

# Build and Service Ship

- Building a ship require resources or \$B on Earth as specified on ship counter. The resource cost must come from the location where it is built
- You can never exceed your RE or CV support limit above four, not even during yearly turns
- CVs can be built reserved: subtract 1 SUP and 1 FUEL from their cost
- Earth counts as having a large Spaceport for all purposes. (A Space Elevator must be built for Earth to build or service ships larger than CV-4.)
- Requirements to build a ship (B) or unreserve a CV (U). SSS=Small Supply Station, LSS=Large Supply Station, SSP=Small Spaceport, LSP=Large Spaceport

Facility	LV1	LV2	LV3	LV4	RE	CV2	CV3	CV4	CV5	CV6+	Repair
SSS	B	B				U					1
LSS	B	B	B	B		U	U				2
SSP	B	B	B	B	B	B/U	U	U	U		3
LSP	B	B	B	B	B	B/U	B/U	B/U	B/U	B/U	Unlimited

- Un-reserving a CV costs 1 SUP and 1 FUEL on bases or \$2B on Earth.
- Repairing a CV costs 1 ORE, or \$1B on Earth, for each damage. Repairing facilities costs 1 ORE for each damage (unlimited)
- Scrap undamaged CV on a base or Earth. Add half of the cost in resources for that ship to the base stockpiles or reserves on Earth. Reduce by 1 SUP and 1 FUEL before rounding if scrapping a reserved CV.

## Movement

- Drop all ships in heliocentric transfer boxes (this is not considered a move)

Each player moves in *reverse initiative order*. A player with better initiative may interrupt before someone with worse initiative.

- Can move between:
  - A world and its orbit (e.g. between Earth and Earth orbit)
  - Between world orbits connected to the same planetary system (e.g. between Earth orbit to Lunar orbit)
  - Along movement arrows to/from a world orbit and a Flyby box (e.g. between Lunar orbit and Earth Flyby box)
- Can move multiple times a turn (even a heliocentric transfer) but must stop if they land on a world or stack with a base
- **Orbiters** can never move again once they enter orbit around a world. **Rovers** can never move again once they land on a world surface. **Telescopes** can only move from Earth to Earth Orbit. **Probes** must be carried by other REs. **Flyby REs** can only occupy numbered heliocentric transfer boxes and flyby boxes. **CVs are restricted** by re-entry, severe atmosphere and severe radiation

### Heliocentric Transfers

- Time to perform the transfer is the difference in numbers indicated in each solar system tile adjusted by your heliocentric transfer modifier from tech (e.g. Earth to Saturn difference is 7. *Fusion Rockets* tech mod is x0.6 = 4 turns to reach Saturn. Place in the Saturn 4 box)

### Moving with Launch Vehicles

- LVs are destroyed after their use unless you have the *Reusable Launch Vehicles* tech. If you have this tech, destroy LV only if you roll 25% or less; LV not destroyed is recovered at the launch location and can be used again the next yearly turn with no cost
- REs must be carried by a LV on the first move. Reduces RE heliocentric transfer times by 1 for each size larger than LV-1 (-3 for an LV-4)
- When leaving Earth, CVs must be carried by an LV of equal or greater size
- LVs can be used to transport resources equal to their size, from LV's location to any of your bases (instant move)

### Engine Failures

- Check whenever ships move. An LV carrying a CV or RE counts for both ships
- Base rate is 5% and is modified by techs and minus the CV size (not roll for engine failure rates less then 1%)
- For a RE or LV with cargo lost, draw 1 free Engineering tech marker. For a CV lost draw 3 Engineering tech markers for a CV-2 or 5 for a CV-3.

