MFØ:IO Rules Outline

The following are the rules of play for **Mobile Frame Zero 002: *Intercept Orbit***, as of **5/7/14**.

Overview

Use your fleet of ships and mobile frame companies to **gain points** by **capturing** your opponents' ships and High Value Assets to points.

Destroy or **capture** your opponents' ships and companies to **cost them points**.

Be careful of your **fuel**! When your companies run out of fuel, you'll **lose points** for them unless you can **rescue** them!

Whoever has the most points when the Doomsday Clock reaches zero, **wins**!

What You Need to Play

1. A distinctive **Doomsday die** that you can use to count down turns

2. A **ruler** made of eight 1x4 LEGO® click hinges, with distinctive colors for the first (frame combat range) and second (point defense range) segments of the ruler.
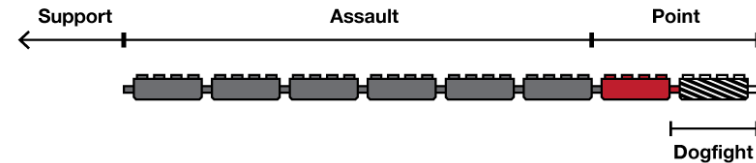
If you don't have click hinges, you can download a maneuver key from http://mobileframezero.com/mfz/maneuverkey/

3. **Dice** in an assortment of colors. You might not need all of these, but make sure before you play that, between all players, you have all the ones your fleet calls for. You'll need some 6 sided and some 8 sided dice.

In total, you need:

- **Two white** dice

- **Three red dice** for normal attacks and **one red d8** for a red ace or well-armed ship

- **One green die** for a frigate or company and **one green d8** for a red ace

- **As many blue dice as you have TAs** and **one blue d8** for a blue ace

- **As many yellow d6s as you have spotting systems** and a **yellow d8** for a yellow ace

- **As many black dice as you have companies**, plus one more if a ship has two catapults.

4. Your **fleets**

5. 3-5 pieces of **space debris** — spacewrecks, satellites, or asteroids, each no bigger than a ship, on a 4x4 base.

6. A square or circular **table** about 4 rulers across. If your table is larger than that, tape off an area of the appropriate size. Slightly smaller is OK; but you might want to reduce the length of the ruler by 1.

7. A piece of paper or whiteboard to keep score, big enough that all players can see it

Build Your Fleet

Before you gather together to play, each player will need to build a fleet in secret. Fleets are made from **Tactical Assets (TAs)** and **High Value Assets (HVAs)**.

Determine the number of assets you can build by consulting the number of players in the upcoming game.

#Players	#TAs	#HVAs
2	4-6	3
3	3-5	2
4	3-4	1

- **High Value Assets (HVAs)** are valuable strategically, but are tactical *liabilities* — they're what your fleet is fighting *over*.

They might be shuttles bearing diplomats or revolutionary leaders, smuggled prototype mobile frames, or cargo ships loaded with illegal peaches. They're hard to maneuver, hard to protect, and extremely valuable. If you're playing with LEGO® or other building bricks, Each HVA should be **no bigger than 12 studs in its largest dimension** and rests on a **base 8x4** studs in size.

- **Tactical Assets (TAs)** are what you're fighting *with*. They're warships and companies of mobile frames. Warships are large and destructive, but must overcome their own forward momentum to move the direction and speed you want. Frame companies turn on a dime, but attack only within a very limited range.

- When you build **ships**, you'll install systems on them:

  - **Weapons** can hit at **point** range, **assault** range, or **support** range.

    - A player may design a weapon to either devote two red dice at a single range; or may split the weapon into one red die at each of two ranges.

    - A second weapon devoted to the same range as the first grants a d8 instead of pair of d6s.

  - **Defensive systems** like armor, chaff dispensers, and electronic countermeasures keep your ship from taking the full brunt of an enemy's blow.

    - A second defensive system gives the ship the ability to make all ships of its choice within point defense range take hits as though in cover.

  - **Communications and sensor systems** give a ship the ability to direct and enhance the attack of other TAs

    - A second coms system gives the ship the ability to spot anywhere in the battlespace.

