A MechWarrior's Primer

Everything we know about the game... so far

Contents

Why this Primer?

That's a hell of a question, MechWarrior. Here's what I know. There are a lot of people asking a lot of questions in a lot of different places. Many of them have made the effort to find the information they're looking for, but it can be a real challenge to track it all down. And there is a lot of information out there to find. I would try to quantify it for you, but I don't think I could do that without using the word "ton" prefixed by a four-letter epithet. Since this is a family show, I'll pass on doing that for now.

I've read a lot of comments by people in the MWO forums saying they couldn't find this, that, or the other tidbit of information. I've also read a lot of comments where people tried to answer a question by linking to two or three different dev blogs and Q & A sessions. Of course, I've also seen a handful of requests from people asking for one single source of information about MWO.

So I decided to create one.

The purpose of this document is to try to collect all of the official information we have about *MechWarrior®: Online™* into one single document. A document which can be disseminated freely to the masses, and which can be relatively easily updated as things change. That's what this primer is meant to be. The second goal of this primer is to present all of that information in a form that is easy to digest for people who are new to MechWarrior.

So have at it, MechWarrior. Everything you need to know about the game is contained in these pages. Everything, that is, that you're allowed to know. If you don't find what you're looking for in here, then the information probably isn't public yet. The game is in its beta testing phase, which means there are still a few things being worked out within the game. When reading this document it is paramount that you remember all of these concepts are, themselves, still in beta. Every single one of them is subject to change before the game goes live. The devs and beta testers are also not allowed to reveal any information which has not been made publicly available, so there are many game concepts which can't be commented on in a public document such as this.

Scattered throughout this primer you may find topics that you'd like more detail on, particularly if you are new to BattleTech or MechWarrior video games. In the Appendix you will find lists of commonly used acronyms and web links that may be helpful to you in your quest to better understand the universe. If you still can't find what you're looking for, or have suggestions for improving this primer, I can be contacted via my talk page on the MWO Wiki or via the thread for this primer in the official MWO forums.

Happy hunting.

---Astaroth

Backstory

Your Role

MWO takes place in the Inner Sphere beginning in 3049. For each day that passes in the real world, one day will pass in the MWO timeline. The Founder launch date of August 7, 2012 will equate to August 7, 3049. It is a period of unrest in the Inner Sphere (isn't it always?), and for those of you familiar with the BattleTech timeline, it is during this month that the Clan invades the Periphery.

A daily feed from Inner Sphere News will appear in the game to keep players aware of current events within the game universe.

It is undecided at this time how, or even if, the community will be able to get involved in historically important battles.
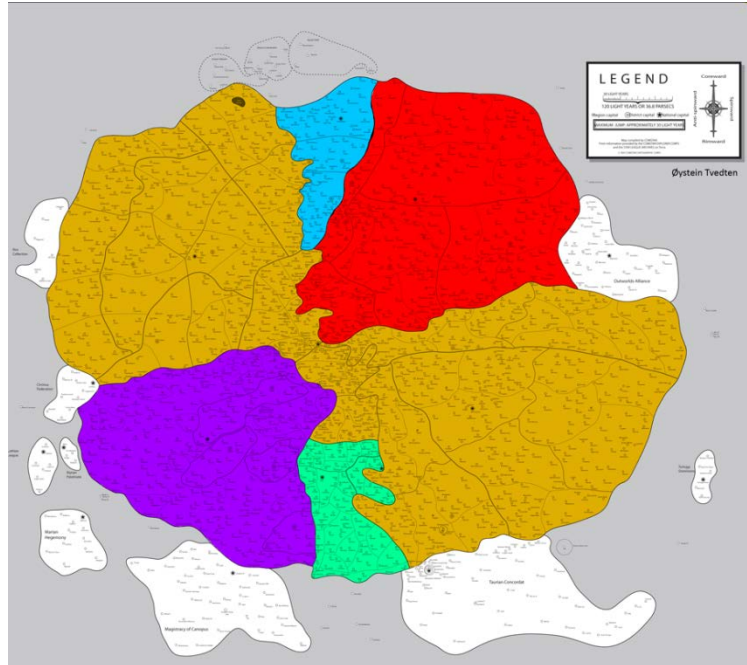
Players will be placed in the role of an Inner Sphere MechWarrior engaged in the day-to-day battles for territory that were so commonplace in the Inner Sphere at this particular time in BattleTech history. For people who just absolutely, positively, *must* play a clanner… suck it up. While PGI has hinted that the clans will be introduced to the game at some point, there have been no indications as to how or when this might happen. In fact, the words, "Clans will not be discussed anytime in the near future," were used in a July developer chat.

Inner Sphere History

The history of the Inner Sphere is one of nearly continual warfare. After mankind perfected fusion engines and jumpships in the 22nd century, it wasn't long before interplanetary empires outside the control of the Terran Alliance began to spring up. Not that Terra didn't try to control these rapidly expanding colonies, but logistics and political corruption rendered these efforts futile. Somewhere around 2300 the Terran Alliance gave up trying to control all of human space and dominion over the various known regions of the galaxy was given over to the five Great Houses and smaller Periphery states. The Terran Alliance became the Terran Hegemony, and after a couple hundred years of fighting between the Great Houses, Periphery states, and the Hegemony itself, a series of truces were signed. A new governing body was formed known as the Star League, with the Terran Hegemony at its head, though all of the Great Houses participated.

