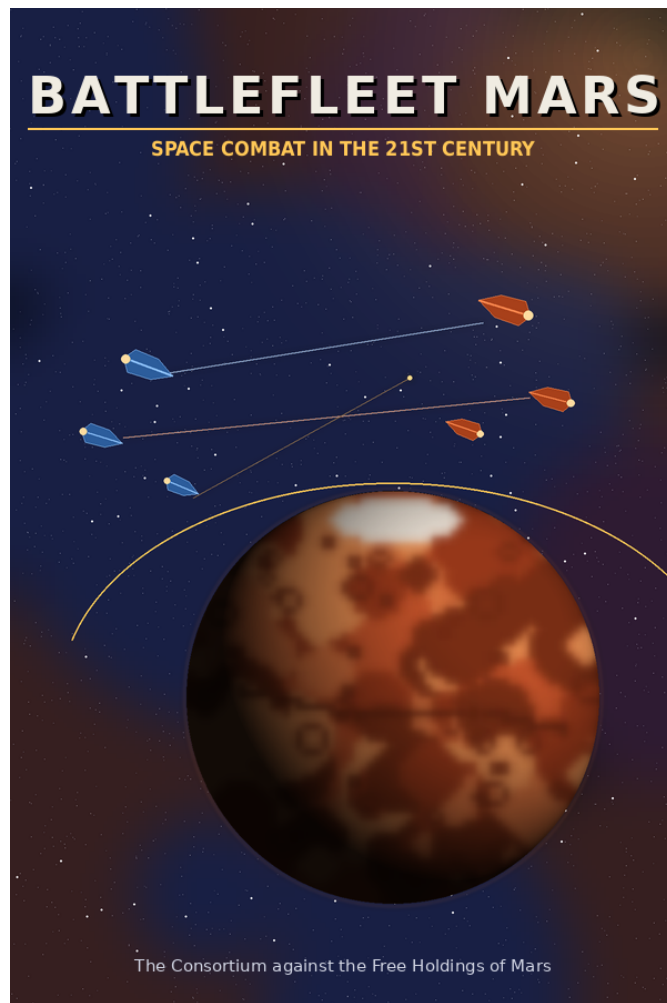




BattleFleet Mars

Space combat in the 21st century

Player's manual · version 1.2.0
Tronsoft Games · September 24, 2026

Contents

1. The war
2. The screen
3. How to play (the rules)
4. The inner Solar System
5. Ships, development and sites
6. The tactical display
7. The strategic table and its calibration
8. Will, the Assembly and victory
9. Scenarios and opponents
10. Designer's notes and credits

