# Mecheditor Suite Documentation

#### Overview

Mecheditor Suite is a collection of tools designed to make it easy to create and maintain a library of units for the Battletech Board game. Currently, there are two applications included.

**Mecheditor:** Using a simple GUI interface, Mecheditor allows you to create or modify Mechs, save them into a large and easily searched and maintained database of Mech designs, and print out any Mech sheets required for Battletech play.

**Scenario Editor:** The Scenario editor allows you to use Mechs created in the Mech Editor to create balanced (or unbalanced) scenarios. Scenario Editor makes it simple to compare Battle Values of two forces, including modifiers for Pilot Skill, different force sizes, and the presence of C3 units on either or both sides. The Scenario editor also simplifies printing of mech sheets, as well as "Initiative Cards" allowing for more streamlined initiative during games.

The Mecheditor suite was designed with two things in mind. First, it's expandable. There is already a "Force Editor" in development, allowing for tracking the units, pilots/crews, and stores for a mercenary or other unit. Other future programs within the Mecheditor suite will include editors for creating vehicles, battle armor, Protomechs, and Battletech: RPG characters.

Second, the Mecheditor Suite is designed for campaign play. It allows multiple different users to share a "Data Directory", allowing a group to share Mechs, prototype gear, forces, and scenarios.

Finally, Mecheditor Suite is a personal project of mine. The development team is one (me), plus two regular testers who are players in my classic Battletech campaign. If you find any issues, please let me know by sending email to jamez@iwptech.com. I'll try to answer any questions as quickly as possible, as well as get any bug fixes posted as quickly as possible. I'm also open to suggestions as to how to make Mecheditor Suite better.

This manual, for example, was quickly typed and almost completely devoid of Editorial work. If anything in here is confusing or misspelled, again let me know, and I'll fix it.

#### Installation:

Simple installation instructions are included either on the web site or on the distribution CD.

#### **Step 1: Install the Microsoft .NET Framework**

Mecheditor Suite is a Microsoft .NET application. .NET applications are similar to Java applications, in that they run within a Virtual Machine. The .NET framework also includes a set of libraries for handling a large number of basic common needs, such as writing .XML to disk, interacting with databases, etc.

The .Net framework is available, free of charge, from Microsoft in a number of different distributions. The one included in the CD is the "Full Version". The one included on the web site is the "Bootstrapper" version, which means that the file itself is quite small, but it will begin the installation process by downloading files from Microsoft. This is slower, but the initial download is quicker.

There is also a "Client Framework" available from Microsoft:

http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=8c ea6cd1-15bc-4664-b27d-8ceba808b28b

This should install a smaller version of the .NET framework. Mecheditor has been compiled to run on this smaller version of the .NET framework, but that is untested. Let me know if it doesn't work!

#### **Step 2: Install the Mecheditor Suite:**

Double click on Mecheditor\_Installer.msi, included either on the web site or on the distribution CD. This may pop up the standard "Do you trust this software" link. If you don't, stop reading now. :) It will also prompt you for a location to store Mecheditor suite, with the standard default in program files. It really doesn't matter where you put it. I can tell you that nothing funny is getting installed – just a set of three executables (one of which you don't directly need, but that gets called by the other two), and two .dll files (**d**ynamic link libraries). All of these need to be in the same directory.

#### Step 3: Run Mecheditor Suite for the first time

The first time you run Mecheditor Suite, it will prompt you for a location to use as a "Data Directory". Make sure you select a location on disk that you have write access to (on Vista, by default, that does not include anywhere in "Program Files"). A perfectly good location is in "My Documents".

One of the original design goals of Mecheditor Suite was to make it easy for me to share my Mech designs with players in my game. Because of that, I use Windows file sharing with my Mechdata directory, so all three of us can use the same Mech data directory. If you'd like more information on how that works, email me. The short form is that Mecheditor uses the Mechdata directory as a "Top Level" directory, and knows where to find everything within that.

#### Step 4: Install the 3039 MechPack

One of the first requirements of the Mecheditor Suite was that it was easy to distribute collections of Mechs. In this case, I've created the first MechPack, which

includes all of the Mech designs (including canonical variants) from the 3039 TRO, including Star League, new, and "Unseen" designs.

To install a MechPack, click on the "Mech Library" menu, and select "Install Mech Pack". That will bring up a file browse dialog, allowing you to select the MechPack file. This will install all of the Mechs and their graphics (which I'll explain later in the Mecheditor section).

Note that you'll be able to create your own MechPack, to share designs with your friends, and to make it easy for me to distribute other collections of Mechs (look for the 3050 MechPack soon!)

Note for Internet Explorer Users: I've found an interesting bug in Internet Explorer 7 (although I believe it exists in IE 6 as well). When IE downloads the mechpack from the web site, it seems to automatically rename it to "3039.zip". However, the "Install Mech Pack" file browser dialog will accept a 3039.zip if you type it in manually or change the file type filter to "All Files(\*.\*)".