Under the Star League a period that can only be described as "a little less fighting" began, lasting some 200 years. Relative peace was maintained largely through the might and superior technology of the newly formed Star League Defense Force (SLDF), the single largest and most powerful military force in the entire galaxy. All of this peace and quiet came to a dramatic end when a bloody civil war began within the Terran Hegemony, a war which was eventually brought to an end through the leadership and tenacity of the SLDF's Commanding General, Aleksandr Kerensky, though at the cost of hundreds of millions of lives. With the Terran Hegemony effectively gone, the five Great Houses voted to dissolve the Star League in 2781 with the intent of reforming the League under the leadership of one of the House Lords. The problem was that all five House Lords wanted the Star League throne, and none were willing to concede. Disgusted, and not willing to wait around for the next war to start, Kerensky led three quarters of the surviving SLDF somewhere into the Deep Periphery beyond the reach of the Great Houses. The SLDF would not be seen again for roughly 260 years when they would return under a new name: the Clans.

In the intervening years the Great Houses engaged in a series of four Succession Wars, a period of nearly constant warfare that finally ended in 3030, though some border conflicts continued afterward. The cost of these wars was staggering: hundreds of billions of lives lost, entire worlds' populations exterminated, several Periphery states extinguished, and centuries of technological advancements lost.

Current Affairs

In 3049 mankind is still trying to recover from the devastation of the Succession Wars, and though some minor conflicts continue between individual houses, the wholesale open warfare of the preceding 250 years is over. In general, the galaxy is at relative peace with itself. For now.

Houses Steiner and Davion (the Lyran Commonwealth and Federated Suns, respectively) were joined by marriage in 3028, an event which touched off the brief but significant Fourth Succession War, and formed the Federated Commonwealth. Though still separate in many ways, in 3049 these two houses rule their vast empire (the yellow area on the map above) jointly, and the two houses are becoming increasingly integrated, including their military. According to the canon timeline, by 3049 the Armed Forces of the Federated Commonwealth are almost completely integrated. However, for purposes of making things more interesting in MWO, PGI has apparently strayed from the canon in this one area. As a result, the Steiner and Davion factions will be played separately in MWO rather than as one faction. At least, that's what seems to be happening.

The Free Rassalhague Republic, which only came into existence in 3034, is a relatively minor player in Inner Sphere politics. Although a playable faction in MWO as a result of popular demand from the game's fans (nice job there, folks), they are not considered a Great House. It should be interesting to see what happens with the Republic, since by 3052 over 90% of this state's territory will have been lost to the Clans.

Die-hard BattleTech fans have also noted a significant discrepancy between the MWO map of 3049 and the BattleTech map for the same time period, and that is the St. Ives Compact. According to the canon timeline, the St. Ives Compact formed out of a chunk of Capellan Federation (House Liao) territory in 3029 during the Fourth Succession War. However, for reasons not yet understood by this editor, the small state of 17 systems has been left off the MWO map altogether. Presumably this was done in an

effort to simplify matters for the game, a move which is perfectly understandable since the presence of the Compact would do little to enhance the game.

If you are interested in learning more about Inner Sphere history or the impending invasion of the Clans, links to additional reading material can be found in the Appendix.

Gameplay

Galactic Conquest

At the core of the community warfare aspect of MWO are the Great Houses, or factions. The factions will battle for control of worlds, which provide bonuses to the controlling faction. There are three types of planets in the game:

- Core Worlds – managed by the dev team and not available for player control. These will be key worlds that are important for future events in the BattleTech/MechWarrior timeline.
- Faction Worlds – Fought over by the Great Houses. These are worlds that are not historically significant. Control of planets is handled by an influence system. Factions gain influence over planets by participating in battles on said planet. The faction with the most influence controls the planet.
- Border Worlds – Fought over via a contract bidding system by merc corps. Expected to changed hands often with benefits going to the controlling corp. Merc corps must bid on a planet's occupation rights via a system of contracts. Matches will be fought between the controlling corp and the challenger. The winner of the match takes control of the planet. To be clear, merc corps will control the border worlds, but they do so *on behalf of* the factions. For more information on this system, see Match Organization, below.

At times, planets will change status between core, faction, and border. This will facilitate the dramatic changes in territorial control that take place during the canon MechWarrior timeline.

At launch it will take only a single match to determine control of a planet. This will very likely change in the future, requiring sequenced matches to control a planet. Another interesting tidbit to note is that the community warfare aspect of the game will not be implemented until a short time (within 90 days) after launch. It sounds like this will create an early free-for-all period during which control of planets is essentially meaningless (other than bragging rights), but that is still unclear at this time. Regardless, that situation will only be temporary.

Match Organization

Matchmaking

Match size will be max of 12 vs. 12, though smaller matches will be possible. Matches will consist of either faction or merc corp players with lone wolf players thrown in to fill any empty slots. Initially, matches will essentially be one-off battles between two sides. At some point after launch there is a plan to add series matches.

In general, the matchmaking system will try to keep teams balanced for the battles. This system will evolve over time, so it would do little good to attempt to describe how they plan to balance matches at this time.

There will be friend list and chat systems in the game at launch which people can use to communicate and join matches together if they wish. PGI had also previously announced that the game would not feature any kind of voice communication feature. They have since changed their stance on the subject, and have implemented the Vivox C3 voice solution.

Not all matches will necessarily be ranked. The devs are considering options for non-ranked matches, such as a practice server for players to test out tactics and mech builds.

Reports from folks at PGI, who play the game together frequently, are that it requires a balanced force of mechs to be successful. This game is not just an assault mech slugfest.