- **Catapults** launch companies of mobile frames across the battlespace.

  - A second catapult gives a *third* black die to the ship, making repair and refueling much more effective.

- **Capital Ships** are clumsy but powerful warships.

  - In addition to their infrastructure and crew of two white dice, hey have **four systems.**

  - The model should be no greater than **16 studs across in its largest dimension.**

  - Its rests on a **base 8x8 studs** in size.

- **Frigates** are faster and more maneuverable than capital ships. They carry **three systems.**

  - They roll a **green die** to help them maneuver.

  - Frigates are no more than **12 studs across in their greatest dimension.**

  - They rest on a **base 8x4 studs** in size.

- **Mobile Frame Companies** are fast and maneuverable, but vulnerable to both point defense fire and other frame companies.

  - They can board ships and HVAs alike, capturing them for both their points and tactical purposes.

  - They have **four systems**: a weapon system, a defense system, a communication system, and a movement system. They rest on a **base of approximately 4x4 studs**. The number of companies you have is equal to the number of catapults you have on your ships.

  - Companies have no momentum.

Every fleet has a Mobile Frame Ace that carries with it a special power. Mark the company that the ace leads with a special model. When you build your fleet, decide which kind of ace your fleet has. Pick one:

- **Red Ace** not only shoots with an additional red d8, but can also shoot particularly far.

  - Roll a red d8 when this company goes.

  - This company may target TAs at assault range as though they were in dogfight range.

- **Blue Ace** not only protects their own company well, but can also protect friendly TAs nearby

  - Roll a blue d8 when this company goes.

  - This ace makes any TA within point defense range take hits as though in cover.

- **Green Ace** not only moves quickly, but also can move other models.

  - Roll a green d8 when this company goes.

  - This ace may slide a TA within dogfight range 1 unit in either direction or change its heading by one click both on that model's turn and on its own.

  - It may move or turn each asset it contacts on a turn.

- **Yellow Ace** not only spots particularly well, but allows others to further aid at their command.

  - Roll a yellow d8 when this company goes.

  - It may spot any ship within point defense range.

  - Place both the yellow d8 and its regular spot die on the ship that this company is spotting.

    - When you use the spot, add the dice together.

- Other TAs may replace either of these dice.

Aces also **board** enemy ships more effectively than companies without them.

Setting Up the Table

When you arrive at the table with your friends, you'll **show off your fleet to each other.** Point out each ship, company, and HVA, making sure everyone can see what system does what. If it's at all unclear, make sure everyone knows which end is the bow on your ships.

Determine each player's
Points per Asset

When we start to count the score, each asset of each player (HVAs and TAs alike) is worth 5 points. Then we'll do some quick measurements to determine how to modify each player's points per asset (PPA).

Ask all the players:

1. Which player has the **greatest number of TAs** — both ships and companies. **Reduce** that player's PPA by one.

2. Which player has the **fewest TAs**. **Increase** that player's PPA by one.

3. Which player has the **greatest number of shipboard systems**, which doesn't count individual systems in companies. **Reduce** that player's PPA by one.

4. Ask each player who has the **fewest shipboard systems**. **Increase** that player's PPA by one.

> If multiple players have the most or the fewest of TAs or shipboard systems, they *all* tweak their PPA.

5. Write all the player's names across the top of the scoreboard with their PPA written under it. Then multiply your PPA by your number of assets you have — HVAs, ships, and companies — and write that down under your name. **That's your starting score!**

If you have a tie for first place, then all tied players roll off. Whoever wins the roll-off can choose to remove a TA or a system or make the loser of the roll do the same. (Note that this might turn a capital ship into a frigate — if so, remember to change the base.)

> The player with the highest score is the **defender.** The next highest scoring player is the **primary attacker,** and all other players are **secondary attackers.**

Placing Assets Into the Battlespace

You'll set up your fleets from defender to attackers to defender.

1. **Defender,** place one HVA anywhere you like on the table.

2. Place your remaining HVAs within assault range of the first HVA.

3. Place one ship within assault range of the **first** HVA.

4. **Primary attacker,** place one ship just within assault range of the defender's ship.