### Interception by other Players or Pirates

- A fleet can intercept another enemy fleet leaving its location:
  - The intercepting fleet needs to be composed exclusively of unreserved CVs, contain at least one CV with combat value.
  - To intercept a fleet, you must have a foreign relation of embargo or war with its owner(s) faction.
    - Embargoing allows to intercept LVs or CVs. War any of their fleets, including Res
- The interception attempt is announced after the moving fleet's engine failure check is complete.
- A moving fleet can be intercepted by any number of opposing fleets in the same turn. Fleets can conduct multiple interceptions in the same turn. Interception does not preclude a fleet from searching for fleets later during the combat phase
- Both attacker and defender fleets roll a d10. Success if 4 or less on either die.
- On successful interception:
  - LVs and REs are destroyed
  - CVs have a choice of i) stop moving, or ii) resolve the combat immediately as if it was a successful combat search. After interception combat, remaining ships can complete their move (or cancel the move or make a different move)
- One **Pirate** per Flyby box will always try to intercept fleets containing a CV leaving their transfer box unless those CVs have combat values.
- If intercepted by pirates, roll a d10. You can either pay cash equal to the die roll (place in the pirate cache), surrender, or fight
- Can pay the pirate double the roll to remove the pirate (place in the pirate cache). You can go into debt to pay pirate (subtract from next Earth production).

# Combat

## 1. Resolve Searches

- Searching fleet must be composed solely of **unreserved CVs**, have at least one ship with an **attack or strike value** and must have foreign relations that allow offensive action (unless targeting pirates). No offensive action can be taken on Earth or in Earth orbit
- Each of your fleets can search for one enemy fleet each turn (world, orbit, or Flyby boxes, but not within a numbered transfer box)
- Both attacker and defender fleets roll a d10. Success if 4 or less on either die. Automatic success if a base is involved, but the die roll will still determine tactics points. Each CV beyond the first on both sides will raise the success number by one (in both rolls)
- Fighter Drones* tech will subtract 1 from the die roll if the fleet contains a drone squadron (even from Defence Networks), or 2 if there are 5 or more drone squadrons
- LVs and REs alone are destroyed by a successful search.

## 2. If successful search, resolve Surrenders

- After any successful search against a fleet containing CVs and/or bases, the other side may choose to offer to surrender
- While embargoing, you must accept all surrenders. If at war, you must accept base's surrenders but can ignore a fleet surrender
- Surrendering affects the entire fleet. If attacking player accepts:
  - Destroy all resources carried by CVs. Roll a d10 and destroy that number of resources on a defending base (attacker's choice which type). Take up to half of the destroyed resources into your fleet, up to your cargo capacity
  - Reserve all defending CVs
  - Take one politics marker from the defender (if possible)
- A fleet that surrenders can not be attacked by the same faction again that turn.

## 3. Roll and Resolve for tactics points

- Earn points from the other side's search roll (modified by drone squadrons, policies, and techs)
- Add to that roll 1 point for every full 7 points of enemy CV size
- Subtract the smaller number from the larger one. The person who has the larger number spends the difference:
  - Spend 1 to make it direct-fire combat, otherwise it is a strike
  - Spend 3 to avoid the combat (unless your fleet containing a base)
  - Spend 2 to increase or decrease a point of damage (announced before either side rolls for damages)
  - Spend 1 to select a target instead of your opponent (announced as targets are picked)

## 4. Resolve Combat

- If neither side spends tactic points, the combat will be a strike. You must have *Space Missiles* tech to inflict damage in strike combat
- If a **direct-fire** combat:
  - Select any of your ships/bases to screen. They will not participate in combat but can not be damaged unless tactic points are spent to target them. Screened ships/bases become targets when all non-screen targets are destroyed.
- If a **strike** combat:
  - Fighter Drones* tech: decrease the damage inflicted on your fleet by 1 per fighter squadron in your fleet
  - Bomber Drones* tech: choose to use drones as fighters (defend) or bombers (attack). If bombers, increase the damage to enemy by 1 per fighter squadron. Defending fighters cancel attacking bombers and only excess will get through. If both sides can choose, this is decided secretly and reveal simultaneously
- Determine how much **damage** is inflicted: add up combat values and add 1d10 plus 1 for each enemy ship or base in the combat after the first. Then cross reference with combat table
- Damage is simultaneous. Inflict alternating hits on ships or bases. If strikes, attacker picks target first and for direct-fire, the defender does
- LV and RE are destroyed on first damage. CVs are destroyed when they accumulate damage markers equal to their size
- Bases without facilities are destroyed on first damage. Otherwise, hits can be applied to facilities or resources. Destroyed large facilities can be downgraded into their small version. For each resource hit, destroy 2 resources of any type (also mixed).