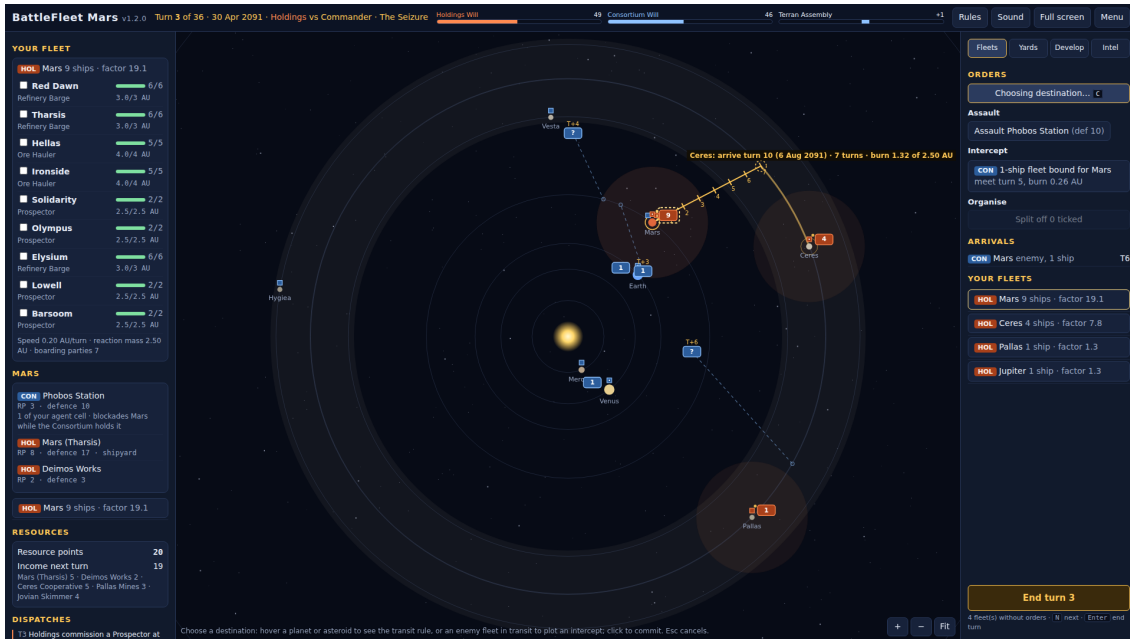
1. The war

It is 2091. For a generation the Consortium, a mining corporation owned on Earth, has run the works on Mars and in the Asteroid Belt with crews it hires on contract. Now the crews have seized the works on Tharsis and declared the **Free Holdings**. The Consortium means to take its property back. Neither side has a navy: they fight with converted freighters, mining tugs and refinery barges, and the first missiles and fighters are still in the workshops.

Neither side can win by conquest alone. The war is decided by **Will** — the Consortium shareholders' willingness to keep paying for it and the miners' resolve to hold out — and by Earth's government, the **Terran Assembly**, which takes no side but can tip the balance.

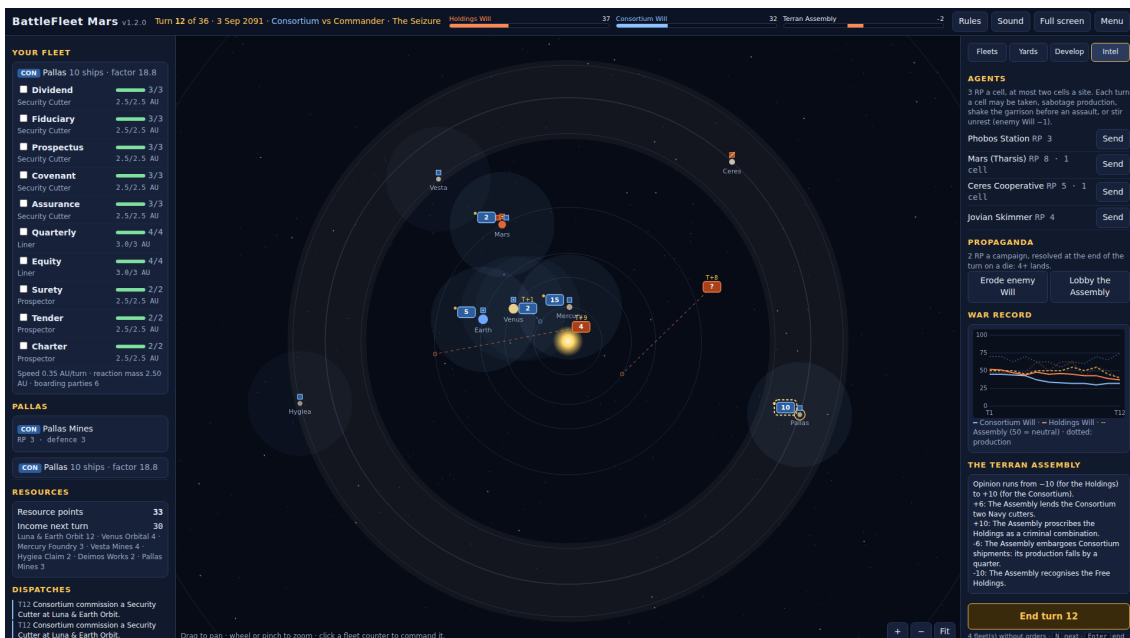
BattleFleet Mars is a new browser game after the 1977 SPI board wargame of the same name, designed by Redmond A. Simonsen. It keeps the ideas the box and its reviewers describe: an inner Solar System whose planets move, moves measured by distance rather than hexes, a choice between a full tactical battle in three dimensions and a quick strategic table, and victory decided by morale. The rules, numbers, map and art are its own.

