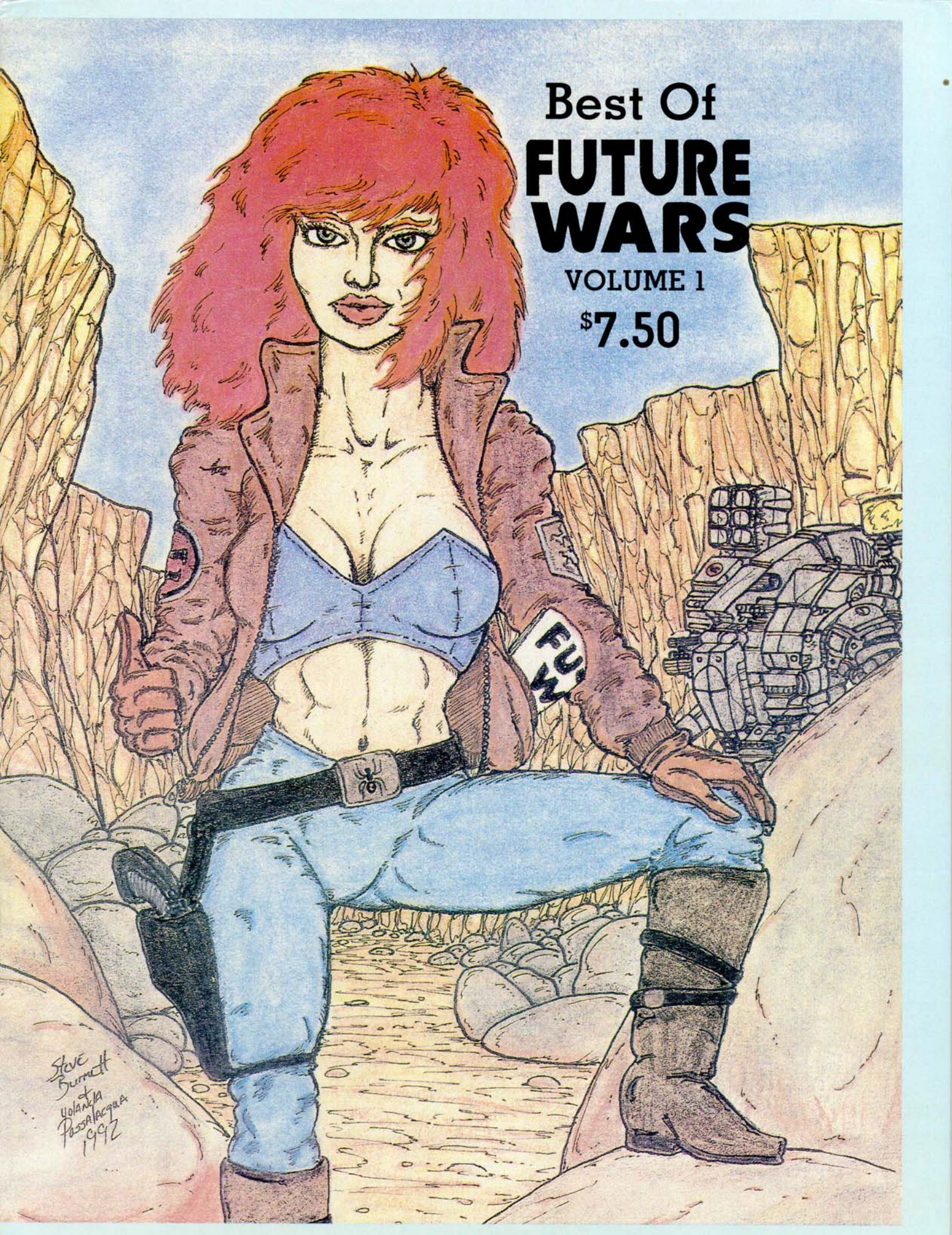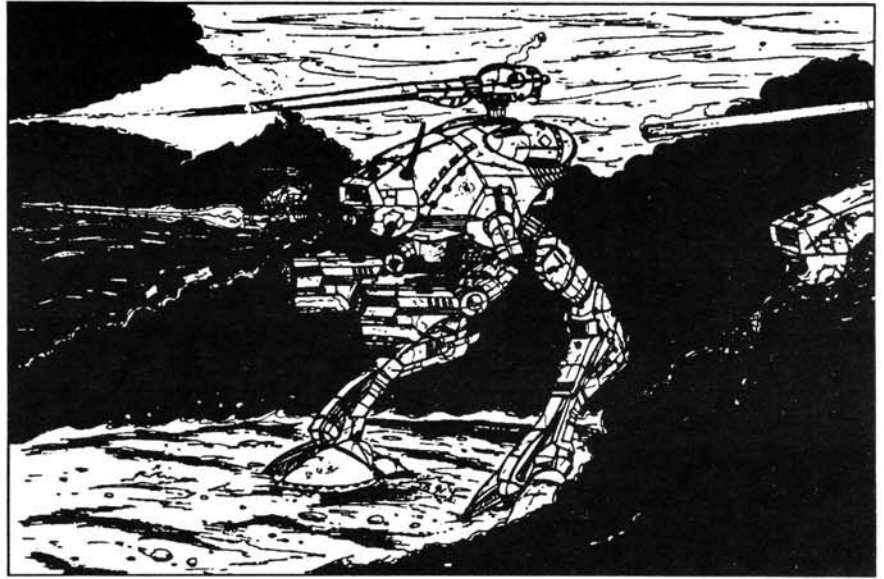# Best Of
FUTURE WARS

VOLUME 1
$7.50

Welcome to
The Best of
FUTURE WARS
Volume One

What you hold in your hands is over three years of work. Future Wars started out as a small time fanzine, that grew and grew and grew, until it became a magazine. Future Wars was not an overnight success, but it has grown on a very steady basis. Each issue sold more then the last. Over the years I have had requests for back issues of this 'zine, well it is not worth my time to print the old issues. But each and every issue had somthing that made it worthwhile. Best of Future Wars #1 covers the articles that appeared in this 'zine from #1 to #18, three years worth of things. It covers only the articles as other Best of Future Wars will contain Mechs and vehicles, real mechs, and tactics.

The articles in this issue contain a lot of game related materials that you will be able to use in your game if you want to. The rules are not sanctioned by FASA. In fact none of this is cleared by FASA, but if you like what you read.... You will find what you read highly entertaining and very useful. That is what Future Wars has always been about good useful and useable information. In fact the readers of Future Wars write most of what appears in the issues.

The Best of... is a good clean up issue from what really appeared, and the artwork is all new. Steve Burnett and Paul Pelfrey are the main people behind this issue and without them this would not have appeared. I know that they had other people help them as well. They got to me in July of '91 to get them the material for the Best of. That was the real hard part right? I finally did get that to them and what you see is what they have done. They have put this together, they have gotten a team of people to help them, and they have gone out and got this done. I'm really proud of what they have done.

But it has been people like these that have allowed Future Wars to grow, Bill Hall, Phil Deluca, and many many others, people that have submitted art, Greg Tancer, Jackie Southerland, Owen Barents, and Steve have all meant a lot to this magazine. Certainly everything isn't the best, but there have been improvements with each and every issue, and that I can be proud of and so can you the reader. Thanks to everyone out there that has read Future Wars. If this is your first issue then I hope you like this and I hope you will start to read and contribute to Future Wars on an ongoing basis. After all Future Wars is only what you the reader make of it and so far you have done well, and there are better things coming in the future.

Till then I'll see you in the Future Wars ....

The Fast Devils:
## A BattleTech Story
by
Michael Reese

PROLOGUE
GENERAL SITUATION:

Your jumpship came out in this system with only minor damage. You were prepared to correct your bad jump when your comm officer notified you of radio noise in the system. Monitoring of the unknown communications indicated the third planet of the system had civilization, and possibly loot. Your approach with your 4 dropships, the Leopard class *Devils Curse*, your 2 Union class dropships *Devils Apple* and *Devils Cure*, and the Seeker class *Devils Promise* was undetected. Analysis of the communications indicated that the civilization is high indeed with no evidence of space travel. A priority target was found on the west coast of one of the major continents.

Aerofighters struck hard and fast, destroying all airfields within 200 miles of your target, and attacking any aircraft in the air in that area. The *Devils Curse* is poised to drop and pick up loot, the *Devils Apple* will preform the pickup. The *Devils Cure* is performing high cover and acting as a mother ship for the fighters. The *Devils Promise* is attacking the other side of the planet to draw off ground defenses. It went in 3 hours ago.