## 5. Post-Combat Effects

- Earn victory markers based on CVs destroyed: 1 for CV-2/3, 2 for CV-4/5, 3 for CV-6, or 4 for CV-7/8 (even if you don't win the battle)
- For each CV or base you lose (also with pirates or NPF raids), earn equivalent Engineering tech markers (1 for CV-2/3, etc.)
- For each damage marker on a CV, check for recall. Can earn a Biology tech marker if recalled, but only one per ship.

## Blockades

- If you can attack a base from orbit, you can declare a blockade instead of combat
- The fleet must be composed of only unreserved CVs and must have a combat value greater than the Defense Networks at the base plus half of defending ships stacked with that bases. A blockading fleet is free to take other actions like explore or initiate combat
- When a base is blockaded: Tech and resource production is halved after modifiers, Settlements decline instead of grow, May not trade or receive a new trade marker, Blockading player receives \$2B for each blockade during the production step.

## Combat with Pirates

- Can search for the pirate to initiate combat but only the strongest pirate is ever included at a time. Pirates roll for searches but only spend tactic points to avoid combat if possible. They always attempt to choose direct-fire combat, but don't otherwise spend tactics points
- Damaged pirate ships remain damaged. Players fighting pirates can choose how to apply all damages they sustain
- Destroying pirates earns you half the accumulated pirate cache, a politics marker and a victory marker.

## Blockading and Raiding NPF Bases

- Blockading only allowed if you have relations of Embargo or War with the NPF. The fleet must be composed of only unreserved CVs
- Gain \$2B during the production step for each NPF base blockaded
- If you have a relation of War, you can **raid** a NPF base. It works like an attack but uses a specific table to determine the captured resources and damage sustained based on a 1d10 roll. A roll of 10 destroys the base, but no damage are sustained, or resources are captured
- Roll a recall for each damage sustained during a raid
- If you raid a base and don't lose a CV, earn a victory marker.