2. The screen



The strategic map with the transit rule: the Holdings' fleet at Mars is being sent to Ceres. The amber ruler has one tick per turn of travel; the label gives the arrival turn and date and the burn against the fleet's reaction mass.

Left: information — the selected fleet (each ship's hull and reaction mass), the selected planet's sites, your resources and income, and dispatches. **Middle:** the map, which you pan by dragging and zoom with the wheel, a pinch or the + – Fit buttons. **Right:** your orders, in four tabs — Fleets (orders, the arrivals board, your fleets), Yards, Develop and Intel (agents, propaganda, the war record and the Assembly) — and the End turn button. The title bar carries the version, the turn and date, both sides' Will and the Assembly's opinion.



Mid-war as the Consortium: the Intel tab with the war record. Orange question marks are enemy contacts outside your detection range, shown with their course but not their strength.

3. How to play (the rules)

How to begin

On the cover, choose which side you command — **the Free Holdings** (the miners of Mars and the Asteroid Belt) or **the Consortium** (the Earth corporation that owned the works) — a scenario, and your opponent's rank. The other side is played by the computer — or choose **Two players** to play hotseat: both commanders share the screen, each writes orders (and tactical plots) in turn behind a hand-over sheet, and neither sees the other's. Press **Begin the war**. A war in progress is saved automatically and can be resumed from the cover.

Controls

The screen has three columns: **information** on the left (the selected fleet or planet, your resources, dispatches), the **map** in the middle, and your **orders** on the right.

- **Map:** drag to pan, mouse wheel or pinch to zoom, the + – Fit buttons, or the arrow keys and + – 0.
- **Fleets** are the coloured counters beside each planet (blue: Consortium, orange: Holdings); the number is the ship count. Click one to select it. **N** selects the next fleet without orders.
- **Set course (C)**, then hover a planet or asteroid to see the **transit rule** and click to commit. **Esc** cancels.
- **End turn** with the button or **Enter**; press it a second time to confirm.
- The **Arrivals** list under Fleets shows every fleet in transit you know of, by arrival turn; the **War record** under Intel charts both sides' Will, the Assembly and production.
- On the tactical display: **Q/A** thrust –X/+X, **W/S** +Y/–Y, **E/D** +Z/–Z, **F** auto-plot, **R** drift, **Tab** next ship, **Enter** execute the round.

Turn order

Each turn is 14 days. Both sides write their orders at the same time, without seeing each other's; then the turn runs in this order:

1. **Movement.** Fleets depart and those due this turn arrive.
2. **Battles** at every planet or asteroid where both sides are in orbit.
3. **Assaults** by fleets ordered to storm an enemy site.
4. **Agents and propaganda** are resolved.
5. **The Terran Assembly:** a news event, then any effects of its opinion.
6. **Will** changes from production and the blockade; a side at Will 0 capitulates.
7. **Income**, finished technologies, new ships from the yards, repairs.

Movement and the transit rule

There are no hexes. Every planet moves along its real orbit each turn, so distances change: Earth and Mars are close at opposition and far apart at conjunction. A fleet moves at the speed of its slowest ship (0.20–0.45 AU a turn).

When you set a course, the **transit rule** finds the fewest whole turns in which your fleet can meet the destination *where it will be* on arrival, and aims the burn there. It shows the ruler ticked once per turn of travel, the target's path along its orbit, a ghost of the target on the arrival turn, and the arrival turn, date and distance. Fleets in transit cannot be redirected.

Interception. A fleet at rest can intercept an enemy fleet in transit that it has detected, if it can reach a point on the enemy's course before the enemy arrives. Hover the enemy counter while setting course (or use the Intercept list under Fleets) to see the intercept rule: the meeting turn and

the burn. The two fleets fight in deep space, where there are no stations and nowhere to withdraw to; afterwards the pursuer has matched course and travels on with its quarry, arriving where it arrives — unless that is Earth space, which the Holdings may not enter.