Lt. B stuck his head out of the commanders hatch. Nothing. Thick fog rolled across the german landscape, blocking visibility and limiting the speed of his support company. Only the two tanks to the rear and the one to the front were visible. This would complicate things.

Ahead, the arm of the Leopard II commander went up in signal. Leopard II number 10 mover up as the Lt. repeated the signal, and then added
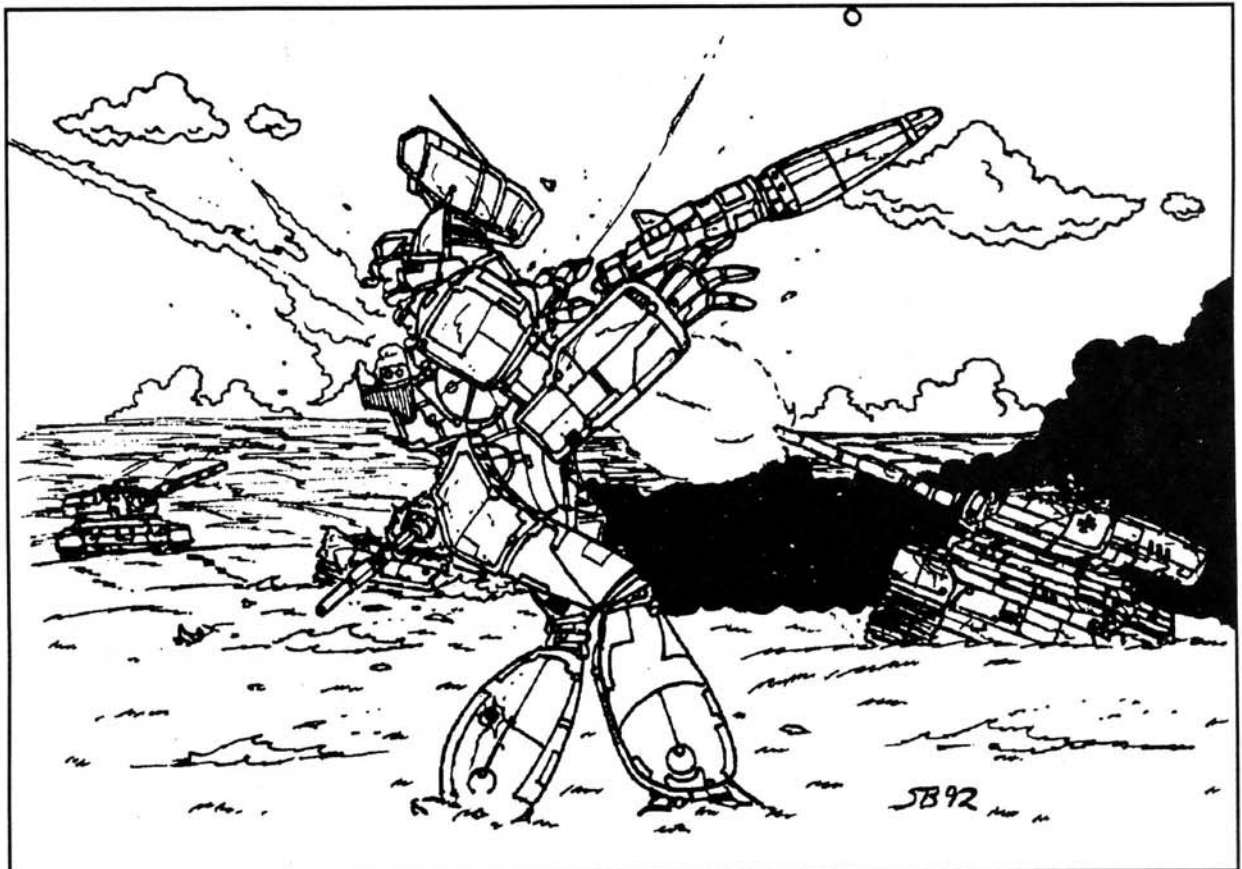
one of his own. It was time. The company had reached the plain to the west of the village Herdt, its objective. Ahead was the unknown. NATO command had reported an unidentified air intruder approaching from the east. It had been fired at by NATO AA missile batteries. It wasn't soviet though. His battalion commander had been informed the soviet had fired at it also. His orders were to consider it hostile. His company was to meet a US cav troop at Herdt, and then move north to where the target had dropped off NATO radar. He would do so. Lt. B repeated the hand signal, then ordered his driver forward. First platoon's 5 leopards moved into a line to the left, second platoon moved to the right. The HQ moved up the center. His infantry platoon was far to the left to secure that flank, and his supporting platoon of Jaguar I's were on the right flank. The tanks crawled forward, speed limited by the fog. The gunners and tank commanders peered into their thermal sights. What was ahead?

Captain R was also peering ahead into the fog. He had 2 cav vehicles, bulky M3's moving ahead on the road. His vehicles were grinding uphill on the east approach to Herdt. There he would meet a german reconnaissance force and proceed north. Mission, locate a UFO which the Air Force had knocked down there. And unfriendly UFO. "Damn fog!"

Company commander E watched his recon lance as it entered the edges of town. He could see the Stinger and Locust moving up the road, supported to the left by the lance Phoenix Hawk command mech, and to the right by the lances other Locust. The companys medium lance was guarding the *Devils Promise*. He hoped the Colonel was happy. "Draw the natives attention" he had said. He had surely done that. Missiles had come up from the planet like a flock of birds. The Dropship was down, and nowhere near their objective. Well, he'd raise some attention

here then.

Infantry! Commander E looked through his thermals. His Stinger was weaving and dodging like mad, and firing its laser. It looked like he was stomping somthing. Some kind of LAW or Inferno. He had better move the command lance up. "Command Lance, on me. Advance to town."

The radio hissed. "111 to 101. I can see giant robots moving in Herdt. They are being engaged by landswehr. Over."

Lt. B thought "Robots?" This was different. "101 to 111 and all units. Continue forward. All units engage upon contact. Out." The fog misted countryside glared for several seconds, as 120mm SABOT rounds flashed towards their targets.

"We are under attack. Tanks to the right flank are engaging us. I am hit." Commander E looked at his readout. The Locust on that flank had taken damage. It was moving towards the stream and firing back with its laser. He looked at the situation map. The infantry had been scattered. The other Locust was across the bridge. His Stinger held the crossroads. The first of his 3 infantry APC's had reached the town and his infantry were being deployed. The recon lances command unit was off to the left, Out of the action. It was watching the high ground across the stream. He would move to support that Phoenix Hawk, where he could cover his units rear, and where he could direct the battle. His own lance would attack and wipe out the tanks.

"11 to 31. Hold your position. 13, take command of the remainder of the mechs less 34. Attack the tanks to the right and wipe them out. 34, support the infantry in searching the town. Over." the reply came quickly.

"13. Wilco, out."

"31 to 11. I'm moving into position. No contact. Out." The company moved like a well trained drill machine. The Shadowhawk and Phoenix Hawk from the command lance turned and moved

towards the river, backed up by the Marauder. The commander moved his Battlemaster past 34, which with the infantry was searching the buildings.

Fire speared through the fog. A leopards armor flared; And then the vehicle exploded in a flash of light. Another went up. The tanks continued to advance, firing as they moved. They hit what they were firing at. Sabot rounds struck mech armor, flared, and were thru. Systems stopped working. Weapons quit. The Locust went to ground behind a building to escape the fire. The Shadowhawk and Phoenix Hawk dropped into the stream, to both cool off and use it as a covered approach. They plodded forward thru the water, their energy weapons and autocannon engaging the tanks.

"13 to 11. They're too far away. Must be close to 1000 meters. We cant hit them and they seem to be having no trouble against us at all. 33 is down with bad damage. I've lost my autocannon. We've also spotted 2 vehicles to the left. Orders?"

"13 this is 11. Close with them. Get in there and kill them. These are barbarians. They have no mechs. They're just tanks. Get them! 31, this is 11. Keep on your toes. They are probably on the high ground and will come pouring down those hills any second. Out." The Battlemaster and the Phoenix Hawk watched the hills, as did the Stinger back in the town. The town was empty, evacuated.