The border world contract system works like this:
1. The game will auto-generate contracts from different factions requesting merc corps to fight for control of a planet.
2. Interested merc corps will place a bid for the contract. This bid must meet a minimum (reserve) amount. These contract auctions will be silent, meaning that interested corps can see the number of bids made, but not the highest bid.
3. The highest bidder gets to contest control of the planet with the currently controlling merc corp. (Actually, I'm making an assumption that the currently controlling corp doesn't have to bid.) These two merc corps will then duke it out for control of the planet.
4. If a contract receives no bids that meet the reserve then the contract will expire without being filled.

In the future, merc corps that lack the personnel to properly fill a match will have the ability to sub-contract with other merc corps in order to get enough mechs onto the field.

Maps

There are currently four maps that we know about:
- Caustic Valley (desert)
- Frozen City (ice world)
- River City (urban)
- Forest Colony (forests and hills)

The dev team intends to release new maps over time, though the pace will be considerably slower than the pace at which new mechs are released due to the time required to design and build a working map.

For some matches, the map used will be random. For other match types you may be able to choose which map you play on.

During a Match

Company and lance command positions in a match are determined prior to the drop. By default, the players with the most experience will be automatically placed into command slots, but people can swap out if they choose. In the case of merc corps, lance and company command roles will often be determined ahead of time by the corp's leadership. If the company commander ejects or "dies" during a match one of the lance commanders will automatically be promoted to fill the position for the remainder of the battle. (It should be noted that there is some discrepancy amongst the devs on this topic. Some of them are saying there is no such thing as a company commander role that the game recognizes. I guess we shall see, neh?)

If your mech gets destroyed during a match you become a spectator to the match and can view it through the perspective of your remaining teammates. Players who disconnect during a match for any reason (intentional, accidental, or via lag) will not receive the rewards for completing the match.

A typical match takes about ten minutes, though as players get more experienced the matches tend to get longer because people become more cautious.

Some matches will include objectives that must be either defended or captured. In many cases there will be structures that an attacking force will need to destroy. We don't know what types of structures may be included or if any of them will have a game effect.

One final point of note here is that a lot of people have been very curious (concerned) about the pros and cons of shutting down your mech during a match, whether intentionally or unintentionally. This is a topic which has not been addressed by the devs other than to say that while shut down you will be virtually undetectable to enemy mechs (unless they're using a magnetometer, I suppose). However, shut down mechs are extremely vulnerable since they are virtually defenseless aside from their armor.

After the Match

We do not currently know much about what happens when a match is over, but there is one morsel to chew on, and that is salvage. I'll just come right out and say it: the concept of salvage is a non-starter in MWO. The folks at PGI felt that implementing salvage would be a game balance issue, and thus have opted not to go that route. Instead, players will receive a C-Bills payment after they complete a match. The better your performance in the match, the more cash you will take home at the end of it. C-Bills, of course, are used in the MechLab to purchase additional equipment, new chassis, etc.

Other Gameplay Notes

There will be a player ranking/ladder system. Private matches and leagues will not be supported at launch.

Your forum name will be your pilot name. (I feel bad for a few people.)

The game has friendly fire, so be careful not to shoot your lancemates! There will also be dynamic weather effects such as rain, fog, etc. Additionally, DFA is not only possible, it is encouraged. However, as one might expect, using a light mech to DFA an assault can have a less than desirable outcome.

The devs are working to balance legging to make it less of a problem, and report that so far it has not been much of an issue because it requires about the same amount of effort as simply aiming center mass and taking out the torso. Headshotting is quite difficult, apparently. Armor values have also been adjusted somewhat in order to balance the game and make both legging and headshots into more difficult methods of obtaining a kill.

For those readers unfamiliar with the concept of legging, it is the act of shooting out a mech's leg in order to make it fall down and go boom. In some previous MechWarrior games, a mech could be destroyed by simply taking out one leg. In single-player games this also resulted in a tremendous salvage boon in addition to a quick kill. The team at MWO has balanced legs so that they are somewhat more

difficult to destroy in the first place, but they have also made it so that mechs to not simply fall over when a leg is destroyed. Instead, the leg becomes a useless peg, severely limiting mobility.

BattleMechs

Available Mechs

All players, regardless of affiliation, will have access to the same mechs and equipment. Prices may vary between factions, however.

At launch there will be 10 different mechs available for play. Several other additional mechs beyond those first 10 have already been announced:

- Atlas *(confirmed for launch)*
- Awesome *(confirmed for launch)*
- Cataphract
- Catapult *(confirmed for launch)*
- Centurion *(confirmed for launch)*
- Cicada *(confirmed for launch)*
- Commando *(confirmed for launch)*
- Dragon *(confirmed for launch)*
- Flea
- Hunchback *(confirmed for launch)*
- JagerMech
- Jenner *(confirmed for launch)*
- Raven *(confirmed for launch)*
- Spider
- Stalker
- Trebuchet

The devs intend to add roughly one new mech per month between now and launch, and then increase that rate to two new mechs per month after launch. If you're hoping one of those new mechs will be a quad, you can forget about it. The physics of a quad mech are dramatically different from standard bipedal mechs, and the introduction of quad mechs would take away a lot from the continued introduction of new standard mechs.

The Unseen

A lot of people ask about the Unseen mechs and whether or not they will factor in the game. To put it simply, the answer is that they will not. The distribution rights to the visual representation of those mech designs (at least in the U.S.) are owned by a firm that seems to have absolutely zero interest in licensing them out to anyone. So there will be no Warhammers, Marauders, or any other Unseen mechs in MWO, even if they were later Reseen.