# **MechEditor**

#### Mecheditor basic Functionality.

When you first start Mecheditor (after selecting a Data Directory) you should get a screen that looks like this:

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There are several major sections to the Mecheditor application. Along the top is the basic description of the mech. Name, Variant, Source, and Graphic. On the left is overview information: Size, Engine, Armor, and various other pieces of information about the Mech. In the center is the Critical hit charts, which also double as the interface for adding weapons and gear to the mech. On the right is the Gear list – a list of all gear that is currently available.

You will note that all of this information is in a single screen. This allows you to see your entire Mech design at once – making it simple to see the various trade-offs required in Mech design.

#### **Interface Elements:**

**Name/Variant**: These are the name and variant of the Mech design. If you've gotten this far, you've seen hundreds of them.

**Source**: This is just another field, allowing for easy search in the Mech Library (covered below). For example, the 3039 MechPack has "3039" for every mech.

**Graphic**: Mecheditor allows the association of a graphic file with every mech. This can be a bitmap (.bmp), a Jpeg (.jpg), a .png file, or pretty much any other image file type. The Mecheditor Suite organizes graphics into a "Graphics Library" which makes browsing easy (More on this below). The "Browse" button allows you to browse the Graphics library and import new graphics into your graphics library.

**Battle Value (BV):** The current Battle Value of your design is displayed here. Clicking on the number (in blue and underlined), will bring up the Battle Value Summary dialog, which looks like this:

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Every blue underlined link brings up more information as to how each number is calculated. The is as much for debugging purposes as anything else, but if you see a Battle Value and don't understand why adding that piece of gear had the effect it did on Battle Value, the Summary will let you know.

The Battle Value Summary dialog also has controls to allow you to see how pilot skill will affect the Battle Value.

Battle Values are calculated using the TechManual Battle Value system (often referred to as "BV2"). If you find a Battle Value that you believe to be erroneous, email me!

#### Cost:

Like Battle Value, the Cost link will bring up a Summary dialog with more information about the Cost of the Mech, in C-Bills. As of the writing of this documentation, the cost calculations are highly suspect (they seem to agree with the description of how to calculate Cost in the Tech Manual, but with none of the results anyone else gets). Again, the Summary should help see where the numbers come from.

#### **Chassis:**

The Chassis Section covers basic Mech Chassis features, such as Tonnage (in 5 ton increments from 20 to 100 tons), a checkbox for Quad Mechs, and checkboxes for Endo Steel Structure, MASC, and TSM. Below this is the Remaining Weight, in tons. If this value is above zero, this number will be highlighted in yellow, if below zero (meaning an invalid Mech design), this number will be highlighted in red.

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Medium Laser	Left Torso	1	1	
mall Laser	Right Torso	0.5	1	
mall Laser	Left Torso	0.5	1	
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RM 6 Ammo	Right Torso	1	1	
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Machine Gun	Left Torso	0.5	1	
Nachine Gun Ammo	Center Torso	1	1	
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Clicking on "Remaining Weight" will bring up the "Tonnage Details" dialog:

This will make it clear where all of the weight in your design has gone!

#### **Engine and Control:**

This set of controls gives more information about your mech. First is Engine Type. This includes the standard engine types, including Standard Fusion, Compact, XL, and Light engines for the Inner Sphere, and Standard and XL for Clan. Next to the Engine Type is the Engine Rating. Below the Engine Type is the Mech Speed (walk/Run). Modifying either the Engine rating or the Speed controls will affect the other, so if you want to know how big an engine you need to make your 70 ton mech move 4/6, set the speed to 4/6 (the control affects Walk speed – run speed is automatically calculated). If you want to know how fast your mech will go with a 300 engine, set the rating and see how the speed is affected.

Jump speed is set here as well. Note that adding Jump speed will add Jump Jets gear to the Critical Locations charts on the right. Jump Jets are added by default to the side torsos, but can be dragged wherever you want them (more on that below). Note that Jump speed is limited to walk speed. (Later versions will include "Improved Jump Jets". However, Version 1.0 of the Mecheditor Suite is limited to equipment in the Tech Manual)

Gyro Types (including Compact and Heavy Duty) are included here, as well as Small Cockpits.

Next is "Heat Sinks". This includes Type (single or double), and the number. Mecheditor Suite will automatically calculate weight and critical slots required for heat sinks not included in the engine. Again, Heat Sinks may be placed in the critical charts in the center. Once there, they can be moved around the mech.

Below this are Weapon Heat and Heat Sinks. Note that Weapon Heat is listed as per the Tech Manual calculations for Battle Value. This means that Streak Missiles count as Half, One Shot weapons count for a quarter, Ultra Autocannons count double, etc.