Reaction mass. Every ship carries a limited burn, measured in AU; a fleet can burn only as far as its emptiest ship. The transit rule shows the burn against what the fleet carries, and turns red when it cannot make it. Ships refill completely at their own shipyards and at their own ice sites (Tharsis, Ceres, Pallas, Hygiea and the Jovian Skimmer), half their capacity a turn at other own sites — all of it for the side holding the Jovian Skimmer — and scavenge 0.2 AU a turn anywhere else. A fleet driven from a battle makes whatever burn it must.

Armed Holdings ships may not enter Earth space, which the Terran Assembly protects.

Combat

When both sides end movement at the same body, you choose how to fight each battle:

- **The tactical display** — two boards showing the same battle: the **plan** (X across, Y up) and the **elevation** (X across, Z up). Ships keep their velocity from round to round; each round you spend a ship's thrust on a change of velocity whose three parts add up to no more than its thrust. The shaded squares show where it can reach. Lasers hit more often at short range and against slow relative speeds. Missiles home on their target and can be shot down by its lasers; carriers launch fighters that return when their endurance runs out. A ship that leaves the display (± 12 on any axis) breaks off. The battle ends when one side has no ships left or after 10 rounds.
- **The table** — a quick resolution in up to two exchanges. Each side rolls a die; its combat factor times the die multiplier is the hits it deals. A side less than 40% as strong as its enemy breaks off and takes only parting shots. The table was fitted to hundreds of computer-played tactical battles, so on average it costs the same as the display.

After a battle the stronger side holds the field; the other withdraws to its nearest station. Stations join battles at their planet with their own guns. At the four great asteroids — Vesta, Ceres, Pallas and Hygiea — the battle is fought among drifting rock: a rock between two ships blocks their fire, a ship that brushes one takes a point of damage, and a missile or fighter that meets one is lost.

Sites, production and development

Each site produces resource points (RP) for whoever holds it. Spend them on ships at a shipyard (Luna & Earth Orbit, Venus Orbital, Mars (Tharsis), Ceres Cooperative), on developing weapons, on agents and on propaganda. To take a site, order a fleet carrying **boarding parties** (Ore Haulers, Liners and Refinery Barges carry them) to **assault** it when no enemy fleet is present; the attack is its guns and boarding parties against the site's defence, on a die. Agents can shake a garrison first.

While the Consortium holds **Phobos Station**, Mars is blockaded: Tharsis produces 3 RP less and the Holdings lose Will. Weapons develop as the war goes on: improvised missiles, short-range fighters, focused lasers and ablative armour.

Winning

Victory is decided by **Will**, not by conquest. Each side starts with a Will score; it falls when you lose ships and sites, when your production drops below where it started, under blockade, from enemy agents and propaganda; it rises when you capture sites, hold the field, and from good news. The Consortium's shareholders also tire of the war over time.

If the enemy's Will reaches 0 it capitulates and you win decisively. If the scenario runs its course, the Terran Assembly brokers a settlement: a Will lead of 20 or more is a decisive victory, 10 substantive, 3 marginal, anything less a stalemate. In **The Phobos Crisis** the settlement goes to whoever holds Phobos Station; the Will margin decides how complete the victory is.

The **Terran Assembly** is Earth's government and plays no side. Its opinion runs from -10 (for the Holdings) to $+10$ (for the Consortium) and shifts with captures, news and lobbying. At $+6$ it lends the Consortium two Navy cutters; at $+10$ it proscribes the Holdings (Will -12). At -6 it embargoes

the Consortium (production –25%); at –10 it recognises the Free Holdings.

Losing

You lose if your own Will reaches 0, or if the settlement favours the enemy. Losing Tharsis costs the Holdings 25 Will at a stroke; the Consortium cannot lose Earth, but a war that drains its production and its shareholders' patience ends the same way.

Saving and restarting

The war is saved automatically in your browser after every turn, every battle round and every battle, under one key for this game only. Resume it from the cover. **Menu** pauses the game and offers Save now, New war and Return to cover; the end-of-war sheet offers Play again. If your browser refuses storage, the game still plays but is not kept between visits.

4. The inner Solar System

Each turn is 14 days. The planets and the four largest asteroids move on circular orbits with their real radii and periods, so distances change turn by turn. The table gives each body's orbit.