Modules

Every mech will be equipped with a module board that players can plug individual modules into in order to customize the capabilities of their mech. The module board concept is separate from the familiar crit slot and tonnage concepts. The number of module slots available varies depending on the type of mech.

Modules are unlocked on the Pilot Skill Tree (more on that later), and purchased in the in-game store using C-Bills. Any module will fit into any mech.

Here is an example module, *Enhanced Night Vision:*
Effect: Increases the detail of objects while in Night Vision Mode at the cost of reduced range. The module instantly takes effect and anytime the player switches to Night Vision, they will see more clearly, but not as far as the default Night Vision mode.
Cost: 4500 CB

There are a myriad of potential effects for modules, from enhancing the capabilities of AMS to duplicating the capability of C3 units, to increasing the number of LRMs that strike true on a successful hit. Obviously, there is some speculation here; these are just possibilities. The one thing we do know is that they are trying to avoid interfering too much with the canon abilities of a mech. There will also be modules that are specific to command functions. Some of these will be required in order to issue orders to teammates.

Modules from different trees (for an explanation of the trees, see Mech Leveling, below) can be mixed and matched in any combination the player likes within a mech. The only limitation on the modules you can use in a mech is the number of module slots that particular chassis has available to it. It should also be noted that modules are a piece of hardware, and can therefore only be installed on one mech at a time. So if you have your Enhanced Night Vision module plugged into your Catapult and you want to use it in your Hunchback, you will have to first take it out of the Catapult. It's not like you automatically get extra copies for each mech you own. If you get tired of swapping modules around all the time, buy extra copies of the ones you use most.

Mech Systems

Weapons

Weapon systems in MWO are effectively the same as in other MechWarrior or BattleTech games. Weapons fall into one of three categories: energy (lasers, PPCs, flamers), ballistic (Gauss rifles, machine guns, Autocannons), and missiles (LRMs, SRMs, artillery). All weapons except for lasers and PPCs require ammunition to fire. Narc Beacons, Artemis IV, and TAG will also be available.

Ammunition for your weapons must be replenished after each match and can be purchased using C-Bills. Lasers work a little differently in MWO. Continuous beam lasers will stay on and apply damage to the target over time. Pulse lasers will blink on and off in short bursts. This is different from past MechWarrior games, but makes the functionality and appearance of lasers a bit more realistic. It is also a game balancing issue to have them work that way.

Aiming could be a bit trickier in MWO than other games, as well. This is intentional and meant to represent the reality of the way a mech's arms and torso would move in relation to one another. Although the mech's torso will always strive to catch up to the position the arms are in (and the aiming reticule that goes with them), it will naturally lag behind a bit. This results in two separate aiming reticules: one for your arms and one for your torso. Additionally, the weapons themselves will adjust their aiming point based on the distance to the target within the reticule. The result here is that if you quickly shift your reticule from a nearby target to one that is farther away and then fire, you will likely miss because your weapons have not yet adjusted to the new range. This will almost certainly result in

some comical misses during combat (and some frustrating ones for people who haven't taken the time to understand this important aspect of the game). That said, there will be an indicator in the HUD to let players know the state of their weapon convergence.

Chain firing weapons will be available at launch. There will be no rear facing weapons in the game; all weapons will face the forward arc. Minimum and maximum ranges will not fully align with tabletop BattleTech. For example, Autocannon rounds won't just vanish into thin air when they reach their maximum range, but rather will keep going until they run out of kinetic energy to carry them forward. As a result, weapons will become less effective past their maximum ranges, but will not be magically useless past that range. The exception is missiles, which will automatically detonate when they reach their maximum range. Minimum range is a little different. Autocannons will still do normal damage below their minimum range, but LRMs will actually just bounce uselessly off the target below minimum range because the missiles have not yet armed.

All Inner Sphere weapons that were available in 3049 will be included in the game. No, I'm not going to list them all, but there is a link to the full list in the Appendix.

Other Critical Systems

As with any BattleTech-based game, your mech will have various internal systems in the critical slots. These can be damaged during battle with appropriate effects.

There are only four ways to destroy a mech:
- Destroy the head
- Destroy the center torso
- Destroy the engine
- Destroy both legs

The following equipment is expected to be available at launch:
- Standard & Endo Steel internal structure
- Standard & XL engines
- Jump jets
- Standard & double heat sinks
- Standard & Ferro-Fibrous armor
- CASE
- Artemis IV
- AMS
- Beagle Active Probe
- ECM
- Narc Beacon
- TAG

Piloting a Mech

Yeah… I'm not going to dive into the basic controls of piloting a mech. Anyone who has ever played a MechWarrior game before is already familiar with them. If you would like a refresher, feel free to read Dev Blog 5 (link found in the Appendix). Here's a screenshot of the HUD, though:

A lot of folks are concerned about what kind of devices they can use to control their mechs. Obviously, keyboard and mouse are the default inputs for control and will be fully supported. The team is also working on being able to support other devices like joysticks, pedals, and HOTAS.

There are a couple important things to note about driving a mech. One is that the speed of torso twist will vary from one mech to the next, with size being the biggest factor. Also, the more articulate a mech's arms are the greater the range of movement in the arms will be. The amount of articulation in a mech's arms is based largely on the descriptions of the mech in the original BattleTech game.

One of the most frequently asked questions on the MWO forums is, "Will there be a third-person POV?" The answer, put simply, is no. The only perspective available in the game is first-person, looking out through the windshield, as seen in the above screenshot.