A note on Criticals: Criticals that can be hit (Heat Sinks, Jump Jets, etc) can be moved. Criticals that are re-rolls (Endo Steel, Ferro-Fibrous armor, etc) cannot be. Re-Roll crits are listed in Grey. If you wish to add equipment to a location that's currently filled with re-rollable crits such as Endo Steel, just drag the equipment there, and the Endo-steel will move out of the way! If there's nowhere for it to go, an error will be generated letting you know your Mech design is invalid.

#### Armor:

Below the Chassis and Engine control groups is the Armor section. This includes the Type of armor (Standard, Ferro-Fibrous, Light FF, and Heavy FF), the weight (in half ton increments), and the points by location. Three buttons are included to make your life easier: **Auto Allocate**, which automatically allocates the armor to the various locations, **Clear Armor**, which reverts every location to zero, and **Max Armor**, which automatically sets the armor for every location on the Mech to the highest possible value.

#### **Critical Hit Locations:**

In the center of the display is a set of lists that should look eerily like a Mech sheet. Each location has a list of either 6 or 12 critical hit locations. Every location that's filled with equipment will have text in black, while every location that's empty will have "Open Slot" in grey.

Right Clicking on a critical slot will bring up a context menu with several options, depending on the location and the gear. For example, right clicking on an arm will allow you to see and then add or remove the Lower Arm and Hand actuators for that arm. Right clicking on a weapon will allow you to add ammo (if available), make the weapon rear

firing, add additional copies of that weapon, or split that weapon across multiple locations (again, if available).

Most gear can be moved. To move a weapon or piece of equipment, simply drag it to the location you with to move it to.

#### Gear List:

Finally, on the right of the interface, there is a Gear List. This consists of a set of filters for Tech Base, Gear Type (Weapon, Equipment), Weapon Category (if Weapon is the selected Gear Type), and a Find Box. The list of gear will then be filtered for the values in those filters, including the text in the find box.

Each row of the Gear list lists a single piece of Gear, its type, how many Tons it weighs (Given the current weight and equipment on the Mech), and how many Critical spaces it will take. If you hover over a piece of gear with the mouse pointer, you will get a popup display with more information about the gear, such as weapon ranges and Battle Value.

To add a piece of Gear to a Mech, simply click and drag it from the Gear List to the critical list for the location you wish to place it. Once you release the mouse button, the item will get added to the Mech in that location. Once there, you can move the item to other locations if you wish.

#### **Error Display:**

When there is some construction error in a Mech, such as a piece of equipment that doesn't fit in a location, or more gear than the chassis can support, a list of construction errors will appear below the Armor section on the left, like this:

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#### **Mech Editor Example:**

Let's walk through a simple Mech Creation Scenario, that should show the use of most of the Mecheditor's basic features. We'll start by creating a new Mech called a "Warhammer" (strange name for a Mech, I know!)

We'll begin by hitting the "New Mech" button in the toolbar (it looks like a blank piece of paper, all the way on the left). This will clear all of our controls. Next, we'll enter "Warhammer" in the Name textbox, "WHM-6R" in the Variant TextBox, and "3039" in the Source TextBox.

To begin, we'll use an existing Mech Graphic, so simply pull the Graphic box down to "Warhammer". (I'll get into Graphic Browsing and importing later).

Next we select "Inner Sphere" in the Tech Pulldown, and we click the up arrow next to Tonnage until we get to 70. We'll leave Quad, Endo Steel, MASC, and TSM unchecked.

Since a Warhammer moves 4/6, we'll click the Up arrow next to Speed until we see 4/6. We could also select 280 from the Engine Rating box, but this is much quicker. We'll leave the Gyro as Standard, and the Small Cockpit checkbox unchecked.

A Standard Warhammer has 18 heat sinks, so we'll click the up arrow next to the Heat Sinks until we reach 18. (It won't let us select fewer than 10 or more than 30). You will note that as we do this, heat sinks will begin appearing in our critical locations. By default, Mech Editor will place Heat Sinks first in the feet, then in the head, and then in the side torsos. You will note that two of the heat sinks wind up in the Left Torso, but we'd actually like to put a Heat Sink in either Arm. To move a Heat sink, simply click on it, and with the mouse button still down, drag it to an arm. Once you're in the arm list, release the mouse button, and you'll see your Heat Sink move.

Next, we'll add Armor. Warhammers have 10 tons of armor, so let's click the Up arrow to the right of the Tons label until we get to 10. (We could also type "10.0" in the text box). Then we'll click "Auto Allocate" and watch the various location text boxes fill up. To make a proper Warhammer, we'll need to change some of the values. For example, the arms on a Warhammer have 20 points of armor, not 16. So highlight the text next to "Left Arm" under "Armor Factor", and type in 20. You'll notice that the "Points Remaining" text turns red to indicate that you've applied more armor than you should, and the error text at the bottom has appeared with "Too many armor points allocated".

I'll leave fixing the rest of the armor as an Exercise for the reader.