"Ready, on my command. Engage!" Captain R ordered his Abrams tanks to firing position. He had lost 2 M3's on the road to laser fire. He wasnt going to repeat that mistake. His tanks and other M3's had ground up the reverse slope of the hill and moved to turret down positions on the hilltop. Peering down the hill thru his thermal goggles he could see 3 sources of heat to his front. Giant man shaped sources of heat. He waited until all of his vehicles were in position. He gave the order and his Abrams smoothly moved into hull

down positions and fired. The 10 Abrams target? The largest whatever it was in the town below them.

Captain E's ears hurt. His mech shook to the impact of 105mm Sabot rounds. 12 hits! His damage board glowed red. All right and left torso weapons were gone. Where were the enemy? Gun flashes on the ridge. Impossible. It was at least 750 meters away. Well out of effective range. Wham! Another salvo came in. A laser answered back. 31 was lying in the stream, supporting his laser arm and firing. A hit! One tank went up. Captain E's mech dropped down, out of sight. 31 fired again. The tanks fired back.

"Lt., second platoon is gone. We are withdrawing to the woods. We cant stop them. Over."

"Roger, 113. We will cover you. 411 come in. Your Vehicles are to cover our withdrawl. We will then cover yours. Over."

"411 to 101. Wilco." The leopards pulled back. Only 4 remained of the 11 they had started with. The giant figures to their front continued to close, but slowly. Missiles from the infantry to the left reached out, but diddnt seem to be effecting the advance. Only the 120mm guns seemed to cause the creatures to stop.

"11, this is 13. Weston's hurt bad. His Marauder is badly damaged. 14 has moved back to assist you. My mech is still in pretty good shape but the rest are hurting bad. Orders? Over."

"13, this is 11. Roger. Hold your position. Get 14 back here as fast as you can. Out. *Devils Promise*, this is Capt. E. Over."

"*Devils Promise*, over."

"DP, get us out. the company is hurting. Load third lance and pick us up. You understand? Out."

"*Devils Promise* here. This is Captain D. Roger 11. We will be at your position in 30 minutes. Hold on. We will jam as we come in. Withdraw to the ramps as soon as they drop. Over."

"This is Captain E. Roger. I understand. Out."

Laser fire lanced through the fog. So did missles. One of the 8 wheeled alien APC's exploded from a hit by a HOT missle. Another went up from a 105mm Sabot round. The Leopards continued to withdraw, firing as they went. The mech let them.

"36, this is 6. Prepare to attack down the hill, across the stream, and into the left side of town. I want your scout teams in there with LAW's and explosives. Get in behind those buildings and see if you can force them out into the open. Understood? Over."

"6, this is 36. Roger. Captain there's another coming up. Gunner, prepare to fire."

A Shadowhawk moved towards the hill, stepping around the buildings in the town. 4 Abrams turrets turned and fired. The Shadowhawk dropped out of sight.

"Yahhhhhh!" A yell came over the commo as 34's jump jets came to life. The Stinger flew up the hill and landed next to a solitary tank firing from the crest. A fist swung and pounded the turret hatch. Laser fire lanced at the tank, and missed.

The Abrams gun spoke again. 2 tanks on the other hill engaged the Stinger. Armor flew from the Stinger. Seconds later, the mechwarrior ejected just before his Stinger blew up.

Captain E looked to the left. Laser fire had stopped from 21. The Phoenix Hawk lay in the river, It's weapon still pointing up the hill. 3 holes were visible in the back of the head. Heat leaked from the holes.

"All units, this is 11. Fall back to the bridges and across. Defend the streamline. Our pickup is on the way in. The *Promise* will be jamming to interfere with pursuit. All units, this is 11. Fall back."

Captain R's radio filled with static. Jamming. A roar could be heard overhead. He pulled his CVC off so he could hear better. The roar filled the sky, then moved across the town and down. "Captain, a spaceship is landing across the river!" his gunner shouted over the intercom. Captain R pulled his CVC back on.

"Gunner, Spaceship, Sabot, Battlesights."
"Up."
"Identified."
"FIRE!"

ORDERS OF BATTLE.

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German   Arrived turn 2
HQ: 1xLeopard II (101)
1st Plt: 5xLeopard II (111-115)
2nd Plt: 5xLeopard II (121-125)
3rd Plt: 4xM113 w/ 3x infantry
team each (131-134)
4th Plt: 4x Jaguar I (attached)
(411-414)


USA Arrived turn 6
HQ: 2 M1 Abrams (6 and 61)
1st Plt: 4 M1 Abrams (16,12,13,14)
2nd Plt: 4 M1 Abrams (26,22,23,24)
3rd Plt: 4 M3 Bradley
(36,32,33,34)
4th Plt: 4 M3 Bradley
(46,42,43,44)
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You Know What Drives Me Crazy...?

Those Annoying Nonsense Rules
by
H. Barents

We all know that Battletech has gone through many changes; first there was Battledroids, then the name change, and, welllll.... you get the idea. The point being (no, not the one on top of my head) is that there is always at least one rule that makes even the most laid-back player foam at the mouth. First on the list...

It was at Mich Con XVI that someone pointed out the infamous armor to internal ratio that makes no sense. As stated, no part of a mech may have more two armor points per internal structure point. Now, there is some question whether we're talking 8 areas or 11 areas to divide into, but the problem is that a head on a mech has 3 IS, and no matter how I try (must be new math) I cannot figure out how they keep coming up with a armor point rating of 9 for every single mech! Granted, it is an exception, but why only here?

Alright, bear with me; I designed a couple of 100 ton mechs using the standard game diagrams. According to the rules, you have 62 AP on the torso, 42 for the left and right torso (each), 34 for the arms, and 42 for the legs. However the diagrams showed 64 for the center torso, 44 for the right/left torso, and I'm sorry, but there seems to be a problem here. Okay, maybe I'm nit-picking, but it seems that a little attention to detail (read: proofread) could save alot of aggravation for those who take the rules seriously.

Another point: heat sinks. The maximum number of heat sinks allowed by the rules is 30. Period. But at the same time, designing a mech is simply a matter of fulfilling a single requirement; not exceeding the total tonnage allotted for the mech. It seems to me that if I want a mech with more than 30 heat sinks and I don't exceed the tonnage, I should be able to.

Jump jets. Now you've done it. You got me started. Why can't you have a jump-only mech? The jump is limited by the rules to the pace of the walk. Sorry, that doesn't make a whole lot of sense to me. If you've got the room, why can't you stick a few more jump jets on the mech and get a longer jump. I built one (100 tons) that walks 2, runs 3, and jumps 4; it has 8 tons of jump jets on it, it had better be able to jump! But the rules say that this is an illegal mech. Oh the shame!

What am I to do? I'll tell you what I'm going to do. I'm going to keep on building 'illegal' mechs, that's what. Because the FASA police are not going to bust down my door and haul me away for malicous meching, no, the guys at FASA spent a lot of time and effort putting out Battletech and these things happen. The point is, these are GUIDELINES! They are not the gospel, and they are not engraved in stone, but they are there to give you a framework within which to play. Don't worry about 'illegal' mechs if we're talking about a fraction of a ton or an armor point or two; the whole idea is to have fun! If the mech you design is acceptable to those who you game with, fine. If not, either build one that makes them happy or find someone else who'll accept it. If the rules make you crazy, change the rules! It's only a game. Let me know how you feel on that score, that's what FW is here for; we're a FAN magazine. Till next time...▲

Dropship Construction

by
Mark Stock

Dropships And Jumpships (1619) by FASA is one of my favorite supplements for the Battletech game, containing a staggering amount of information concerning the medium of interstellar travel. Like most everyone, a through reading of the book produced a number of design changes that I implemented for my game, and yet I found myself thinking that there was a few fine points that could stand a bit of expansion and/or addition. So came about the article you're now reading. Essentially, the process I have come up with is a bit more complicated than the one found in the supplement, which at best could be said to be a bit spare, with no definite statistics involved. The construction process as I envision it is as follows;

1. Determine tonnage.

2. Determine thrust and overthrust ratings.

3. Determine drive tonnage as: dropship tonnage/(15/thrust).

4. Determine S.I. rating and tonnage as: (S.I. * dropship weight)/100.

5. Determine thrust points per ton by looking in DS/JS under a ship of equal type and tonnage. Use this same process for consumption in tons burned/day.

6. Determine fuel tonnage.

7. Determine bridge tonnage. First determine the number of crew members (ref. DS/JS). Second, the bridge can weigh 1-10 times as much as the total number of crew members depending on bridge complexity.