Experience and Leveling

Loyalty and Rank

Players can join a Great House, join a merc corp, or remain unaffiliated (lone wolf). You cannot, however, be a member of a Great House and a merc corp at the same time. You get one or the other.

Loyalty Points (LP) determine how devoted you are to a particular faction (Great House). LP will decay over time if a player is inactive. Engaging in actions opposed to a particular faction will cost you LP with that faction.

The way LP are earned depends on your affiliation:
- Faction (House) Players – Earn LP by playing and winning matches. As LP accumulate you gain military rank. Gaining rank in a faction earns special privileges such as membership in special units, new skins, bonus C-Bills, bonus experience points, etc. Eventually, the ability for players to add custom faction units may be added. The highest ranking players may even influence which planets are targeted for conquest (and presumably defense).
- Merc Corp Players – Players who earn LP as a merc will see their points go to their corp. Once the corp has accumulated a certain amount of LP with a faction they will be able to engage in planetary combat on behalf of that faction. (However, every merc corp will start out with a minimum of LP with each faction that allows them to bid on small contracts.) LP will also determine the type and level of contract that a merc corp is permitted to bid on. These LP will also decay, which means that merc corps must remain active in order to retain the ability to bid on the types of contracts they are interested in with the various factions. Ranks within merc corps are determined and assigned by the merc corp's leader. Permissions can also be associated with each rank at the leader's discretion. It is also important to note that rank in a merc corp does not come with any special perks in the same way that faction rank does.
- Lone Wolf Players – These guys earn LP through participation in random matches. However, these LP will have zero game implications. Ranks are also not available to lone wolves. There is a plan to increase the role of lone wolves in the universe post-launch.

Players can switch their allegiance between factions, merc corps, or even lone wolf status. There will be a cost involved in doing so, however.

There will be a mechanism in the game to entice players to join less heavily populated factions. This could take the form of lower operating costs, C-Bill bonuses, or something else entirely.

Experience

Faction Leveling

This is what faction LP get you, provided you are affiliated with a Great House faction. Players automatically gain rank in their faction as LP are accumulated. These can decay over time if a player is inactive, though there will be a grace period before decay begins.

Players whose LP have begun to decay will not lose any House rank, though the privileges associated with said rank may drop off a little. As an example, let's say you have earned the rank of Captain with

5000 LP. You then take a nice vacation in Singapore for three weeks. During this vacation your LP with the faction drops to 3000, which would be less than what is required for the rank of Captain. As a result, your title now changes to Honorary Captain and you may lose a few of the benefits, like maybe you get a few less C-Bills per day. As soon as you get your LP back up to 5000 again (or whatever is required for Captain), the "Honorary" part drops off and your benefits return to normal for the rank of Captain.

Incidentally, rank does not equate to the ability to issue orders to other MechWarriors. To quote developer Paul Inouye, "Rank is purely a reward system for consistent and successful gameplay."

Pilot Leveling

Pilots gain general experience points (XP) for in-game actions, completion of objectives, and winning matches. These experience points can be used for purchasing Battlemech efficiencies, which are discussed later. XP does not decay.

Mech Leveling

You earn Mech XP (MXP) for some in-game actions and winning matches. These MXP are earned and stored on a per-chassis basis. MXP is then used to purchase new capabilities for that specific chassis in the form of Battlemech efficiencies. These also do not decay.

As players get into matches they begin to earn XP and MXP. After each match, the MXP earned is stored in the mech itself. This pool of MXP can be spent on something called BattleMech efficiencies. Essentially, these BattleMech efficiencies represent your pilot's increased familiarity and skill with that particular mech chassis. Each mech has its own custom tech tree, and you spend your MXP pool on the efficiencies within that mech's tech tree. General XP is also spent on BattleMech efficiencies, but can be used on any mech; it does not necessarily have to be used on the mech it was earned in. At each tier within the tech tree a pilot point is awarded. Pilot points are used to unlock modules in the store.

Each efficiency, or upgrade, on a tier must be purchased before you can access any of the efficiencies on the next tier. Once Tier 4 has been completed on variant A of a given

mech, the player will need to unlock Tiers 1 – 4 on variants B and C as well before the next tier can be purchased on variant A. The same occurs after the Elite I tier, and again after Tier 8. This pattern will vary somewhat for mechs that have more or less than three variants. Also note that this tree is just an example and is subject to change before MWO actually goes live.

Once a tier has been unlocked on a given variant, it stays unlocked, even if you get rid of the mech for some reason. For people who feel an overwhelming need to transfer MXP from one chassis to another, there will be an option to do so, though there will almost certainly be a penalty associated with the transaction.

Pilot Skills

Every time a tier is completed on a mech's tech tree the player earns one pilot point. Pilot points are spent to unlock modules in the in-game store. Once a module has been unlocked it can be purchased with C-Bills. Like BattleMech efficiencies, the pilot skill tree is set up as a hierarchy where earlier skill modules must be unlocked in order to access later modules. A player can unlock pilot skills from all three pilot skill trees, and can eventually unlock every skill in all three trees.