Body	Orbit (AU)	Period (days)	Period (turns)
Mercury	0.387	88	6.3
Venus	0.723	225	16.1
Earth	1.000	365	26.1
Mars	1.524	687	49.1
Vesta	2.362	1325	94.6
Ceres	2.767	1680	120.0
Pallas	2.773	1686	120.4
Hygiea	3.139	2031	145.1
Jupiter	5.203	4333	309.5

Launch windows

How long it takes to reach Mars from Earth depends on when you leave. Worked out by the transit rule for a Security Cutter (0.45 AU a turn) and an Ore Hauler (0.25):

Turn	Date	Earth-Mars now (AU)	Cutter (turns)	Hauler (turns)
1	2 Apr 2091	0.75	3	6
6	11 Jun 2091	0.55	2	3
11	20 Aug 2091	0.99	2	3
16	29 Oct 2091	1.54	3	5
21	7 Jan 2092	2.02	4	6
26	17 Mar 2092	2.35	5	8
31	26 May 2092	2.51	6	9
36	4 Aug 2092	2.48	6	10

A Security Cutter carries only 2.5 AU of reaction mass, so near conjunction the burn to Mars is beyond it: the transit rule turns red and refuses the course. Wait for the window, or stage through a station that can refuel you.

5. Ships, development and sites

Ship classes

Class	Side	Hull	Thrust	AU/tur n	Lasers	Missiles	Fighters	Boarding	Cost	Turns	Needs
Prospector	both	2	3	0.40	1× 1/r4	—	—	—	4	1	—
Ore Hauler	both	5	1	0.25	1× 1/r3	—	—	2	5	2	—
Liner	Cons.	4	2	0.35	—	—	—	3	5	1	—
Security Cutter	Cons.	3	3	0.45	2× 1/r5	—	—	—	7	2	—
Refinery Barge	Hold.	6	1	0.20	1× 2/r7	—	—	1	7	2	—
Missile Barge	both	4	1	0.25	—	2× 6	—	—	7	2	Improvised Missiles
Carrier	both	5	1	0.25	—	—	4	—	9	3	Short-Range Fighters

Lasers are given as count × power / range. Reaction mass (AU of burn): Prospector 2.5, Ore Hauler 4, Liner 3, Security Cutter 2.5, Refinery Barge 3, Missile Barge 3.5, Carrier 3.5.

Development

Technology	Cost (RP)	Effect
Improvised Missiles	18	Unlocks the Missile Barge; new Cutters and Prospectors carry one rack.
Short-Range Fighters	26	Unlocks the Carrier with four fighters.
Focused Lasers	14	New builds: laser power +1 and range +2.
Ablative Armour	14	New builds: +1 hull.

Sites

Site	Body	Held by	RP	Defence	Shipyard
Luna & Earth Orbit	Earth	Consortium	12	12	yes
Venus Orbital	Venus	Consortium	4	6	yes
Mercury Foundry	Mercury	Consortium	3	4	
Phobos Station	Mars	Consortium	3	10	
Vesta Mines	Vesta	Consortium	4	6	
Hygiea Claim	Hygiea	Consortium	2	3	
Mars (Tharsis)	Mars	Holdings	8	17	yes
Deimos Works	Mars	Holdings	2	3	
Ceres Cooperative	Ceres	Holdings	5	5	yes
Pallas Mines	Pallas	Holdings	3	3	
Jovian Skimmer	Jupiter	Holdings	4	3	

An assault adds 0.4 for each point of the fleet's gunnery and 1.0 for each boarding party, multiplied by a die (the table's multipliers below), against the site's defence, less 2 if agents have shaken the garrison. The station fires back either way.

6. The tactical display



A battle among the rock of an asteroid in War in the Belt. The plan board (top) and the elevation board (bottom) share the X axis. Grey stones are rock; amber lines are plotted courses, grey lines drift, bright lines the last round's hits.

The display runs from -12 to $+12$ on every axis; a ship that leaves it breaks off. A battle lasts at most 10 rounds. Each round every ship spends up to its thrust on a change of velocity (the three parts added without sign), then moves by its new velocity. Everything moves at once, then missiles strike, then lasers fire at once.