5. **Secondary attackers,** place one ship anywhere on the table outside assault range of the defender's HVAs and ships.

6. **All attackers,** take turns placing all your ships, then placing your companies touching your carriers, one company per catapult, then placing your HVAs.

7. **Defender,** place the rest of your ships, then place each company touching one of your carriers, one company per catapult.

8. Take turns placing a few pieces of space debris around the table, no closer than assault range from any ship but your own, and no closer than assault range to another piece of debris. If there's nowhere legal a player wants to place debris, stop placing debris.

The Game Starts Now

Defender, pick a ship or HVA. In future turns, you may be able to pick a mobile frame company, but they're all still on deck for now.

Declare an enemy TA or space debris as the ship's target and the range at which it's attacking if you want to and can, and roll all the ship's dice at once.

Every time you move a ship, you'll:

1. defend your ship

2. repair your ship

3. optionally, shoot

4. move

5. shoot if you haven't yet

6. launch, fuel, and repair frames

7. spot a TA

Defend your ship

Choose a blue die (if you have one) or a remaining white die. That will be your defense number for the rest of this round. If you don't choose one, your defense number will be 0 for the round.

Repair Your Ship

If any white dice are a 6, you may spend them to repair one system each that the ship has lost. You may not repair white dice nor give the ship systems that you didn't build them with; just re-attach the systems you've taken off.

Optionally, shoot

Use a red die or a remaining white die to attack if you're within range. Continue in normal combat and tactical order.

You may opt to shoot after your move instead, or not at all.

Ranges

You can declare a target that is, or you hope will be, within range of your weapons. If your ship has no point defense weapons, its crew can still fight with labor frames carrying mobile frame-scale small arms with its white dice.

A ship may only target frames at point defense range, or frames touching a ship within point defense range.

Damage

Weapons at **support range** damage systems on other ships with a **5 or 6** on their hit dice.

Weapons at **assault range** damage systems on other ships with a **4-6** on their hit dice.

Weapons at **point defense range** damage systems on other ships and mobile frame companies on a **5 or 6**.

Cover

A target is in cover if space debris or another ship is between the attacker and target, and within point defense range from the target ship.

If the target is in cover, the cover will absorb all 5s from a support- or point defense-range weapon, and all 4s from an assault range weapon. If the cover was debris, remove it from the table as destroyed.

Cover for a unit that has been spotted takes damage at the discretion of the attacker.

Move your ship

Your ship will move straight forward 4 units by momentum if you don't maneuver it. Allocate a green or remaining white die to maneuver the ship. Each pip on your maneuver die allows you to pick one:

- Click any single hinge on the ruler once (for all ships and HVAs) or twice (for frigates). Ships and HVAs may not click a single hinge more than once in a turn.

- Increase the speed of the ship by 1.

- Decrease the speed of the ship by 1. Ships may not reverse.

- Avoid a collision with space debris

When a ship moves, the player may reposition any of their frame companies touching the ship or its base.

All other companies may opt to continue on with the ship, choosing where to position themselves in initiative order, or stay where they are on the table.