Next we need to add Gear. However, one thing you may notice is that Warhammers don't have hand actuators, so we need to remove those. First off, right click on the row labeled "Hand Actuator" in the Left arm. This will bring up a context menu with two elements, each with a checkbox next to it. Click on the row for "Hand Actuator" in the context menu, and it will become unchecked, and the hand actuator will be removed. Repeat for the right arm. Of course, a Warhammer wouldn't really be a Warhammer without the PPCs in either arm, so let's add them. If you scroll the Gear list down a bit, you'll find PPC. If you mouse hover over that you'll see its stats (heat, damage, range, etc.) Click on it, and drag it, releasing the mouse button when you get to the Left Arm list. You'll see the PPC's three critical slots get allocated, the Remaining Weight change, as well as the Battle Value and Cost. Repeat this with the PPC for the right arm.

Next, the 6R has an SRM-6 in the Right Torso. Instead of Searching for the SRM, let's use the Gear List filters. Next to "Gear Type" pull down to "Weapon". This will cause the "Weapon Category" filter to appear. Pull that down to "Missile" to see the list of missiles. Alternatively, revert "Gear Type" to "All", and in the text box next to "Find:" type "SRM". Select the SRM-6 and drag it to the right torso.

Of course, SRMs need ammo as well. To add Ammo to a weapon, right click on it to get the context menu. This gives us a set of options, including "Add Ammo: SRM-6 Ammo". Select that, and a single ton of SRM 6 ammo will be added below the weapon. If we wanted to move that ammo, we could drag it to any other location with room. There are other options as well, which I'll describe later, in "**Weapon Options**".

At this point, you've seen all that you need to see to complete your Warhammer. Add a Medium Laser, Small Laser, and Machine gun to each torso, plus a ton of Machine Gun ammo to the center torso, and you're done. In the File Menu, select "Print...", pick a printer, and see the results of your work.

#### **Mecheditor Options**

There are obviously many more options not covered above, so this section will go into detail for all of the MechEditor menu options.

### File Menu:

In the File Menu you'll find typical File Menu options, such as Save, Load, Print, etc. In order:

**Open:** This will prompt you for a mech file, which is a file with the extension ".mech". MechEditor automatically adds this extension to files it saves.

**Save:** This will save the mech you're currently working on. If the Mech has already been saved, or was opened from a file, this will save over that file. If not, you will be prompted for a filename to save to, as with the "Save As" option.

**Save As:** This will prompt you for a filename, regardless of whether or not the file has already been saved, and save your mech under that file. If you select a file that already exists, it will prompt you to overwrite it.

**Print...:** This will bring up the Windows print dialog, with a list of available printers and printing options. There are too many different versions of this dialog for me to go into details, but if you simply select your printer and hit Print, you'll get a sheet suitable for play. The Mech Sheets are similar to the Total Warfare style sheet, but with a few notable differences.

**Print Preview:** This will bring up a dialog showing you what you'll get if you print the sheet.

Preferences: This brings up the Mecheditor Preferences dialog:

💀 Preferences	;	
Data Directory:	ames\Battletech Campaign\3039 MechPack	Browse
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	ОК	Cancel

There are really only two preferences to set here. The first is the Data directory that you picked when you initially started MechEditor. You can select a different data directory here if you'd like. If that directory doesn't exist, Mecheditor will create it.

Administrator Mode is set by default. If you uncheck Administrator mode, certain options will be turned off, such as the ability to create new gear, or add Mechs to the Mech Library. This is most useful if you're sharing a data directory with multiple players, such as a GM and players in a campaign.

**Recent Files:** The next (up to) 4 elements are "Recent Files". Selecting one of these will open a recently viewed mech file.

**Exit:** Er, this exits MechEditor. If you've made changes to your mech (As shown by an Asterisk next to the Mecheditor title in the title bar), it will prompt you to save first.

### **View Menu:**

Tech Readout... This brings up a Tech Readout style display of the Mech.

## Mech Library:

**Show Mech Library:** The Mech library is a collection of Mechs that you have stored in your data directory, indexed by Battle Value, tonnage, name, etc. This is a better way to organize your Mechs that by storing them in files. The Mech Library looks something like this:

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Name Contains:		Varian Contai	t ns:		E Ter Ba	ch se:	Weight Class:		~	Source Book:	×
Name	Variant	Source	T	Tech	BV	Cost	Weapons	Heat	Armor	Speed	<u>^</u>
Archer	ARC-2K	3039	70	Inner Sphere	1356	3481866	2xLRM15,2xLL	26/12	81	4/6/0	
Archer	ARC-2R	3039	70	Inner Sphere	1477	3607866	4xML,2xLRM20	24/10	95	4/6/0	
Archer	ARC-2S	3039	70	Inner Sphere	1393	3577866	4xML,2xLRM15,2xSRM4	28/10	95	4/6/0	
Archer	ARC-2W	3039	70	Inner Sphere	1338	3617866	2xML,2xLRM20,2xSRM4	24/10	73	4/6/0	
Assassin	ASN-101	3039	40	Inner Sphere	757	2453616	ML,3xSL,SRM2,LRM5	10/10	46	7/11/5	
Assassin	ASN-21	3039	40	Inner Sphere	749	2616866	ML,SRM2,LRM5	7/10	52	7/11/7	
Atlas	AS7-D	3039	100	Inner Sphere	1932	4666000	4xML,AC20,LRM20,SRM6	29/20	99	3/5/0	
Awesome	AWS-8Q	3039	80	Inner Sphere	1605	3633650	3xPPC,SL	31/28	97	3/5/0	
Awesome	AWS-8R	3039	80	Inner Sphere	1470	3483650	SL,LL,2xLRM15	19/28	97	3/5/0	
Awesome	AWS-8T	3039	80	Inner Sphere	1593	3573650	SL,2xLL,2xLRM15	27/23	97	3/5/0	
Awesome	AWS-8V	3039	80	Inner Sphere	1510	3508650	SL,LRM15,PPC,LL	24/28	97	3/5/0	
Banshee	BNC-3E	3039	95	Inner Sphere	1422	4845116	SL,AC5,PPC	12/16	81	4/6/0	
Banshee	BNC-3M	3039	95	Inner Sphere	1595	5000116	SL,2xPPC,2xML	27/16	81	4/6/0	
Banshee	BNC-3Q	3039	95	Inner Sphere	1394	4812116	SLAC20	8/12	81	4/6/0	
Banshee	BNC-3S	3039	95	Inner Sphere	1751	4472100	2xSL,2xPPC,AC10,SRM6,4xML	41/21	81	3/5/0	
Battlemaster	BLR-1D	3039	85	Inner Sphere	1522	4368266	2xMG,4xML,PPC	22/24	94	4/6/0	
Battlemaster	BLR-1G	3039	85	Inner Sphere	1519	4506266	2xMG,6xML,PPC,SRM6	32/18	88	4/6/0	
Battlemaster	BLR-1S	3039	85	Inner Sphere	1507	4365266	4xML,LRM15,LRM5,2xSRM2	23/20	88	4/6/0	
Black Knight	BL-7-KNT	3039	75	Inner Sphere	1443	3738250	4xML,PPC,2xLL,SL	39/20	76	4/6/0	
Black Knight	BL-7-KNT-L	3039	75	Inner Sphere	1409	3642250	4xML.3xLL.SL	37/22	76	4/6/0	<b></b>
Refresh List	)	Del	ete	)					Load	Mech	Close

Along the top is a set of filters, much like the filters in the Gear editor. If the field is blank, no filtering happens, if it has a value, only those Mechs that meet that criteria will appear.

Clicking on a column label will sort all of the visible Mechs by the values in that column. Double clicking on a mech will bring it up in the MechEditor, as will selecting a row and clicking "Load Mech".

Selecting a mech and clicking "Delete" will delete that Mech.

Hitting the "Refresh List" button will go over every mech in the data directory and refresh its statistics, including the weapons list, cost and battle value, etc. The main reason you'll want to do this is if there are bug fixes to some calculation, as these values are unlikely to change without editing the mech. Be warned: This can take some time, since it has to read in every mech and recalculate everything, so be patient!

Hitting Close will close the Mech Library. Note that the Mech Library is a *Modeless* dialog, which means that you can switch back to Mecheditor and keep working. So if you have a big enough screen, you can leave the Library window open, double click on a Mech, print it out, and then double click on another mech.

Add Mech to Library: This will add the mech currently being edited to the Mech Library. If there is already a Mech there matching name and Variant, it will prompt you to overwrite. It will also prompt you if the Source and Graphics fields are empty.

**Create Mech Pack...** This will bring up a dialog with a list of all of the Mechs currently in your Mech Library, like this:

🔜 Create Mech Package			
Name	Variant	Source	<u>~</u>
📃 Flea	FLE-15	3039	
📃 Flea	FLE-4	3039	
🔲 Hornet	HNT-151	3039	
🔲 Hornet	HNT-152	3039	
Locust	LCT-1E	3039	
Locust	LCT-1M	3039	
Locust	LCT-1S	3039	
Locust	LCT-1V	3039	
Mercury	MCY-98	3039	
Stinger	STG-3G	3039	
Stinger	STG-3R	3039	
🔲 Thorn	THE-S	3039	
🔲 Thorn	THE-T	3039	
📃 Wasp	WSP-1A	3039	~
	0.000 4D	0000	
Check All			OK Cancel

Simply click on the Mechs you want to add to the Mech Package and hit "OK". Selecting "Check All" will add every mech in your library to the package. Once you hit OK, it will pop up a Save File Dialog. Then after a few seconds, it will create your Mech Package, which is a fairly large binary file including all of the Mechs, plus their graphics.