# Exploration

- Each ship can explore only once a turn and must have an exploration value to do so
- Bases and ships stacked with bases cannot explore
- A world with current **exploration value equal to zero** cannot be explored
- If you have the *Space Mining* technology, you can **produce resources** with CVs instead of exploring.
- When **exploring with a RE**:
  - **RE Exploration value** = current exploration value of the world + the exploration value of the RE + *Computing* technology bonuses (+1,+2,+3) + Unified *Robotic* policy bonuses (+1) + bonus from world card based on the type of RE you are using.
    - Reduce exploration value by 1 if an **Orbiter** orbiting the central world in a planetary system is exploring any other world in that planetary system
    - Reduce exploration value by the heliocentric number if exploring with a **Flyby RE** from a heliocentric area
    - Halve the current exploration value of the world when exploring with **Telescopes** (Telescopes cannot explore Alpha Centauri)
  - Using a **probe** takes the exploration action of the carrying RE for this turn. Probes are always **destroyed** after use.
  - **Probes** can only be used to:
    - **Explore a World** from the surface of the world (**Rover**), except gas giants and Sun surface, or the orbit of the world (**Orbiter**)
    - **Explore any World** from the flyby area (**Flyby RE**).
  - Earn a **tech marker** of the type indicated by the world per 10 exploration value. Roll d10 for any remaining fraction of 10 (less or equal)
  - **Roll for malfunction**, except if using a probe. Your starting RE malfunction rate is 30% (modified by tech)
    - Add +10% to malfunction rate if exploring from an area with severe radiation, unless you have the *Active Radiation Shielding* technology
    - Add +20% to malfunction rate if exploring Venus with a rover, unless you have the *Pressure Shell* technology
    - Destroy RE on failure (less or equal). For each RE (non-probe) lost to malfunction, draw an **Engineering** tech marker.
  - If any tech markers drawn is 3 or higher, earn a **depletion**.
  - A **Flyby RE** in a flyby area (after exploration or not) must make a heliocentric transfer (rolling for engine failure) to another planetary system farther from the sun. Flyby RE are destroyed after they leave the Scattered Disc flyby area (cannot move to Alpha Centauri)
- When **exploring with a CV**:
  - **CV Exploration value** = current exploration value of the world + the exploration value of the CV + Crew technology bonuses (+1,+2,+3,+5) + bonus from world card to CV exploration.
    - When equipped with a **mobile lab**, roll 2 dice and choose which one to keep
    - Cannot explore Sun observation, gas giants or Deep Space Astronomy
  - Earn a **tech marker** of the type indicated by the world per 10 exploration value. Roll d10 for any remaining fraction of 10 (less or equal)
  - **Roll for recall** after each CV exploration. Your starting CV recall rate is 50% (modified by tech)
    - Reserve the CV on failure (less or equal). For each CV recalled, draw a **Biology** tech marker.
  - If the sum of all tech markers drawn is 3 or higher, earn a **depletion**.
- When **earning a depletion**:
  - Reduce the **exploration value** of the world by 1 (using number markers to indicate current exploration value)
    - When a world exploration value is reduced to zero, remove any unearned mission marker for that world from the game and draw a replacement for it.
  - Draw a **politics marker**
  - Draw a **world card** (if exploring with a spectrometer, draw two and choose which one to keep)
    - If the world card is eligible (share at least one descriptor with a world to occupy the world box), choose to **place** it or **discard** it
    - When a world exploration value is **reduced to zero** and the world does not have a world card yet, you must place a world card or keep drawing until an eligible one is drawn.
  - Check if the depletion **completes an unearned mission**, private or public (except for telescopes). **Upon completing a mission**:
    - Draw a **politics marker**
    - Draw a **new mission** to replace it
    - Keep the completed mission marker next to your board if possible:
      - You can only keep completed mission markers equal to the decade of the game (1 marker for 2030, 2 markers for 2040, etc.)
      - When you complete a mission that you can't keep:
        - Earn one victory marker
        - Return any one of your completed mission markers to the pool.
  - **Search for life**:
    - You cannot search for life in a world that already has *Life!* Marker
    - You must have the *Signs of life* technology to search for Existing life in a world that has *Signs of life* marker
    - Roll d100 against the life chance of the world (less or equal to the world's life value)
    - On a successful roll **find Signs of life**. If they were already present, instead **find Existing life**.
      - When finding **Signs of life**:
        - Earn the *Signs of life* technology
        - Draw 2 Biology tech markers, 1 victory marker and 1 politics marker
        - The world receives the *Signs of Life* marker.
      - When finding **Existing life**:
        - Earn the *Existing life* technology
        - Draw 4 Biology tech markers, 2 victory marker and 2 politics marker
        - The world receives the *Life!* marker.
    - After one player has discovered *Sign of Life* or *Existing Life* technology, these technologies can be developed like any other
    - A world with sign of life/life also receives an additional +1/+2 tech points production (no impact on exploration).