Chance for one laser to hit

Range	Target at the same velocity	Relative speed 4
0	90%	78%
2	76%	64%
4	62%	50%
6	48%	36%
8	34%	22%

At Vesta, Ceres, Pallas and Hygiea the display holds 45 rocks. A rock whose centre lies within 1.3 of the line between two ships blocks their fire; a ship whose move passes within 0.55 of one takes a point of damage; a missile or fighter that meets one is lost.

Missiles have thrust 4 and home for 6 rounds; each deals 2 damage. Each laser on the target (up to three) has a 45% chance of shooting a missile down. Fighters have thrust 5, one laser of power 1 and range 2, and return to their carrier after 5 rounds.

7. The strategic table and its calibration

The table settles a battle in up to two exchanges. In each, every side rolls a die; its combat factor times the die multiplier times 0.40 is the hits it deals, spent on the enemy ships it can finish. A side less than 40% as strong as its enemy at the outset does not stand: it takes only parting shots at 30% strength and withdraws. After the first exchange the same test is made again.

Die	1	2	3	4	5	6
Multiplier	0.55	0.75	0.90	1.05	1.20	1.45

The constants were fitted so that the table costs what the tactical display costs. The shipped rules were used to fight the same engagements both ways — 240 random pairs of fleets, played out on the display by the computer on both sides and settled on the table:

Weaker side's strength	Battles	Display: weak loses	Table: weak loses	Display: strong loses	Table: strong loses
0-40%	55	13%	7%	2%	0%
40-70%	90	62%	57%	21%	18%
70-100%	95	52%	49%	38%	34%

Losses are the share of each side's shipping, by cost, destroyed. The display lets a good commander do better than the table — and a careless one worse.

8. Will, the Assembly and victory

Will moves with the war. Each side loses Will for the shipping it loses in battle (a point for every 6 RP), and the side holding the field gains 1. Capturing a site gains Will and costs the loser more (3 for a claim, 6 for Phobos, 25 for Tharsis). Every other turn, production below where it began costs up to 3; above it gains 1. The Phobos blockade costs the Holdings 1 every other turn; shareholder fatigue costs the Consortium 1 every fourth turn. Agents cost 3 RP a cell and propaganda 2 RP a campaign.

The Terran Assembly

Opinion	Effect
+6	The Assembly lends the Consortium two Navy cutters.
+10	The Assembly proscribes the Holdings as a criminal combination.
-6	The Assembly embargoes Consortium shipments: its production falls by a quarter.
-10	The Assembly recognises the Free Holdings.

Settlement

Will lead	Result
20 or more	Decisive victory
10 or more	Substantive victory
3 or more	Marginal victory
less	Stalemate

9. Scenarios and opponents

Scenario	Turns	Starting Will (C/H)	Opening RP (C/H)	Length
The Seizure	36	45 / 52	16 / 8	about 2-3 hours
War in the Belt	20	40 / 48	16 / 16	about 1-1½ hours
The Phobos Crisis	10	42 / 40	6 / 6	about 20-30 minutes

The Seizure. The whole war: fourteen months from the first occupations on Tharsis.

War in the Belt. Nine months in. Both sides already fly missiles; the Belt claims are in play.

The Phobos Crisis. Five months round Mars. The Holdings win if they hold Phobos Station when the Assembly steps in; the Consortium wins if it still holds it. A relief squadron is two weeks out.

Balance

Measured with the Commander playing both sides, from fresh seeds:

Scenario	Wars	Consortium wins	Holdings wins	Stalemates	Ended by capitulation
The Seizure	60	31	28	1	54
War in the Belt	60	22	32	6	1
The Phobos Crisis	60	27	33	0	8

Opponents

Rank	Production	Concentration	Research	Agents	Tactical skill
Lieutenant	80%	0.30	0.5	0.4	0.35
Commander	100%	0.75	1.0	0.8	0.70
Admiral	120%	1.00	1.2	1.0	1.00

Measured head to head in The Seizure, each pairing played from both sides so that neither side's advantage counts as skill: Admiral beat Commander 56% of 60 wars; Commander beat Lieutenant 69% of 60 wars; Admiral beat Lieutenant 77% of 60 wars. With its production edge removed the Admiral measures level with the Commander, so its difference is declared openly as that edge; the Lieutenant is weaker in judgement as well as in production.