**Install Mech Pack:** This allows you to install a Mech pack that someone else created. If you select this, it will bring up a File Open dialog, allowing you to browse to a Mech Pack file (such as one you might download from iwptech.com). This will install all of the Mechs in your Mech Library, as well as the graphics needed for them.

### Gear:

**Edit Custom Gear:** This will bring up a dialog allowing you to create custom gear. This can be used either in a campaign where you're exposing your players to new technologies, or if you really want to use some weapon from the Tactical Operations manual that I haven't entered yet.

Selecting this option brings up the "Custom Gear File List" dialog:

Cı	stom Gear File List	
	Gear List Load Order: <built in=""> geardata.xml</built>	Move Up Move Down
		Create Import Remove Reset
	ОК	Cancel

Each listing in this dialog is a set of custom gear. The order is important! Later files will supersede earlier ones. This allows you to replace versions of gear with new versions. For example, if you wanted to playtest an environment where Large Lasers weighed 8 tons and generated 4 heat, you could replace the Large Laser statistics.

To create a new Custom Gear List, Click "Create…". Give it a name, click OK, and your new (blank) gear list will appear in the list. Double click on it, and the "Edit Gear List" dialog will appear:



To add a new weapon, click "Add Weapon…". This will bring up the "Add Weapon" Dialog:

Edit Weapon					
Name Providence Short Name Tech Level Inner Sphere V Wecht Cris O Fixed 0 O Tried 0 O Variable Edt O Variable Edt Bartie Value: 0 Detensive?	Wespon Category Heat 0 Rapid Fee: 1 2 Explosive 1 Dane Shot Versi Danage Type: F	All Range Minimum 0 Medium Short 0 Long Can Split Location Can use on is Available One Shot BV ixed	0 0 Astemis IV	Anno Type:	
Coat: 0	Damage: U			Add Ammo. Delete Ammo	Carcel

This allows you to edit the Weapon's statistics, as follows:

Name: This is the name of the item, and what will appear in the Mech Sheet.

Short Name: This is what appears in the Weapons list in the Mech Library.

**Tech Level:** Clan or Inner Sphere. It is possible to have versions of weapons or gear with the same name and different Tech Bases.

**Weight:** This is the number of tons (in .25 ton increments). If you select "Fixed", then the weapon weighs the same regardless of the mech that it's placed in. If you click the "Variable" radio button, and then click the "Edit" button, it will bring up the "Variable Weight" dialog:

🖶 Variable Edit 📃 🗖 🔀									
Select Gear Weight by Mech Weight									
Mech	Gear:	Mech	Gear:						
20	E .	65	0						
25	0	70	0						
30	0	75	0						
35	0	80	0						
40	0	85	0						
45	0	90	0						
50	0	95	0						
55	0	100	0						
60	0								
OK Cancel									

This allows you to enter how much the gear will weigh based on the weight of the mech it's placed on (for example, Hatchets or Jump Jets). Entering a value in a box automatically enters that value for all boxes below it, making it easier to fill in the whole chart.

**Space:** This is the same as weight, except that everything has to have a whole number for the number of critical spaces it occupies.

**Battle Value:** This is the basic Battle Value for the gear, which may get modified for heat, etc.

**Defensive:** This checkbox indicates that a given piece of gear should count towards defensive battle value (such as ECM or Anti-Infantry Pods)

**Cost:** In C-Bills of the gear.

Weapon Category: Energy, Ballistic, etc.

**Heat:** The amount of heat generated by the gear. This affects Battle Value calculation, and is displayed on the Mech Sheet.

**Rapid File:** This is the number of shots that can be fired at once. Ultra Autocannons are 2, Rotary cannons are 6, etc.

**Range:** This is the various range brackets.

**Explosive:** This indicates that the Weapon explodes when hit (such as Gauss Rifles), and will affect defensive Battle Value.

**Can Split Location:** This allows the weapon to be split across multiple locations, like the AC-20.

**Can Use Artemis IV:** If this is selected, then the Artemis IV option will be available for the weapon in the weapon context menu in the mech editor, allowing the user to add Artemis IV to that weapon.

**One Shot Version is Available:** If this is selected, then the "One Shot" option will be available in the weapon context menu. It will also enable the "One Shot BV" text box, allowing you to enter the value of the single shot version.