# CV Resource Production

- The *Space Mining* tech allows you to produce resources using unreserved CVs equipped for production if the world has a world card. The world must have at least 1 production value for the resource type. You can not use a CV to produce where you have a base (other bases are ok)
- You **gain 1** of the resource you choose. Roll 1d10, modified by the *Space Refining* tech. If it is equal or less than the production value of the world, you gain an **extra resource**. If the modified roll is 1 or 0, gain **another resource**. You can only take what you can store on your fleet
- Roll for recall after production
- You can **harvest an asteroid** marker in a Flyby box with unreserved CV by converting asteroid into resources (with *Space Mining* tech and CV equipped for production). Check the Asteroid Harvest table for the result. Earn a **victory marker** for each asteroid you harvest.

## Trade & Base Construction

### Trade with Bases

- Can only trade with bases that have trade markers. Any resources you sell are destroyed, and any resources you buy weren't previously in the game. Add/remove resources to/from the base stockpile. Remove the marker after that base participates in a trade
- Can always trade with your bases. Can only trade with other's bases if you have a Neutral or better relationship with them and you have a fleet in the same location. Resources traded must come from and go to the fleet's cargo
- You can refuse another player's request for trade or demand a \$1B tariff to trade with you
- The maximum number of resources you can trade is restricted to the lesser of a) foreign relations, or b) the limit based on the base's Settlements (unlimited for NPF bases).

### Building and Expanding Bases

- Bases can be built in Earth's orbit or on any world that can hold a world card
- Spend SUP from the cargo of a CV at the location. The cost is found on the world's solar system tile and can be modified by tech (min = 1)
- The CV must be unreserved, have an exploration value and all SUP must come from the cargo of a single ship
- You can also build and **expand facilities**, even on the same turn as building the base. Can only build or expand one facility level per turn
- If you have the tech, you can purchase **terraforming points** using SUP. The cost is increased by 1 after the initial purchase, for any additional purchases in the same turn (e.g. if they normally cost 4 SUP, you can buy 3 points paying 4 for the first, 5 for the second, and 6 for the third)
- Mark terraforming points on the Tech Chart using number markers (cumulated from all players)

## Game Mechanics

### Number and Dice

- On 1d10 roll a 0 is a 10. On a 1d100 a 000 is 100.
- Whenever a success or failure rate is given, you must roll that number or lower to succeed or fail
- Performing any calculation, perform all multiplication or division before addition or subtraction. Round result normally (e.g. 2.5 = 3, 2.49 = 2)

### Cash

- Does not need to be transported. On Earth, buy any resource for \$1B each and sell 2 resources for \$1B.

### Politics Markers

- Spend politics markers to: (1) Modify **initiative** rolls by +10% per marker, (2) Add 2 **tech points** of any type to your tech bank, (3) Convert to \$1B **cash** at any time, (4) Spend 2 markers to return an **unused mission** and re-draw, (5) Spend 4 markers to buy a **victory marker**, (6) Attempt to increase or decrease your **foreign relations** with another faction
- Discard remaining markers at the end of the technology step.

### Politics and foreign relations

- Non player factions can be traded with by using the text within the foreign relations track on your faction's player board. For example, (\$1B/6R) means you can trade up to 6 resources with this faction for an extra \$1B, provided the base has a trade marker
- Earn extra politics markers for each Alliance. An Alliance can join fleets
- If able to embargo, that means you can block bases, intercept LV's, intercept and search for CV's to initiate combat.

### Crew Vehicle Range

- The CV range is the maximum heliocentric distance a CV can travel for earth or a base that can unreserve (serve, resupply) the CV
- A base that can unreserve a CV extends the range from earth.

### Reserve Status

- You must turn a ship to reserve if: (1) It is recalled during exploration, production or combat, (2) It cannot reach earth or a base the could unreserve it, (3) It surrenders
- You can always choose to reserve a ship. A reserved CV can only move, transfer resources or defend
- You can purchase a ship reserved. The cost is reduced by 1 SUP and 1 FUEL

### Fleets and Stacking

- A single ship or stack of ships (and one base) owned by a single faction or set of allied factions is a **fleet** and can move and fight together
- You can stack with non-allied faction's bases to trade (not a fleet). You can **transfer resources** amongst a fleet at the start of any phase or step. Ships can elect to join/leave a fleet automatically when enter/depart its location. However you must make an engine failure roll if you separate from a fleet and remain in the same location. Fleets containing a base can't explore or initiate combat