10. Designer's notes and credits

Why the planets move. The original game had no hex grid: it measured moves on a map whose planets changed position every turn. Here the transit rule does the arithmetic of a lead pursuit so the player can think about windows rather than trigonometry. Reaction mass (added in 1.1.0) makes the windows matter: a cutter that could reach Mars at opposition cannot at conjunction.

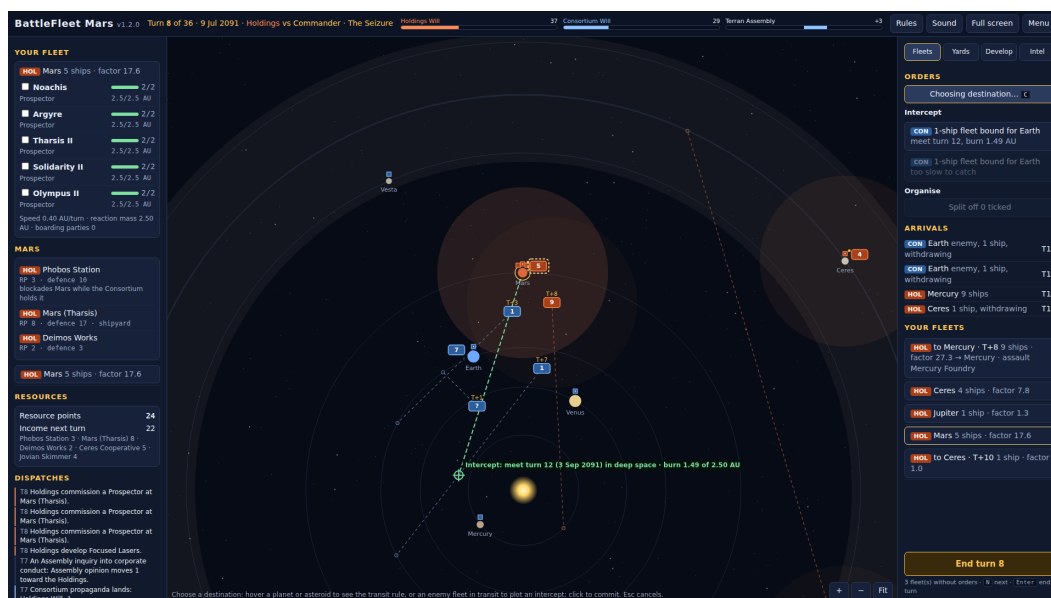
Why interception. The original drew straight-line courses on the map, so a fleet under way could be caught. The intercept rule (added in 1.2.0) finds the earliest turn a fleet at rest can reach the enemy's course; the fight is in deep space, with no station and nowhere to run, and the pursuer then shares its quarry's course. The rock at the asteroids came with it: a place where a weaker squadron can hide its hulls behind stone.

Why two ways to fight. A full tactical battle for every skirmish would make a fourteen-month war take days. The table is fitted to the tactical display over hundreds of computer-played battles, so the quick way is fair on average, and the display is there for the battles that matter.

Why Will. Neither a corporation nor a miners' cooperative can conquer the other. What breaks is the will to go on: shareholders who see no return, or colonists who cannot eat. Most wars end when one side's Will reaches zero; the rest are settled by the Assembly.

Credits

Browser adaptation by Calvin Robert Glomb for Tronsoft Games, with AI-assisted development (Claude, by Anthropic). After BattleFleet Mars (Simulations Publications, Inc., 1977), designed by Redmond A. Simonsen with B. E. Hessel; that game and its title belong to their owners, and nothing from it is reproduced. Art and sound are generated by the package's own code; no third-party libraries or fonts are used in the game. This manual is set in DejaVu Sans.



The intercept rule: a Holdings fleet measures an intercept on a Consortium fleet under way — the meeting turn, and the burn against its reaction mass.