8. Determine the number of heat sinks included with the engine by dividing the engine weight by the following ratio; small engines 10 to 12, medium engines 13 to 16, and large engines 17 to 25.

9. Determine armor points per ton (ref. DS/JS).

10. Determine armor tonnage and allocate it. Note that aerodynes use different locations than spheroids.

11. Determine weapons, ammo, location, and optional fire factors.

12. Determine cargo, components, passengers, and other elements:

   a. Battlemech cubicles, aerospace fighter cubicles, and small craft bays at the rate of 150 tons per.

   b. Mech and fighter doors weigh 5 tons, as do cargo doors.

   c. Heavy vehicles are 100 tons. Light vehicles are 50.

   d. The weight for passengers and infantry is not only body weight, but also includes waste processing, food prep, and gear storage. Regular passengers 5 tons, first class is 10 tons, regular infantry is 2 tons, jump infantry 3 tons, motorized infantry 3 tons and crew members are 5 tons.

   e. Cargo (self explanatory).

13. Fill out record sheet.

I hope that this will add to your game; it did to mine.▲

ELLENA INDUSTRIES INC. Point Defense System (EII PDS)

by
Mike Reese

EII is located in the UR system near TIKONOV. It has a major facility located on a plateu in the mountains, and in orbit above the planet. EII is one of the few facilities still capable of manufacturing jumpships. It regularily manufactures dropships and preforms repairs on dropships and jumpships.

EII is now expanding into Mech equipment and ground vehicles. One of the new items of equipment, still in experimental stage, is the EII Missle Point Defense System. The PDS as it is known is connecter to a EII Mark 52 or later fire control system. One system is known to have been placed on a Marauder II in place of the AC 5.

The PDS weighs 2 tons, whish includes .5 tons of ammo. It occupies 2 critical hit locations, one for the weapon and one for the .5 ton of ammo. It consists of an electrically driven gatling MG (15mm), radar system, and fire control. The fire control is connected to the mechs fire control. The Mechs sensor suite, throught its fire control system, provides targeting information on incoming missles to the PDS fire control. The PDS fires its MG at the incoming missles, using its own radar system to track the outgoing rounds. The system then moves the MG to make the outgoing rounds occupy the same space as the incoming missles, resulting in the destruction of the incoming missles.

Due to the high rate of fire the damage factor for the PDS is 4. Ammo is half that of a normal MG as the weapon fires twice as fast. The built in .5 ton of ammo gives it 50 bursts. An additional ton (100 bursts) can be incorporated into the mech/vehicle in a seperate magazine. Each burst is used against one enemies incoming LRM/SRM fire. IE if the enemy fires two SRM 6's and gets a total of 7 hits, then the PDS uses up one burst to defend against the 7 missles.

Range is normal for an MG, with a maximum range of 3. The PDS works as follows:

Heat	Damage	Min RNG		
0	4	-		
Short	Med	Long	Tons	Shot/Ton
1	2	3	2	100

When an SRM or LRM fire is declared against a mech equipped with an EII PDS, the attacked Mech player declares he is firing the PDS. The attacker determines the number of SRM and/or LRM hits on the defending Mech (or vehicle if equipped with a PDS). The defender rolls one die 6 against SRM and one die 6 plus one against LRM fire. The number rolled (+1 for LRM) is the number of missles that would hit that are shot down. For example, if 5 SRM and 3 LRM hit the defending Mech, the Mech with the PDS would roll a D6 for the SRM. If a 4 is rolled 4 missles were shot down and one missle hits. If a 5 were rolled for the LRM then 6 missles would be shot down and none of the 3 LRM's hit. Two units of ammo were used up. The PDS can be used against ALL missle fire in the same turn. One unit of ammo is used against each salvo of missles.▲

The Development of the VHE Shell

by
Chris Congdon

In 3040, Hanse Davion, realizing the potential of the newly rediscovered Gauss Rifle, commissioned an extensive research mandate with the NAIS to develop a more powerful round then the standard nickel-ferrous compound in use. After several months, a preliminary report was presented to the Prince upon the new VHE, or Very High Explosive, shell. Basically, the VHE shell is a shaped charge consisting of a armor-piercing head and a hollow body with a good deal of HE packed into it. However, the shell has its' drawbacks, namely, the volitile nature of its' charge and the wieght, which in turn shortened the range and number of rounds that could be carried. Despite this, the damage inflicted, when compared to the standard round, was devastating, and, in the opinion of the designers (and the Prince as well), more than made up for its' deficiences.

Ironically enough, the Cappellans were also examining the possibilities of the Gauss Rifle as well, headed by the renowned Dr Xhiao Zing. Dr Zing was considering the developement of a multi-purpose round for use by both mechs and other arms, finally directing his considerable talents toward the construction of a inferno-type round. While almost identical to the VHE round, the Laio varient uses a soft lead alloy as a casing, and the head of the shell is much like a hollow point round. A thin white phosporus core runs the length of the shell interior, which is packed with a napalm compound, and acts as the igniter for the fuel load when the shell impacts its' target, exposing the core to the air.

Extensive field tests were conducted by both sides, and as the following transcripts show, could herald the introduction of a truely lethal variation of the Gauss round onto the war-torn battlefields of the Successor States...

The Davion field test pitted a CES-3R Caeser against a trio of WVR-6R Wolverines on remotes. The pilot of the Caeser fired first, putting a VHE round into the center of the Wolverines' torso and following up with paired medium pulse lasers. The new round worked better than anyone had expected, piercing the torso armor like tissue paper. The lasers, meeting no resistance, shredded the Wolverines' gyro and fusion engine casing in a matter of seconds; the Wolverine disappeared in a boiling cloud of light as the reactor exploded and consumed the hapless mech. Engaging the second Wolverine, the Caeser brought the rear torso into its' sights and fired the Gauss rifle again. The round tore into the Wolverines' back with a vengence, detonating the fuel in the rear-mounted jump jet and piercing the armor as the warhead exploded. Flame leaped and swirled about the stricken mech as secondary explosions racked its' frame, one particularly violent one expelling the smoking, twisted hunk of metal that had been its' gyro but moments before out the gaping hole in its' back. The Caeser followed once again with a twin laser assault, which, though it failed to detonate the fusion engine, nevertheless reduced the Wolverine to a smoking, immobile hulk. The third Wolverine, seeing its' companions go down in a matter of seconds, fell back to bring its' AC 5 into play at an advantageous range. The two mechs exchanged fire for several minutes without doing any serious damage, and then the Caeser took its' shot. The Wolverines' torso armor and its' autocannon shattered under two well-placed shots. As yet, the Wolverine was still functional, and it jumped, playing its' last card with a death from above at-

tack. It seemed, however, that the Caesers' pilot could do no wrong this day, and with a third and final shot, sheared the Wolverines' head from its' body in mid-air; the mech struck the earth moments later and leaped back towards the sky as a ball of golden fire.

The Laio field test was different in several respects, not the least of which was the use of live pilots in all the mechs, at full power. A GOL-3M Goliath was refitted with a Gauss rifle and the new inferno rounds, while the opposition was a full lance of SHD-2H Shadowhawks in standard configuration. The test began with the whole lance jumping in an effort to maximize their maneuverability; the Goliaths' pilot opened fire immediately, scoring a hit on the head of one of the Shadowhawks, the flash and the heat causing the mech to spin out of control and crash, damaging its' gyros. The mechs' pilot, no fool he, gave the surrender signal; first blood to the Goliath. Then two Shadowhawks attacked, flank and rear, and the combat became serious as the Goliath pilot turned his unwieldy mech to face the twin threat. The first Shadowhawk gained a target lock with its' LRM, but for some reason failed to fire; the Goliath pilot took the advantage and destroyed the LRM launcher with a single, well placed shot, but was in turn rocked by the other Shadowhawks' assault as a flurry of SRMs' shredded his center torso, lightly damaging the engine. Prudently, he began to back off, while the Shadowhawks regrouped and began to return fire with their LRMs and ACs. The Goliath pilot responded with his paired LRMs, bracketing the already damaged Shadowhawk, gouging meter-wide holes in its' torso, before firing an inferno round that peirced its' already weakened armor and igniting a jump jets' fuel supply in the process. The other Shadowhawks had not been idle, however, peeling the massive mechs' armor off in large chunks in a storm of metal, shattering a leg and knocking

out the life support system and an MG as well. The Goliath pilot, either unknowing or uncaring, charged the the already damaged Shadowhawk, so unnerving the pilot that he punched out in a cloud of smoke and flame and rode up and out of the battle. At that moment, the Goliaths' leg locked up, but the pilot simply swung his turret and fired at the third Shadowhawk, the inferno round immolating the mechs legs in jellied fire, overheating the actuator systems, and effectively immobilizing the the mech. Crabbing the crippled giant around, the Goliath pilot poured a stream of MG fire into the helpless mechs' head and shoulders like a triphammer, the relentless assault wringing a third surrender from the dazed pilot inside. This was too much for the final Shadowhawk pilot, having watched his companions reduced to smoking wrecks in a matter of minutes, so that when that terrible muzzle swung his way, he simply surrendered rather than face its' hellish assault.