Damage Type: There are four types:

- **Fixed:** This is a fixed amount of damage (The standard). There is one box, allowing you to select the amount of damage the weapon does.
- **Missile:** This allows you to specify the damage each missile does, the "Cluster Size", and the number of missiles fired in a single volley.
- Variable by range: This allows you to specify the damage done at each range bracked (short, medium, long), such as the Heavy Gauss Rifle.
- **Melee:** This allows you to specify the damage done as a function of the mech tonnage. This allows you to specify a divisor and a constant additive. For example, the Sword would look something like this:

Damage Type:	Melee	*
Melee: Tons	:/ 10 + 1	
🕑 BV based o	on damage 1.725	]

This is because the sword does damage equal to mech tonnage divided by 10 plus 1. This also allows you to specify that the weapon battle value is a function of how much damage it does, times a multiplier. For example, a Sword on a 60 ton mech, which does 7 points of damage when it hits, is worth 12 BV. (7 \* 1.725 = 12.075)

Ammo Types: This is a list of available ammo for that weapon. Clicking "Add Ammo" brings up the "Add Ammo" dialog:

Edit Amr	no		
Name:	LB 10-X AC Ammo		🔲 Half Ton
Shots:	10	Battle Value:	19
🗹 Exp	losive		
		ОК	Cancel

This allows you to specify a name for the ammo, whether it weighs a half ton (for Machine Gun and some industrial weapons), how many shots it has for that weight (so a half ton of Machine Gun Ammo has 100 shots, a full ton has 200), the Battle Value for that lot of Ammo, and whether or not it explodes when hit (this is checked by default, as most ammo explodes when hit, but there are certainly exceptions, such as Gauss Rifle ammo). Whether or not ammo is explosive also effects defensive Battle Value.

- **Edit Equipment:** Editing equipment is pretty much a simpler version than editing weapons. Weight and Size are still variable, but there are obviously many fewer fields, since equipment doesn't have ammo, or ranges, etc.
- Import Gear List: Back in the "Custom Gear File List" dialog, below "Create" is "Import". This allows you to import a gear file created by someone else. This will also allow me to distribute simple add-ons to the MechEditor when new source books come out.
- **Remove:** This removes a custom gear list. It will no longer appear in the gear list in the mech editor.
- **Reset:** This resets the gear lists to the default set, which is simply the gear built into the Mecheditor. It does not actually delete any of the gear lists from disk, so they can still be imported if necessary.

### Help:

About Mech Editor Suite: This brings up the About Dialog, including the Version, and the list of changes in the various versions leading up to this one.

## Weapon Context Menu:

This isn't a toolbar menu per se, but the menu that appears when right clicking on a weapon in the mech. Depending on the type of weapon, several of these options may or may not appear.

- **Rear Firing:** (Checkbox): Denotes whether or not this weapon fires to the rear of the mech.
- Add Ammo: <Ammo Type> There will be one element per ammo type available for that weapon. For example, LB-10X Autocannons list "LB-10X Ammo" and "LB-10X Cluster Ammo". Machine Guns list "Machine Gun Ammo" and "Machine Gun Ammo (1/2 ton)" Selecting this will add the selected ammo to the mech. If there

is no room available in that location, a dialog will appear allowing you to select a different location.

- Artemis IV (Checkbox): For weapons with Artemis IV enabled (LRMs, SRMs, MMLs) This allows you to select whether or not the weapon has an Artemis Fire Control System attached. If this is checked, then the Artemis weight and critical slots are automatically added.
- **One Shot (Checkbox):** For One-Shot weapons, this automatically adds half a ton (as per the one-shot rules) and marks the weapon as a Single shot variant.
- Add Additional: This adds a duplicate weapon to the same location. This saves you dragging six medium lasers over to the right torso on a Hunchback 4P, and makes the mech sheet easier to read, as the weapon section will read "6 Medium Lasers" as opposed to six rows of "Medium Laser".

**Remove (All):** This removes the Weapon altogether.

Remove One: If you have added additional Weapons, this removes one of them.

**Split:** For weapons that can be split between multiple locations, this brings up the "Split Weapon" dialog:



This allows you to select a secondary location, and a number of crits to place there. To "Unsplit" a weapon, select "None" as the secondary location.

# **Graphics Library**

Mecheditor and Scenario Editor share a library of Graphics (Images) to be used with Mechs, Pilots, vehicles, and other objects. To select a graphic for a mech (or other unit) simply select it from the Graphic pulldown at the top of the Mech Editor. If you'd like to browse through the available graphics, press the "Browse…" Button to the right of the graphics pulldown. This brings up the Browse Graphics dialog:



This allows you to view the graphics already loaded. You can rename a graphic by clicking on it when it is already selected (as you would with a file in Windows Explorer). If you select an image and click "OK", or double click on an image, that image will be selected for your mech (and will appear in the "Graphic" pulldown).

To add Images to the Graphics library, click the "Import…" Button, bringing up the "Import Graphic" Dialog:

Import Graphic File	
Category: Mechs Name: Phoenix Warhammer File: F:\Games\Battletech Campaign\Graphics\ Browse	Preview:

This allows you to give the image a name, and browse for a file that will be imported into the graphics library, plus a preview of the image that will appear. Again note that this file is imported into the library, so it will have no affect on the original file. MechEditor currently supports Bitmap and Jpeg files. Other file types have not been tested, but at least .png files should work as well.