### Damage Markers

- Damaged **CV's**: each damage marker reduces exploration and combat values by 1, and each 2 points damage reduces drone squadrons by 1
- Damaged **Settlements**: don't count for trade or production modifiers
- Damaged **Mining Stations, Refineries** and **Research Labs**: produces one less resource or tech point per point of damage
- Damaged **Spaceports** and **Supply Stations**: count as one level lower, or small Supply Stations don't function at all
- Remove damage by spending 1 ORE (repair action). Ships must be at a supply station or spaceport.

# Events

At the start of each economic phase, you’ll roll percentiles for an event. Starting in 2100, also roll for a second event (if you get the same event twice, ignore it and don’t reroll). Events marked \* will have a major impact on the game and should only be played if all players agree (any player can veto; ignore them in that case).

Roll	Event Title	Event Description
1-12%	PUBLICITY CAMPAIGN	The player with the lowest (worst) initiative can choose to increase the exploration value one world of their choice by 2 (world must not be fully depleted).
13-17%	INCREASED SPACE BUDGET	The player with the least earned missions earns \$5B extra on Earth this economic phase (if multiple players are tied for the least, they all earn \$5B).
18-21%	MINER STRIKES	Halve the resource production of bases this economic phase after all modifiers. Add a damage marker to every Mining Station and Refinery in the game.
22-25%	RESEARCH STRIKES	Halve the research production of bases this economic phase after all modifiers. Add a damage marker to every Research Lab in the game.
26-29%	DOCKYARD STRIKES	Each player must destroy 2 saved resources of their choice at every base they own. Add a damage marker to every Supply Station and Spaceport in the game.
30-35%	NATURAL DISASTER	Roll percentiles to see which world is impacted. Any bases at that world add a damage marker to all non-Settlement facilities and destroy half their saved resources of each type. (Ignore this event if there are no bases on the rolled world.)
36-40%	SPACE RACE	Each player adds up their total number of Settlements plus the value of missions they’ve earned. The player with the lowest total draws 5 politics markers. In the case of a tie, all tied players draw 3 politics markers, unless the tie includes all players (in which case ignore the event).
41-45%	PRIVATE FREIGHT COMPANY	The player with the fewest Settlements (everywhere) can transfer 5 resources this turn as if they had the technology Trade Routes, or if they have the tech, can increase their resource transfer capacity by 5 (if multiple players are tied for the fewest settlements, all tied players can do this).
46-59%	IMMIGRATION	The player with the fewest Settlements (everywhere) can add 2 to any base they control (ignore event if they don’t have a base; if multiple players are tied for the fewest settlements, all tied players with a base can add 1 settlement instead).
60-65%	THAWING RELATIONS	Move all foreign relations one space towards ‘Neutral’ (only move once for mutual relations between players).
66-78%	SURVEY ERROR	Roll percentiles to select a world and draw a world card. If the drawn world card can apply to the selected world, add it (replacing any existing card).
79-83%	PIRATE SWARM	Roll to place an extra pirate this economic phase.
84-90%	BOUNTIFUL HARVEST	Roll to place an extra asteroid this economic phase.
91-93%	MASSIVE COMET	Increase the exploration value of the comet by 3 (even if fully depleted).
94%	EXTRATERRESTRIAL SIGNALS	Increase the exploration values of Alpha Centauri and Deep Space Astronomy by 4 each (even if fully depleted).
95%	SOLAR STORM	Each CV not located at a base or Earth takes 1 damage. Roll a die for each RE not at a base or Earth and destroy it on a roll of ‘1’ or ‘2’.
96%*	RUINS OF ANCIENT CIVILIZATION DISCOVERED	Set Mars’ exploration value to 10 (even if fully depleted).
97%*	FIRST CONTACT	The first player to land a CV on Alpha Centauri earns 5 politics markers and 10 victory markers.
98%*	ARTIFICIAL INTELLIGENCE	Select a random player to designate one off-Earth RE controlled by any player to become self-aware (turn it to its ‘Reserve’ side); that player will direct self-aware REs as a separate faction that moves after all players have moved (without movement restrictions for the REs, using the same Helio transfer rates as the directing player). Self aware REs can’t return to Earth, and can be attacked by any player without consequence. Any other REs that come into contact with a self-aware RE (i.e., at the same location) also become self-aware, even if stacked with other ships and/or bases. Destroy all self-aware REs before the next economic phase, at which point the player directing them earns 1 victory marker per self-aware RE.
99%*	INCOMING	Trigger the Incoming scenario after the current economic phase (with no bonus tech or cash). The asteroid’s position is based on the current campaign year instead of the year indicated in the scenario (e.g., it remains at the Main Belt for the first 10 years and then moves to Mars Flyby). If the players win, players earn a victory marker for each 3 points of strength they remove from the asteroid. If Earth gets hit, all players discard all cash, politics markers, and tech markers and points, and skip the next economic phase.
100%*	INVASION	Trigger the Invasion scenario during the next combat step (with no bonus tech or cash). Immediately set all relations worse than ‘Neutral’ to Neutral. Players can immediately teleport any existing ships they currently have or build in the next turn to Earth orbit to form a fleet that will fight the invader. If the invader wins or the players choose not to fight, all players discard all cash, politics markers, and tech markers and points, and skip the current economic phase. If the invader is destroyed, any player who chose to participate in the defence of Earth earn 5 victory markers for each CV they contributed to the battle.