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A ship starts its movement by placing the end of the ruler at the back of the base on the inside of the upcoming curve. In this case, the player has clicked the first hinge by one click. Because the ship is a frigate, the player could have chosen to click it again with the same maneuver point, but didn't.
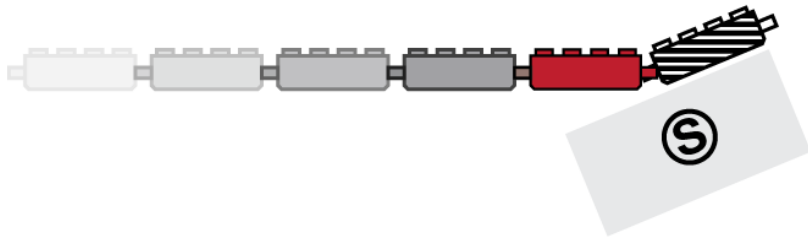
To make a turn, line the front of the base up with the next segment of the ruler.
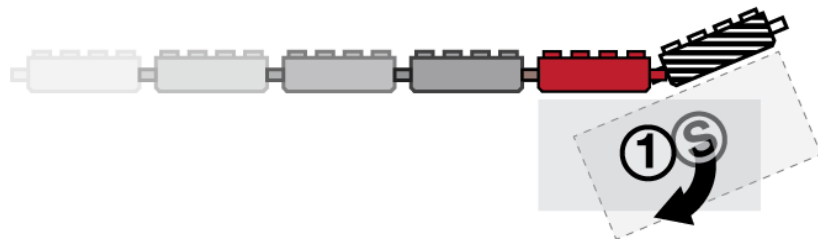
To move straight, move your ship the number of segments you can go. If you don't have the maneuver points to slow your ship, you must move the whole distance. In this case, the player has used a second maneuver to slow their ship to 3.
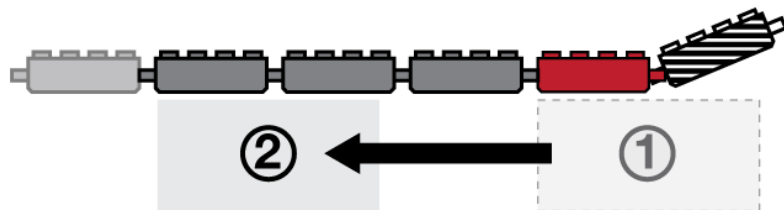
Ramming and Collisions

Sometimes, you'll want to ram another ship or HVA, and sometimes a collision will happen against your wishes.

If a ship would end its turn touching another ship, they have collided, whether they wanted to or not. Skip to rolling collision dice.

If a ship's move takes it all the way through another ship, however, the players will have an opportunity to choose to ram or or avoid the collision.

- **If one ship is a frigate**, it can use its maneuverability to decide unilaterally if the ships are colliding or not.

- **If neither or both of the ships are frigates**, the ship currently moving says if it wants to ram or not. If that player decides not to ram, the other player then decides if they want to, instead.

- **If a ship moves through or touches a mobile frame company,** the company can decide if they cling to the ship. If the company is out of fuel, the owner of the ship decides instead if they're capturing/rescuing the company.

- **If a ship moves through a piece of space debris**, it can avoid the debris at the cost one maneuver pip.

- **If a ship hits a piece of space debris**, roll collision dice, then choose to remove the debris altogether or move it the same distance as their current speed, though not into an immediate collision.

Collision dice

When two ships collide, roll as many dice as the current ship's speed. Every 1 or 2 on the die damages one of the ramming ship's systems. Every 4-6 damages one of the target ship's systems.

Starting with the rammer, both players turn their opponent's ship by a number of clicks up to the number of hits the ship took. If such turning would cause another collision, stop the turn just before the ships collide.

When the target is an HVA, the HVA will take no damage, but the rammer will still turn it.

Note that HVAs may never opt to ram. If their turn ends on another ship, it stops before the collision happens. If its maneuver will take it through a ship, that ship can unilaterally opt to ram it or allow it to pass.

The Edge of the Table

If a ship leaves the edge of the table, it's lost in space and won't be able to return to this volume until the battle is over. The player loses its points immediately and removes the model from the game.

If in doubt about whether the ship is on the table, assume that it is.

If an HVA hits the edge of the table, the player with the highest score, other than the player who owns the HVA, rotates it in any direction they like to keep it from going off the table.

Launch, Fueling, and Repairing Frames

If your ship has a catapult system and a company of frames touching the ship or its base, you can opt to fuel and repair it, and launch one company per catapult.

Using a black or remaining white die, you may **repair** any company back to as many total systems as the repair die shows.

So, if your company has 2 white dice, a weapon and a defensive system left, you can use a repair die of 5 to replace its movement or spotting system. If the die was a 6, you could repair both.

You may also use a black or remaining white die to **fuel** any company by optionally replacing its current fuel die (if any) and then **launch** them. Place the company anywhere on the table not in cover to the launching carrier, and place the fuel die beside the company. That die will count down every round, and sometimes during dogfights.