Again, be aware that these trees could change significantly before launch. This is just an example of what they might look like. Off-hand statements made by devs since this information was first released indicate that the skills from the Commander tree, for example, have been redistributed among the other trees in order to make room for a new support role. We don't know anything more about this new role, however. Descriptions of the previously proposed pilot skill modules have been provided as follows:

Scout Skills:

- Vision Mode 1 - Zoom Vision – Allows the pilot to zoom 7x
- HUD Detail 1 – Enemy Damage Level – Level of damage detail in terms of damage
- Ghost Signature – Increases length of time before a signal fades by 2% up to 3 times
- HUD Detail 2 – Enemy Component State – Overall component criticality
- Radar Range Increase – Increases radar range by 2% up to 5 times
- Null Signature System – Allows the pilot to appear shut down for 5 seconds
- Multi-Targeting – Allows the pilot to target multiple enemies up to 4 at a time
- IDF Accuracy – Narrows the AOE of IDF fire
- Critical Shot Indicator – Shares with nearby friendly BattleMechs the critical components of an enemy BattleMech

Assault/Defense Skills:

- Vision Mode – Night Vision – Allows the player to see in dark areas/night
- Charging – A special attack that allows the pilot to drive their BattleMech into an enemy BattleMech without sustaining too much damage
- Vision Mode – Thermal – Allows the pilot to see heat signatures through solid objects
- DFA Damage Reduction – Reduces the amount of damage caused by performing a Death From Above attack
- Vision Mode – Magnetometer – Allows the pilot to see metal through solid objects
- Power Up/Power Down Speed Increase – The power up and power down sequences are sped up by 20%
- AMS Range Increase – Increases the effective range of AMS by 2% up to 5 times
- Cognizance – Automatically lets the pilot know of any nearby friendly BattleMech taking fire
- Critical Shot Receiver – Allows the pilot to receive the critical shot information from nearby scout Mechs

Command Skills:

- Command View – Provides a layer of information over the BattleGrid including objectives and any intelligence information passed back by scout Mechs on the front line
- Order View – Allows the pilot to right click and request friendly BattleMechs to attack or defend areas/objectives on the BattleGrid
- Call Air Strike – Calls in an air strike that does AOE damage in a straight line
- Call UAV – Calls a UAV that passes overhead of the battlefield and relays ALL enemy positions to the command pilot
- Call Artillery – Calls in a land based artillery bombardment on to a target area
- Danger Close – A short range radar detection system that lets the command pilot know of any nearby enemy BattleMechs
- Call Satellite Sweep – Full detail information is passed to the command pilot including enemy location/direction/speed
- Call Predator Drone – Drops a heavy explosive device on a targeted area
- Call Naval Bombardment – Calls in Naval artillery bombardment that has a larger and more powerful result than regular artillery

Warfare in 3049

Information Warfare

Information warfare is about controlling the flow of information on the battlefield:
- Knowing where your enemy is
- Knowing the current status of your enemy
- Understanding your enemy's status
- Sharing information between units

At the core of this is the BattleGrid. Essentially, this is the map that appears in your mech's cockpit. It includes a top-down map showing objective and waypoint markers; unit markers for friendlies, enemies, and support units; and orders. Commanders will receive additional information via the BattleGrid and be able to issue orders through it.

Target information is based exclusively on Line of Sight/Detection (LOSD). Either you or a teammate (or a support unit) must be able to see or detect an enemy in order for you to have any information about it. If your team loses LOSD on the enemy mech, then the information you have on it will decay rapidly to the point that you lose all the information you have on that mech. The available information on a target is layered based on the type of modules you have installed in your mech.

There are several ways to get LOSD information on a target:
- Direct line of sight
- Radar
- Satellite scan – an orbital scan of the entire battlefield; efficient, but limited to top-down line of sight. It won't detect a mech hiding in a cave, for example.
- UAV – works like a satellite scan, but localized to a smaller area
- Detectors – little sensors dropped off around the battlefield by scout mechs
- Support units

As an additional benefit to team-based LOSD, team members that don't actually have line of sight to a target can still lock onto a target that someone else can see, and use indirect fire weapons against that target.

Each type of detection device can also have different modes of detection, including night vision, thermal vision (which works through obstacles), and magnetometer-assisted, which detects metal and metal density (this can be used to locate a shutdown mech hiding behind a building, for example). Some of these modes won't be available at launch.

Targeting an enemy mech is one of the best ways to get information about it. The longer you target a mech, the more information you will get. Obviously, the modules you have installed will have an impact on the type of information you get. This information is automatically shared with your team, though they may need to have certain modules equipped in order to be able to view it all.

Radar will have both active and passive modes. Naturally, passive mode will have a reduced range, but will also make you much harder to detect for the enemy. Much of your other communication and information warfare equipment will not function while the radar is in passive mode, however.

Of course, there are ways of countering all this whiz-bang detection tech. Types of ECM that will be available include:
- Spoofers – beacons that send out false target signatures
- Disruptors – to disrupt or block modes, communication, target acquisition, and target lock
- Surveillance – to intercept and decode enemy intel

Initially, ECM capabilities will be limited to methods of countering the opposition's detection and communication capabilities. Over time other capabilities may be added.

Role Warfare

The basic idea behind role warfare is that in any team-based combat game or military conflict there are four essential roles played by combat personnel. (Note that this does not include the no-less-essential roles played by non-combat support personnel.) These roles are as follows:
- Scouting – performing reconnaissance and gathering battlefield information to relay back to the main force
- Assault – tactical forward units whose job is to seek and destroy enemy targets
- Defense – holding ground against the opposition's assault forces and protecting those in need
- Command – Directing the actions of the friendly forces on the field

Before we dive into understanding how these roles are aggregated, let's spend a little time just defining the roles a little more clearly. These descriptions come straight from the Dev Blog.

Scout

Scouts are the main source of information on the battlefield. It is their utilization of information warfare that is the key to the success of a team. Scouts need to get to the front lines as soon as possible in order to gather information as fast as possible. They should utilize fast moving BattleMechs which allow them to do so and at the same time allow them the opportunity to escape should the need arise. Advanced scout players will need to use scout modules to enhance their abilities to detect enemies and relay information.