Combat Table

- If neither side spends tactic points, the combat will be a strike.
- You must have *Space Missiles* tech to inflict damage in strike combat.

Direct Fire Value	Damage Inflicted	Strike Value
4 or less	0	6 or less
5-7	1	7-8
8-10	2	9-10
11-13	3	11-12
14-15	4	13-15
16-17	5	16-18
18-19	6	19-21
20-21	7	22-24
22-23	8	25-27
24	9	28-29
25	10	30-31
26	11	32-33
27	12	34-35
28	13	36-37
29	14	38-39
30	15	40-41
31	16	42-43
32	17	44-45
33	18	46-47
34	19	48-49
35	20	50-51
36	21	52-53
37	22	54-55
38	23	56-57
39	24	58-59
40+	25	60+

Raid NPF Bases Table

- Determine the captured resources and damage sustained based on a 1d10 roll.
- A roll of 10 destroys the base, but no damage are sustained, or resources are captured.

Roll	Resources Captured	Damage Sustained on raiding fleet
1	1	4
2	2	3
3	3	2
4	4	2
5	5	2
6	6	1
7	6	1
8	6	1
9	6	0

Asteroid Harvest Table

- In a Flyby box with an unrecalled CV equipped to produce, converting the asteroids in resources. Requires *Space Mining* tech.

Roll	Resources
1	3 SUP
2	4 SUP
3	5 SUP
4	3 FUEL
5	4 FUEL
6	5 FUEL
7	3 ORE
8	4 ORE
9	5 ORE
10	6 ORE

Heliocentric Transfer Timetable

- For distances greater than 10, compute the time for every full 10 first and then add any remainder

Transfer Modifier	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
x0.9	1	2	3	4	5	5	6	7	8	9	10	11	12	13	14
x0.8	1	2	2	3	4	5	6	6	7	8	9	10	10	11	13
x0.7	1	1	2	3	4	4	5	6	6	7	8	8	9	10	11
x0.6	1	1	2	2	3	4	4	5	5	6	7	7	8	8	9
x0.5	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
x0.4	1	1	1	1	2	2	3	3	4	4	5	5	5	5	6
x0.2	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3