Game Use

The VHE shell, due to its' weight and size, rates only 5 shots/ton, as opposed to the normal 8 shots/ton. Also, range is reduced by 3 hexes due to the weight of the shell. At impact, a VHE shell does 20 points of damage to the area hit, and 5 points to each adlacent area as well. For example, say that a shell hits a mech in the center torso; 20 points go to the center torso, while 5 points go to left and right torsoes, 5 points go to each leg, and 5 points to the head. If a critical hit occurs, there is an additional critical hit awarded due to presence of the HE charge, and the player still rolls on the critical hit chart to see if he gains any more. Thus a VHE shell could concievably produce as many as four critical hits with a single shot! The drawback to this is that if there is a critical hit on the ammo, each shell will do 30 points of damage as it 'cooks off' in the ammo bay.

Type : VHE shell
Shots/ton : 5
Damage : 20/5

Range : Short	Medium	Long
1-4	5-12	13-19

The Laio Inferno shell is fairly simple. At impact, the target takes 2 points of damage due to high velocity of the shell itself, and an additional 10 heat points/turn for 5 turns. As per standard inferno rounds multiple shots only increase the number of turns that the heat lasts. If a critical hit results, the player takes 30 heat points (20 if CASE is installed) and 1 point per shell (remember the ignitor?).

Type : Inferno shell
Shots/ton : 8
Damage : 2/10 hp/turn x 5

Range : Short	Medium	Long
1-7	8-15	16-22

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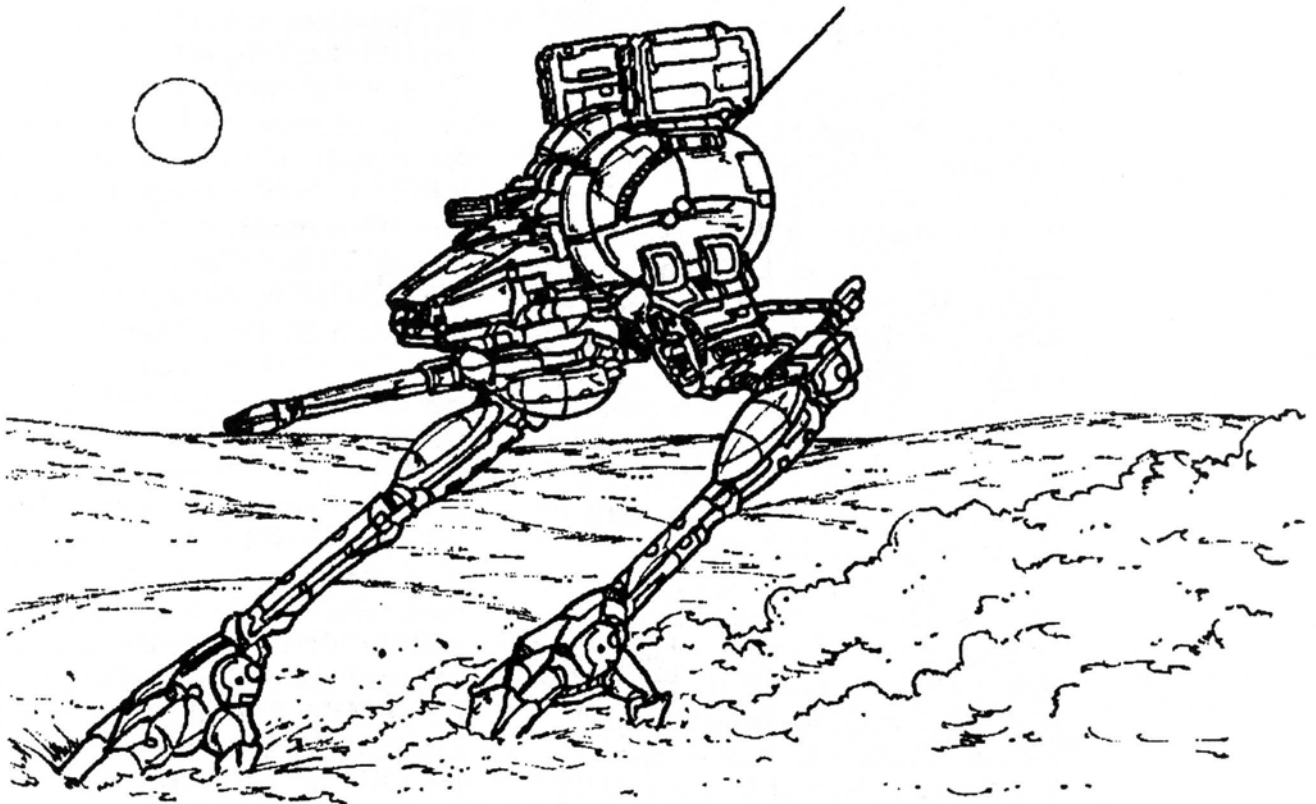
Weapons: Is There A Difference?

by
H. Barents

In Battletech the main differences in weaponry fall into three basic categories; damage, range, and heat. Now, if you look at the performance values here, you'll notice a slight discrepancy between energy-based weapon systems and those that use some form of ammunition, namely, that ton for ton, you aren't getting the best deal if you opt for the payload types. For example, an energy weapon is powered by the fusion reactor, whereas an AC or missile rack or MG requires that you tote a few tons of ammo around with you. Also, if an energy weapon is disabled, that's it, I mean it's a problem, sure, but I don't know of anything worse than sweating out a critical hit roll on an ammo bin. So, you say, why even bother with 'em, right? Well... First, I think we should give these weapons the benefit of a fair trial. Let's start with the mighty AC, as written in the Battletech rules (note: the weapons examined here are the pre-Helm memory core designs, aka, before 3028). On the wieght ratio, the AC 2 comes in at 6 tons (7 with one ton of ammo = 45 rounds), the AC 5 at 8 tons (9 with 20 rounds/ton), the AC 10 at 12 tons (13 with 10 rounds/ton), and the mighty AC 20 at 14 tons (15 with 10 rounds/ton). Damage is the AC rating, while critical spaces are 1, 4, 7, and 10, respectively. In this corner, we have the small laser at .5 tons, the medium laser at 1 ton, the large laser at 5 tons, and the awesome PPC at 7 tons. Damage is 3, 5, 8, and 10, respectively, and the critical spaces are 1, 1, 2, and 3, also respectively. In a nutshell, anywhere from two to three times the wieght for a projectile system as opposed to a energy system. Not a very good showing. In heat, however, we begin to see some promise. As far as I can tell, an AC produces one (1) heat for every time it is fired regardless of its' size! Thus, we are looking at 1 heat for any AC, as opposed to 1 for a small laser, 3 for a medium, 8 for a large, and 10 for a PPC, with the damage being 3, 5, 8, and 10, respectively. Hhhmmm. Of course, we can't forget the LRM's and the SRM's. The LRM 5 wieghs in at 2 tons, with 24 salvoes per ton of ammo, the LRM 10 is 5 tons, with 12 salvoes per ton of ammo, the LRM 15 is 7 tons with 8 salvoes per ton of ammo, and the LRM 20 is 10 tons, with 6 salvoes per ton of ammo. Next is the SRMs', with the SRM 2 at 1 ton, with 50 salvoes per ton of ammo, the SRM 4 at 2 tons, with 25 salvoes per ton of ammo, and the SRM 6 at 3 tons, with 15 salvoes per ton of ammo. Critical spaces for LRMs' is 1 for the LRM 5, 2 for the LRM 10, 3 for the LRM 15, and 5 for the LRM 20. The SRMs' run 1 for the SRM 2, 2 for the SRM 4, and 3 for the SRM 6. Also, add 1 to each of the
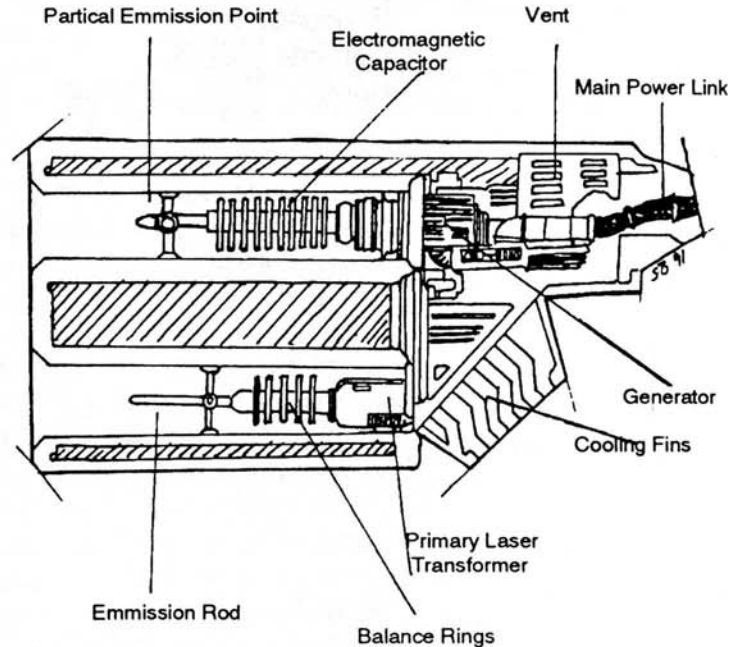
Partical Emmission Point
Vent
Electromagnetic Capacitor
Main Power Link
Generator
Cooling Fins
Primary Laser Transformer
Emmission Rod
Balance Rings