The frame company now moves as in independent unit.

Spot a Tactical Asset

A ship may use a yellow die or a remaining white die to spot any TA.

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A Frame Company's Turn

Declare an opposing TA or space debris as the company's target. It may only declare a target at frame dogfight range: one ruler unit, or touching the same ship. The red ace's company can also target at assault range.

Roll all the company's dice, including the ace's, if they're in this company.

On its turn, a frame company will:

1. defend your company

2. optionally, shoot

3. move

4. optionally, shoot if you haven't yet

5. spot a TA

Defend Your Company

Choose a blue or white die as your company's defense number.

The **blue ace**, when attacked, takes hits as though in cover and may provide cover at any time to any other unit in point defense range.

Optionally, Shoot

Choose a red die or a remaining white die as your attack. You may opt to shoot at the end of your move instead of at the beginning, or not at all.

Dogfight range

Frame companies may only attack at dogfight range. Dogfight range is 1 ruler unit, or touching the same ship or its base as the target.

The **red ace** allows the company to attack at point defense or assault range, as well.

Frame companies damage other frame companies on hit dice of 4-6, or ships on 5-6.

Dodging away

Companies that have a green die remaining and are touching a ship may, when taking hits, spend one fuel to step two units directly away from the ship, ceding control of it for the time being.

Move

Choose a green or remaining white die as your move. Mobile frame companies have no momentum and move as in Mobile Frame Zero: Rapid Attack.

If a company comes into contact on its move with an unfueled company, they can carry it with them to rescue or capture it.

The **green ace** may move or turn each ship it touches by one unit or one click. Additionally, it may do this when the ship moves itself and may unilaterally decide if the ship it is on collides with another model.

Abandoning Assets

If a company abandons a ship by flying at least 2 away, being destroyed, or running out of fuel the ship and any un-allocated dice immediately return to the original owner of the ship.

HVAs remain in the possession of the last player to have a TA within point defense range of it.

Spot a Tactical Asset

Choose a yellow or remaining white die to spot with. Frame companies can only spot TAs in dogfight range.

The **yellow ace** may place its yellow d8 in addition to its normal spot die. When the spot is used, use both dice. Additionally, the yellow ace may spot at point defense range.

Capturing HVAs

When one player is the only one with TAs within point defense range of an HVA, that player may take immediate possession of it, increasing their own score by their own PPA and reducing the points of the previous owner by the opponent's PPA. The new owner now takes it as their own asset. If it has already moved this turn, the player does not get to move it again, but until another player captures it, they control it and retain its points.

Ending the Round

When all assets have taken their turn:

1. Remove all blue (defense) and yellow (spotting) dice from the table.

2. Capture and defend ships

3. Turn the Doomsday clock down by one.

4. Turn all of your fuel dice down by one.

Capturing and Defending Ships

If any ship has a hostile company touching it or its base at the end of the round, each player rolls one yellow die for each company, and the wonder of the ship rolls all red dice for point defense weapon systems on the ship.

- One player may opt to aid another, giving them their dice. That player can not take possession of the ship this round.

- The player with the most yellow dice reading **3 or higher**, captures the ship. If none are highest, the current owner of the ship keeps it.

- Every die reading **4 - 5** damages **one** system of a company of the attacking player's choice.

- Every die reading **6** damages **two** systems of a company of the attacking player's choice.

Bingo Fuel

A frame company with only 1 fuel left is at bingo fuel. This is their last opportunity to get to a friendly carrier and refuel before they're lost.

When you turn down the fuel die from 1 to 0, the frame company has run out of fuel. The player who owns the company loses its points immediately.

The company's engines have gone cold. No one can target it and the company does not get a turn during the round.

Any asset can capture or rescue a drifting company by passing within point defense range of it. Assets can pass companies to other ships as they pass within point defense range. The company stays captive, touching the ship as long as the owner of the ship so wishes.

Companies may dodge away from a drifting company that they're carrying by spending one fuel, as when on ships.

Feedback?

Please check the conversation at mobileframehangar.com/index.html