Defense/Assault

The defense and assault roles are very similar in their core gameplay. The only difference between the two is how they want to balance their skills and modules. There are numerous configurations that will prove to be beneficial to either role being played.

Defense may want to skew their attributes to heavier armor and friendly assistance modules, while the assault may want to skew their attributes to targeting and assistance modules. Both roles need to be combat effective in both long and short range abilities.

Command

Command players are a special breed that will need to be "situation aware" of everything happening on the battlefield at any given time. It is up to the command player to let all friendly units know of key operational changes in plans or actions to be played out while in combat. The command player is always at risk due to the nature of the role and their dependency on the BattleGrid to issue orders and distribute information. It is because of this, command players should be protected by other players on the same team. Movement co-ordination is the key to the survival of the command player by making sure the command player is never left alone.

It is important to note that radar/information sharing has a defined range. This means that a command player cannot simply stand at their original spawn location for the entirety of the match. They must keep moving in order to make sure all members of the team are within communications range. Something else we have learned about command players is that the command screen will fill most, if not all, of their HUD when it is open. This means that commanders will be easy targets for opponents and will require protection.

Role Aggregation

The aggregation of a pilot's role is based on a combination of the type of mech they choose to drive, the modules they use, and the player's own skill and tendencies. Some types of mechs are better suited for some roles than others. Light mechs, for example, are great for scouting, but less than ideal for assault or defense. Players should carefully consider the role they wish to play in a given match, and select the right combination of modules, weapons, equipment, and mech to be able to fill that role. A player driving a light mech with a mix of scout and command modules could fill a defense role, but they would not be as well suited for it as someone driving a heavy mech with mostly assault/defense modules.

Mech Lab

Customizing Your Mech

All of the following can be swapped or upgraded in your mech, within the MechLab:
- Weapons
- Armor
- Engines
- Heat Sinks
- Jump Jets
- ECM Gear
- Modules

Hardpoint System

Mechs have a series of hardpoints on their chassis that are used for storing weapons. Hardpoints are specific to a category of weapons, either energy, ballistic, or missile. Only weapons of the same type can be swapped into a given hardpoint. Of course, this assumes that you have both the space and tonnage available to support the weapon you would like to swap in.

For example, let's say you have a mech that is maxed out in terms of tonnage, and you've got a Large Laser in your mech's arm that you would like to switch out for something else. The arm also happens to have three energy weapon hardpoints in it, but the Large Laser only occupies one. A Large Laser also weighs five tons and takes up two crit spaces. If you want to switch out that laser it will have to be with another energy weapon (or weapons) that weighs five tons or less and takes up no more than two crit slots. Medium Lasers fit that bill; they take up one crit slot and one hardpoint each, and weigh only one ton. You could put two of them in there, and still have three tons left on the mech to use for other equipment. If you happen to have some empty crit slots available, perhaps some extra heat sinks (at one ton and one crit slot each) might be in order. Although non-weapon equipment doesn't require hardpoints, it still takes up weight and crit space.

Weapon hardpoints will only be found in places where the stock variant of the mech you are using has weapons. Example: the Hunchback HBK-4P has no weapons in the left torso. As a result, there would be no hardpoints in that location, so no weapons could ever be mounted there.

Critical Spaces, aka Crit Slots

I've mentioned crit slots several times throughout this primer, and while experienced tabletop BattleTech players understand exactly what those are, there are probably a lot of folks out there who are unfamiliar with the concept. For those of you who are familiar with how critical spaces work in BattleTech, you may want to skip ahead to the next section because in MWO they will work exactly like they do in BattleTech. The rest of you may want to forge ahead. This is a very important concept to understand, so I'm going to go into some detail here.

The purpose behind critical spaces is to provide a mechanism to account for the fact that the key functional components of a BattleMech take up space inside the body of the machine, and any time a mech's armor is penetrated and internal damage occurs there is a chance that one of those components

could get damaged, causing it to stop working. By key functional components I mean any component that provides important capabilities to the mech, such as the engine, computer system, arm and leg actuators, weapons, heat sinks, etc.

Every part of the mech's chassis contains a certain number of crit slots to account for these key functional components. The amount of stuff you can pack into any one part of the chassis is determined largely by how many crit slots you have available in that part of the mech. Some of your crit slots will automatically be taken up by basic components like the engine and gyros, but others will remain available for you to do with as you please.

A mech's arms will each have a total of 12 crit slots. The same is true of the right torso, center torso, and left torso. The legs and head, however, only have six critical slots each. As I mentioned earlier, a lot of these crit slots will already be taken up by the engine, gyros, actuators, heat sinks, and other critical systems like life support and your cockpit (because the pilot takes up some space, too). If one of these things gets hit by weapons fire that component generally stops working. The major exception is the engine, which takes up six crit slots in your center torso, and can absorb up to three hits before it quits working, although the first two hits will slow you down and cause heat buildup). Once all these mandatory components are in place you have some slots left over that are assigned to weapons, additional heat sinks, and other optional components that you may want to install. The following table gives you a quick rundown of what you can probably expect to have in terms of available crit slots:

Chassis Section	Available Crit Slots
Head	1
Center Torso	2
L/R Torso	12 each
L/R Arm	8-10 each
L/R Leg	2 each

The number of crit slots available in your arms can vary depending on how the arms are designed. Some mechs, like the JagerMech and Catapult, have arms that lack lower arm and wrist actuators (which means they are also not as agile), and so they have more available crit slots in the arms.