above for the ammo storage. On the heat and damage scale, we have the LRM 5 with 2 heat and 0-5 damage, the LRM 10 with 4 heat and 0-10 damage, the LRM 15 with 5 heat and 0-15 damage, and the LRM 20 with 6 heat and 0-20 damage. The SRMs' come in with 2 heat and 0-4 damage for the SRM 2, 3 heat and 0-8 damage for the SRM 4, and 4 heat and 0-12 damage for the SRM 6. Again, hhmmm. Oh, yes, the MG and the flamer; MG is .5 ton for the MG and 1 ton for the ammo, 1 critical space for the MG and 1 for the ammo, damage is 2, and heat is 0 (I know, I know, but let's not get into that!). Flamer is 1 ton, 1 critical, 2 damage, and 3 heat. Now, when you throw in the range factor, things get a little complex. For example, the AC 2 has the best range of any weapon on the field at 24 hexes long range, but at the same time, it only does the same amount of damage that an MG does, which has a maximum range of 3! Another example; the AC 5 and the PPC have the same range ratings, ie, 1-6 short, 7-12 medium, and 13-18 long, but the AC 5 only does half the damage that the PPC does, which is 10. And yet the LRM 20 has a range (long) of 21, but the damage is variable, which can be from 0 (no hits) to 20 (odds are against it) in any given situation. And of course, the ugly fact of an ammo bin blowing you and your mech to kingdom come from a lucky shot rears its' ugly head once again, and we're back to the same question that we started with, namely, why do you want an AC or an MG or whatever...? In my campaign, using all the technologies, infantry is everywhere, as are vehicles, even more than mechs. It is very likely that a force will run into infantry and support troops more than they will mechs at any given time; remember, mechs are the kings of field, and there are not that many of them. Now, lasers are accurate weapons, capable of pin-point accurracy that can slice up another mech or a vehicle like hot knife through butter. Missiles, on the other hand, are the 'dumb' missiles, ones that must be aimed to hit, or they fly off into the wild blue yonder, while the AC is like an MG, or a cannister shot,

with a nmuber of projectiles just thrown that-a-way. And the much-belittled MG, well, think how big a mech is; those 'little' MGs' are probably 20 mm, at least! The point being, infantry is dispersed, not clumped together, and I don't see that changing in the near (or far) future, so they will be correspondingly harder to hit than a vehicle or mech. Now it seems to me that a laser wouldn't do you much good in a situation like that. Missiles, well, they would be better, but not much...see where I'm heading? I think that when dealing with a situation like this, ACs' and MGs' should do double (x2) damage to infantry and like targets, while missiles do the normal damage, and energy weapons do 1/2. Now we have a big difference in weapos, and we have a reason for the various weapon types. Simply put, the AC and the MG is for killing infantry. If you catch the infantry out in the open, damage should be quadrupled (x4). As an example, the AC 2 would do 8 points with one shot, while the AC 5 would do 20! Now I know that will destroy most infantry units, but remember what artillery did in WW I and WW II and take that over a thousand years into the future. Mechs with missile capabilities, they can hold their own, but a unit that has only energy weapons could be in for some serious dents from a couple of well-placed infantry units with the right stuff. Consider that if the infantry is under cover, the mighty PPC will only do 5 points of damage to them, still, a lot for an infantry unit, but the game doesn't cover that. Energy weapons are made to kill tanks and mechs, not infantry. Sure, catching an infantry unit in the open with only an energy weapon is okay, you'll do okay, but with all the metal that MGs' and ACs' can throw out there they are the much better infantry slayers. Even the Technical Readout hints about this when the subject is MGs'. Try this idea in your game and see what it does; I'm quite sure that it will surprise you. Different weapons are different for a purpose. Till next time...▲
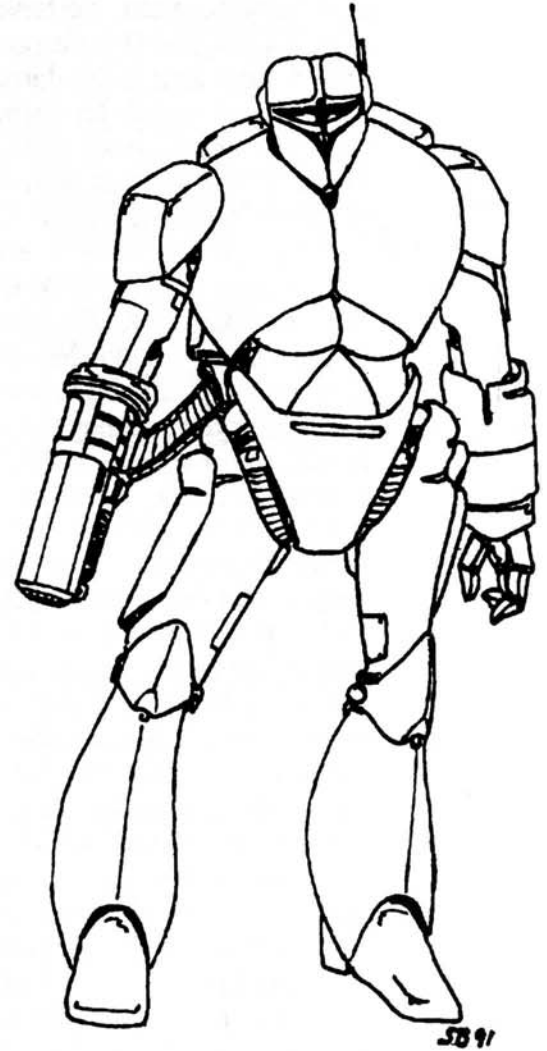
Power Armor: The Poor Man's Battlemech
By Bill Swisher

HISTORY

For many centuries infantry platoons groveled in the shadows of the Battlemechs. Even ultra-light mechs could kill dozens of infantrymen in a few minutes of fighting. House Steiner, lacking light Mechs, needed a unit to support infantry in battle. Billions of C-Bills were spent on the research and development of this new unit. The unit had to be small enough to move easily in an urban enviroment, yet carry the firepower of a light mech. In 2963 a Tharkan research project culminated in the development of the Power Armor suit, a smaller version of a Battlemech that could outclass it's heavier brethren in urban situations. Unfortunatly, the Estates-General blocked the funding of the Power Armor's production at Hesperus II because the facilities there would curtail the production of "real Mech's to make room for pseudo-Mechs.". For many years the project was abandoned. Finally, in 3026, the project was revived when the Federated Suns and the Lyran Commonwealth planned a combined invasion of the Capellan Confederation in 3028. Power Armor would be needed to supplement the Battlemech assaults on key positions when invading Liao planets. Power Armor was also needed tor guard Steiner and Davion planets from invasion during the assault. They were needed to hold positions once held by Mechs. By 3027 NAIS and Lyran scientists had recovered the ability to produce Power Armor. In December 3027, Defiance Industries switched its Hesperus II facilities from Zeus production to Power Armor production. To the delight of the military, production was quick and cheap. By August 3028 the Hesperus II facility had already built 230 suits and they were producing them at the rate of 38 suits per month. When the Fourth Succession War began nearly 150 Power Armors would see action on Liao Worlds...