# **Scenario Editor**

When you first start up the Scenario Editor, you'll get an interface that looks something like this:



The Scenario editor allows you to create a scenario with two forces. Each force has a name (defaults to "Top" and "Bottom") and a collection of units. To the right is an overview, with a Size Multiplier and Total BV based on the relative sizes of the units (as per the Tech Manual Force creation rules).

On the left of the interface is the Mech Library, broken down by Mech chassis. To add a Mech to either the top force or the bottom force, expand the Mech Chassis (for example, "Warhammer"), and click and drag the variant you want to either list. Adding a mech will then update the lists. This will show you the mech BV, pilot skill, etc. To Edit a Mech that's been loaded into a scenario, right click on it to bring up a context menu. You have three options: Edit Mech, Edit Pilot, and Remove.

**Edit Mech:** This brings up the Mech Editor, allowing you to make changes to the Mech. Don't worry, if you click "OK" here it will not modify the mech in the Library, only in the scenario.

Edit Pilot: This brings up the "Edit Pilot" dialog:

🔜 Edit Pilo	t			
Name:				
Piloting: 5	*	Gunnery:	4	
Graphic:			*	Browse
		C	ОК	Cancel

This allows you to select a name for the pilot, and his Pilot and Gunnery Skills. It also allows you to select a graphic for the pilot, with a separate Graphic Library for Pilots exactly like the one for Mechs.

#### Adding Mech Files and other units:

Above each list is a set of buttons for adding units not in the Mech Library. The first button, immediately to the right of the Unit Name text, is the "Add Mech File" button. This will load a mech file into the Scenario. Again, modifications made to the Mech in the Scenario will not affect the original mech file.

To the right of that button is the "Add Generic Unit" Button. Clicking on this will allow you to add a unit other than Mechs. This will bring up the "Edit Generic Unit" dialog:

💀 Edit Generic Unit
⊂ Unit
Name: New Unit
Tonnage: 0 BV: 0
Speed:
C3: None 🔽 TAG
Graphic: Browse
Pilot/Crew
Name:
Pilot/Driving Skill: 5 🗢
Gunnery Skill: 4 🗢
OK Cancel

This is useful, for example, if you want to add a Vehicle or Battle Armor to a Scenario, and I haven't written a Vehicle Editor yet. This has the following options: **Name:** The name of the Unit.

**Tonnage:** Total weight of the unit.

**Battle Value:** This is the basic value of the unit. This will be modified by skill and other things.

**Speed:** The speed of the unit. This is simply a text field.

C3: This allows you to select whether or not the Unit has C3, and the type. (Master,

Slave, Improved), which affects how a C3 network can be created.

**Tag:** If the unit has Tag. This can affect force battle value.

**Graphic:** Like Pilots, this is a whole separate category of graphics, allowing you to use an image for your Schrek PPC carriers or Longinus Battle Armor Squads.

**Pilot/Crew:** This is pretty much like the "Edit Pilot" section for Mechs, allowing you to put a good (or bad) crew in your vehicle.

#### Menu Options:

#### File Menu:

New: Resets the Scenario to a blank one.

**Open:** Allows you to open a Scenario from a saved file.

**Save:** Saves the current Scenario as a file. Prompts for a filename if you haven't already provided one.

Save As: Prompts you for a filename, and saves the Scenario to that file.

**Reset Library:** This reloads the Mech Library on the left. This is useful if you discover that your library doesn't have a mech you'd like to include in your scenario, and you want to fire up Mech Editor to add it. Once you're done in Mech Editor, come back to Scenario Editor, and select "Reset Library", and your new mech will appear.

**Print Overview:** This prints an overview of the scenario, including each side and the units that will appear.

**Preview Overview:** This shows what will happen if you print the overview. **Print Sheets:** This will first pop up a "Print Unit" dialog:



This gives you the option to select the Mech Sheets that you'd like to print for the Scenario. Note that Generic Units cannot be printed, and it will be up to you to photocopy or fill out blank sheets for those. Checking a unit will cause it to get printed, and if you check the checkbox next to "Top" or "Bottom", it will check all units within it. Once you hit OK from here, it will bring up the standard Print dialog, and once you've selected a printer and hit "OK", it will print your mech sheets.

**Print/Preview Initiative Cards:** Scenario Editor can create "Initiative Cards", giving an overview of each unit, including Speed, a picture, and the Name. These can be used with nonstandard initiative systems, or to indicate that a unit has moved/shot/etc. These initiative cards can be printed on Card Stock, or on Sticker-Sock, which can then be cut out and stuck onto the fronts of unused Magic (Or Battletech TCG) cards. Initiative cards look something like this:



**Recent Files:** This is a list of the most recently opened scenarios.

**Exit:** Closes Scenario Editor. Prompts you to save if there have been changes made to the Scenario since it was last saved.