When you add new components to your mech you get to decide where on the chassis they will go, as long as you have available crit slots and tonnage capacity to handle the equipment. There are some restrictions based on the type of equipment (jump jets, for example, can only go in the legs or torso), but for the most part the choice is yours.

Armor

Armor works pretty much exactly like the tabletop game. You get 16 points of armor per ton, which you can distribute over the chassis as you see fit. Each location on the mech can only have a certain amount of armor, which varies by weight class. You will also be able to assign armor points to rear torso locations, unlike certain other MechWarrior video games.

It is also important to note that heads and legs have additional armor than what was allowed in the tabletop game as a way of balancing out legging and headshots.

Oooh, pretty colors!

Yes, you can choose the paint scheme for your mech. You will have primary, secondary, and tertiary color choices to make, as well as decals to choose. However, Players will not be able to import custom skins, decals, etc. at launch. This may become available later, but there are some serious copyright issues to consider.

If coloring your mech is too much dang work for you, there will also be a selection of skins available for people to choose from.

Other Components

New engines can be purchased in the MechLab. Putting a new engine in your mech will cause the mech's new top speed, crit slots, and weight to be refigured automatically.

Several other advanced components from the BattleTech universe will also be available to equip in your mech via the Mech Lab. Examples include Ferro-Fibrous armor, XL engines, Endo Steel internals, and double heat sinks. The placement of equipment within the mech will be limited according to tabletop rules. For example, jump jets will only be allowed on mech variants that normally have jump jets, and CASE can only be used in the torso.

You will also be able to set up weapon groupings in the Mech Lab rather than having to do it on the field of battle.

At some point in the future it will also be possible to purchase alternative ammunition types, such as Inferno rounds. It will never be possible to purchase coolant pods.

Damaged Mechs

Naturally, your mech is going to take some damage during a match. Sometimes it will get completely trashed. The good news is that no matter how much punishment your mech endures (including getting cored), you can always repair it. Yes, your mechanics are that good. There will always be a cost associated with repairing and rearming your mech, and this cost will increase with the amount of damage you've taken. As long as you pay for the repairs, you will be able to take your mech into the next battle at full strength.

Weapons that get destroyed in a match are not lost for good, either. They can also be repaired in the Mech Lab. Ammunition used during a match must be replenished, at a per-round cost. What this means is that if you only use two rounds of AC/10 ammo during a match, you will only need to buy two rounds of ammunition to replace what you've used rather than having to buy a full ton.

Appendix A: Acronym Glossary

AC: Autocannon

AMS: Anti-Missile System. A defensive system which shoots down incoming missiles as they approach the mech on which the system is installed. Provides some extra defense against SRM and LRM attacks.

AOE: Area of Effect

C3: The acronym itself stands for Command, Control, and Communications. However, in BattleTech terms it is the name of a computer system which aids this function by allowing mechs equipped with C3 computers to communicate additional information with one another.

CASE: Cellular Ammunition Storage Equipment. A storage compartment for ammunition that protects the mech in the advent of a direct hit on the ammunition. Without CASE an ammunition hit can be devastating to the mech.

DFA: Death From Above. An form of attack whereby one mech uses its jump jets to jump up and then land on top of another mech. Can be a devastating form of attack if the mech performing the attack is of a heavier weight class than the mech on the receiving end.

ECM: Electronic Countermeasures.

HOTAS: Hands on Throttle and Stick. Advanced game controllers that include a joystick for the right hand and a throttle for the left hand, and often additional bells and whistles.

HUD: Heads-up Display

IDF: Indirect Fire

LOSD: Line of Sight/Detection

LP: Loyalty Points. See the section titled "Loyalty and Rank" for a complete explanation.

LRM: Long Range Missiles

MWO: MechWarrior: Online

MXP: Mech Experience Points. See the section titled "Experience" for a complete explanation.

PGI: Piranha Games, Inc.

PPC: Particle Projection Cannon

SRM: Short Range Missiles

TAG: Target Acquisition Gear. Equipped in place of a weapon, this is a targeting laser that enables a MechWarrior to paint targets for attack by the Artemis IV artillery system.

UAV: Unmanned Aerial Vehicle

XP: Experience Points

Appendix B: System Requirements

Minimum System Requirements

CPU: Intel Core 2 Duo E6750 2.66 GHz *or* AMD Athlon II X2 245e
GPU: Nvidia GeForce 8800GT *or* AMD Radeon HD 5650
RAM: 4 GB
OS: Windows Vista
DirectX: DX9
HDD Space: 4 GB

Recommended System

CPU: Intel Core i3-2500 *or* AMD Athlon II X4 650
GPU: Nvidia GeForce GTX 285 *or* AMD Radeon HD 5830
RAM: 8 GB
OS: Windows 7 64-bit w/Service Pack 1
DirectX: DX9
HDD Space: 4 GB

Appendix C: Additional Reading

Specific to MWO

Dev Blog 5   Contains information about the piloting controls in MWO
Founders FAQ   Frequently Asked Questions about the Founders program
Ask the Devs 1   Has a list of the weapons available at launch in MWO
MWO Wiki   The un-official *MechWarrior: Online* wiki
MWO Primer Thread Discussion thread for this primer on the official MWO forums

BattleMech Components

AMS
Beagle Active Probe
CASE
Endo Steel
Ferro-Fibrous Armor
TAG
XL Engine

The World of BattleTech and MechWarrior

Inner Sphere   An introduction to the Inner Sphere with links to additional information
Great Houses   An introduction to the five Great Houses