BATTLETECH RULES

A suit of Power Armor is virtually identical to a Battlemech, except that it is a one level-target. Due to its small size a modifier of +1 is needed to hit a Power Armor. a suit moves like a

regular mech. For stacking purposes up to 14 suits can occupy a single hex; 7 suits can share the hex with an infantry unit, a Mech, or any other (single) unit.

Combat for a suit is resolved as in regular Battlemech combat, with the following exceptions:

1) A suit is +1 to hit due to its size (as mentioned above)

2) A suit may punch, charge, and kick targets on its level only; in addition it may punch infantry IN its hex while standing.

3) A suit may club a target either on its own level or the level above; this means that the suit may either use the punch or kick damage table when clubbing a target on the same level it is.

4) A Mech may NOT punch a suit
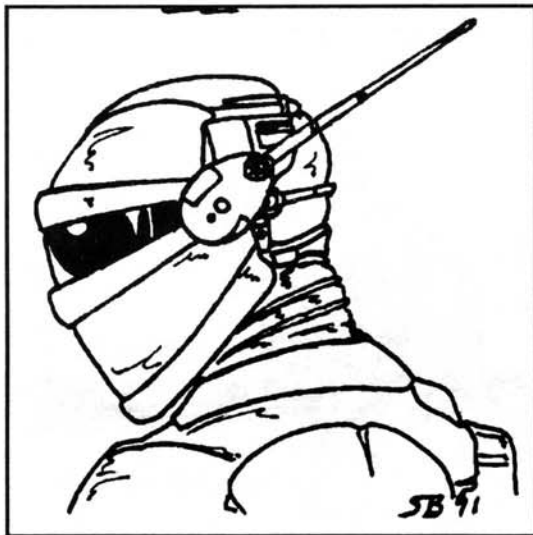
on the same level it is, but it can kick it. All Mech physical attack damage, except for DFA, is resolved on the hit table for ranged attacks. Only DFA is resolved on the punch table.

5) If DFA fails and the suit falls the pilot automatically takes a hit and must make a piloting skill roll to avoid suffering another hit.

6) A suit cannot use a Battlemech limb or a tree as a club; it may use a girder only.

7) The pilot of a suit occupies two critical spaces each in the head and center torso. no weapons may be

located in the head or center torso.

8) A head hit causes one point of damage to the pilot, if the head is destroyed the pilot is killed.

9) Head critical hit: Pilot- kills the pilot.

10) Center Torso critical hit: Pilot-the pilot takes 1d6 hits.

11) An ammo explosion electrocutes the pilot for 1 hit, but if the explosion damage gets to the Center Torso the pilot is automattically killed as the blast came from INSIDE the armor.

12) A suit pilot cannot eject, there is no ejection system. The pilot must unlatch a plate on the front center torso, open it, and climb out. this process takes one full turn, during which the suit may not move or fight. If the center torso is hit while the pilot is attempting to escape he takes 1d3 hits. If the pilot is alive and conscious at the end phase, he
may leave the now inactive armor.

13) When moving thru a building hex Power Armor has less trouble then mech do. As reflected on the table below.

	Power Armor Building Effects Table					
Size	5 ton		10 ton		15 ton	
Type	MP	Pilot	MP	Pilot	MP	Pilot
Light	1	0	1	0	2	0
Medium	2	0	2	+1	3	+1
Heavy	2	+1	3	+2	4	+2
Hardened	3	+2	4	+3	5	+4

GENERAL DEPLOYMENT OF POWER ARMOR

1) Support of infantry (Steiner tactic): A lance of suits support a company of infantry.

2) Urban defense (Steiner tactic): A company of suits protecting a city or industrial complex

3) Knee Bashing (used by both houses): several armors attempt to close with the enemy commander's Mech and destroy its legs.

4) Swarming (Davion tactic): A lance or more of suits single out a Mech and assault it from all directions till it goes down.

5) Dropship guards (used by both houses): The suits guard the landing sites while the mechs attack military

targets.

BUILDING A POWER ARMOR SUIT

Power Armor suits are constructed the same as Battlemechs except for the following constraints.

1) Suits must have both upper and lower arm actuators.

2) Suits have less available critical spaces then mechs; they have 3 per arm, 6 per side torso, 2 per leg, and none in the center torso.

3) Suits do not require a cockpit. Instead they need a 1/2 ton waldo system. Cost: 50,000 C-Bills.

4) 5 ton power armors do not require a gyro; however, the pilot must have a piloting skill of 3 or less. Pilots with a skill rating of 4 can also pilot one by adding +2 to all piloting actions. Pilots with a skill rating of 5 or higher cannot operate the unit.

5) 5 ton suits have an internal structure as follows:
H 1, CT 3, ST 2, A 1, L 1. Since the head only has 1structure point it can only hold 2 points of armor.

6) 5 ton suits must have shielding if useing a fusion reactor. This shielding must weigh half the tonnage of the plant itself as per vehicle construction rules. 10 and 15 ton suits do not need this shielding.

7) 5 ton suits may only use flamers, MG's, and small lasers. ▲
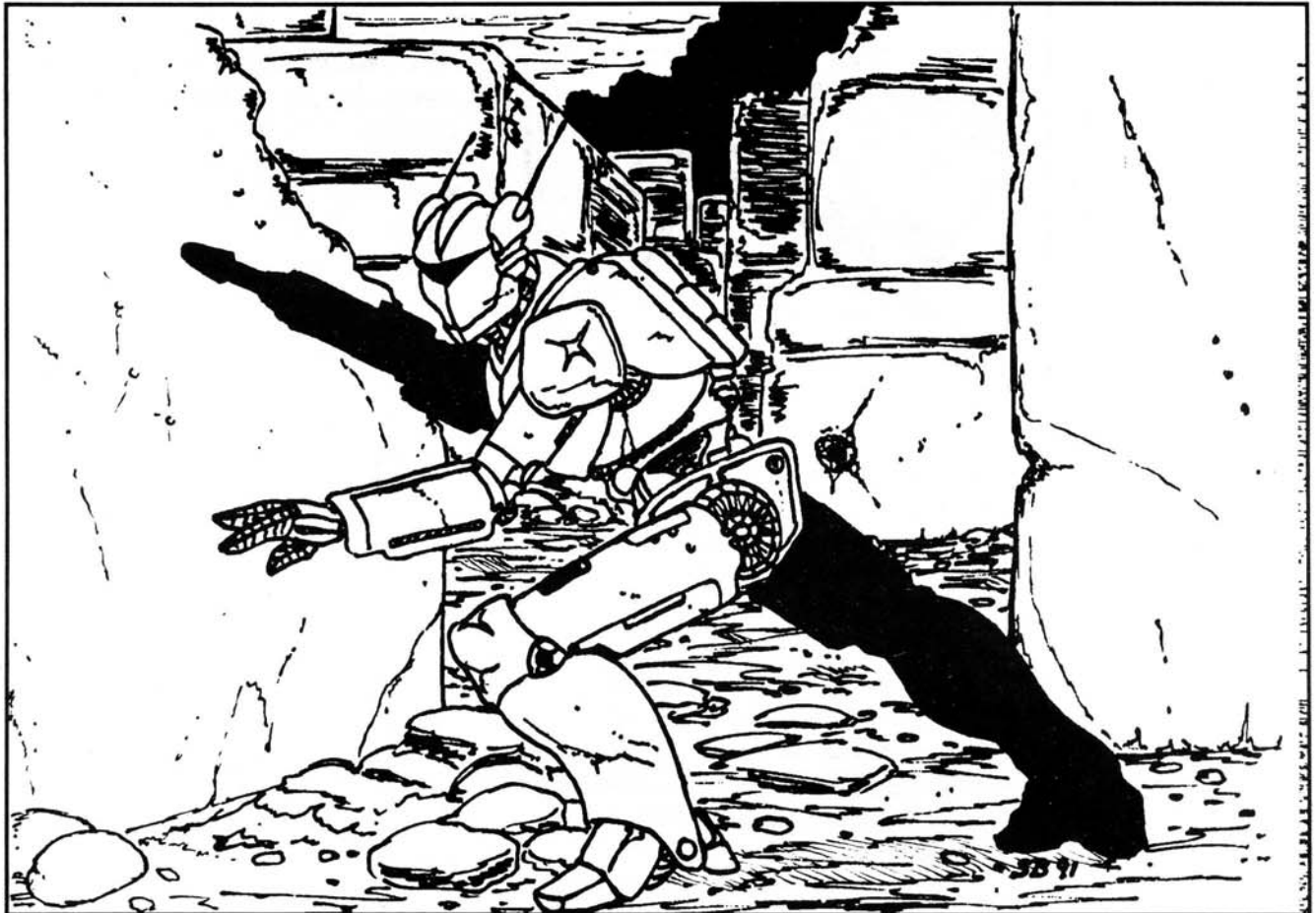
Rules Varient: Opportunity Fire

by
Charles J. Tomaszewski

In FASA's Battletech game, all combat is considered simultainous, even though it takes place in phases. This rules varient will try to add an optional and additional fire phase to the rules. It should be used at the discression of the Players and Referee.

Each turn is broken down into the following phases: Iniative, Movement, Fire, Physical Attacks, Heat. Normally fire combat can only take place in the Fire phase. Using Opportuinity Fire a player may make an attack during the movement phase before all other fire is declared. There are restrictions to this. First, the fireing player gets a +2 modifier to hit if he moves his mech at all in the movement phase. The target may execute any type of movement, but may only be fired upon if he crosses the attackers line of sight. When it crosses the firers line of sight the firer should claim opportuinity fire and all movement ceases until the fire is resolved. The target then completes its normal movment without any restrictions imposed by the fire. Any damage that inhibits its movement is applied in the next phase. Combat is then resolved according to the normal rules, except for the mech that has already fired.

The to-hit is 6 at short range, 8 at medium range, and 10 at long range, plus any targeting modifiers. Movement modifiers are 0 for walking, +1 for running, and +2 for jumping. Actual hexes moved are not counted, but terrain restrictions are still used as per normal. The firer may only fire one weapon and may not fire missiles. The firing play may fire all other weapons during the normal fire phase at a +1 to hit penalty, as if it were a torso twist.

Example: A Warhammer, with a gunnery of 4, spots a Wasp jumping at a range of 4. He decides to fire a PPC at the wasp as it crosses his LOS. The to hit at shrot range is 6, +2 for the jumping and we assume a Gunnery skill of 4, or not modified. The final to hit is 8 at short range. A 6 is rolled and the Wasp takes damage to his torso, losing his jump jets. The Wasp may finish his jump this turn but may not jump again after the damage has been applied.

This gives an advantage to the side that has won the initative. This allows a little more 'realism' with only a little more confusion. But I nust stress, This does slow down the game somewhat. In order to speed up the game, place markers where the LOS was crossed and procede with combat as normal, except that Opportuinity Fire attacks are made first.▲

Strategic Movement For Battletech

by
H. Barents

I'm sure we've all said at one time or another, "I wish I could get this unit over there faster; the game will be over before it gets there, etc". It can be frustrating to us players, especially when running large, slow mechs, which seem to stand still even when they are running, and watch them creep across the board. I think I have a solution; I would like to propose a little rule addition called Strategic Movement.

Strategic Movement has been used for years in all manner of wargames, and in particular miniatures games. Strategic Movement allows movement that is much faster than normal, but, like all good things, at a price. For example, if you are using more than four mapboards in your game, this rule will allow you to position your reserves faster and also to disengage and re-position your units as well. It allows for a more fluid game where planning can make all the difference. However, I must advise against using this rule if your game is only using four boards or less; bear with me a moment, and you'll see why.

This is the proposed rule; first, all movement is doubled. So the Atlas would be able to move 6 and 10 while utilizing SM, while a Locust can attain a speed of 16 or 24. Imagine being able to shift your forces from one flank to the other in the space of a few turns! As I said before, on four or less boards this would be chaos (yes, I've tried it) and neither side gains anything in the situation. That's the only hard-and-fast rule; use this option only with games that are using more than four mapboards.

Of course, along with the good there is the bad. While using SM, you gain no modifiers from movement as you are concerned only with speed, not evasion. Also, this kind of speed builds up heat (anyone surprised?) rather fast; one extra heat point for every movement point. For our example, we'll go back to our friend the Atlas. Walking 6 would give the Atlas 2 heat for moving 5 or more, but with SM the Atlas gains 3 more heat points for each of the movement points over the 3 normally allowed. Running is really asking for it! Build up would be normal running plus 2 heat for each movement point used after normal movement. The Atlas would recieve 2 heat for the normal movement and 2 per each movement over the normal movement, so if the Atlas moves 10, it recieves 12 heat. The Locust would need to roll for a shutdown if it ran its' full 24 in SM. However, if you think about it, the heat problem is not insurmountable. There are ways to cool down a mech that are readily avaiable on any given battleground (well, alright, the desert could be a problem).

Another trade-off is that when in SM, you may not fire or engage in physical combat. Since you can be fired at and not return it, you should plan your route carefully, because once you are fired upon, you must stop SM. In brief, this is a movement type that is more suitted to reserve units, but it can be utilized by units engaged in combat if they do the following. The unit must not fire or be fired upon for one full turn. That's it. If the unit fires or is fired upon, no SM. You are much too busy dodging or firing or whatever to utilize SM.

The final penalty is that turning (ie, not following a straight line or path) while using SM costs two movement points instead of one. There will be a piloting roll for each hexside turned. If you fail, mech fall down, go boom.

To sum up, SM can double your normal run or walk. There is no

movement modifier if you are attacked while in SM. You may not engage in combat while in SM. You must stop SM the moment you are attacked while in SM. You must not attack or be attacked on the turn that you use SM. Walking in SM creates 2 HP for walking plus 1 for every MP used. Running creates 2 HP for running plus 2 for every MP used. Each hexside turned will cost 2 MP.

If you decide to use this rule, remember that the light mechs become much more dangerous then before. Till next time...▲

Come into the sun. I've been waiting...

The Penitrator

by
Herb Barents

While fighting around the planet Harvest, actually on the first moon, Glow, the 113th RCT and the recon company, Silverdores, came across some very strange mech's. These mechs had equipment on them that had never been seen before. They captured a couple of them, one of which they call the Blaster. On this mech they found a new weapons system. This was a missle system unlike any other in use in the inner sphere. The range of this system tested out to 1800 meters (36 hexes). The missles were very fast, but carried a low explosives charge on them. It was found out thru further testing that these missles were for penetrating mech armor to get critical hits, thus disabling the enemy before he can get into range to fire back.

While looking at this weapon the tech's of the 113th found that it was a solid fuel rocket. The fuel took up almost half of the total weight. Each missle weighed half a ton. The blaster carried only 4 of these missles. The launche was fitted on the top torso of the Blaster and weighed 3 tons, the same as an SRM6 rack.

The missles themselves were very easy to take apart and work with. The circuit boards were much better then the ones that we have, but in our

replicas this has had no detrimental effect. The head of the missle is very soft thus once it hit the target it blasted all the explosive force directly into the section hit causing a penetrating blow and doing damage to the mech's internal structure. With one hit at very long range a mech could very easily be disabled by critical hits. The damage to the mech's armor was minimal and attacks under 400 meters (8 Hexes) was even less due to the fact that the missle had not reached full speed yet. Plus at this range the guidence system has not achieved full control so it is harder to hit.

The est. cost is very high, around 250,000cr per ton, almost 10 times that of normal missles. This will likely be the only cost estimate made as this price range makes the missle too costly to make. Perhaps as the tech catches up or mass production reduces the cost they will become more avaliable. Until then only the Federated Commonwealth posses them...And only a very few.

Game Stats Range	min	Short	Medium	Long
	8	12	24	36
Damage	1d4/2	1d8	1d6	1d4
Internal Dam	1	3	2	1

Roll for a critical hit for each of these missles that hit. The Damage row tells you how much external damage to apply. The internal damage is the amount of internal structure damaged by each hit. ▲

Solid Fuel

Shaped Charge Warhead

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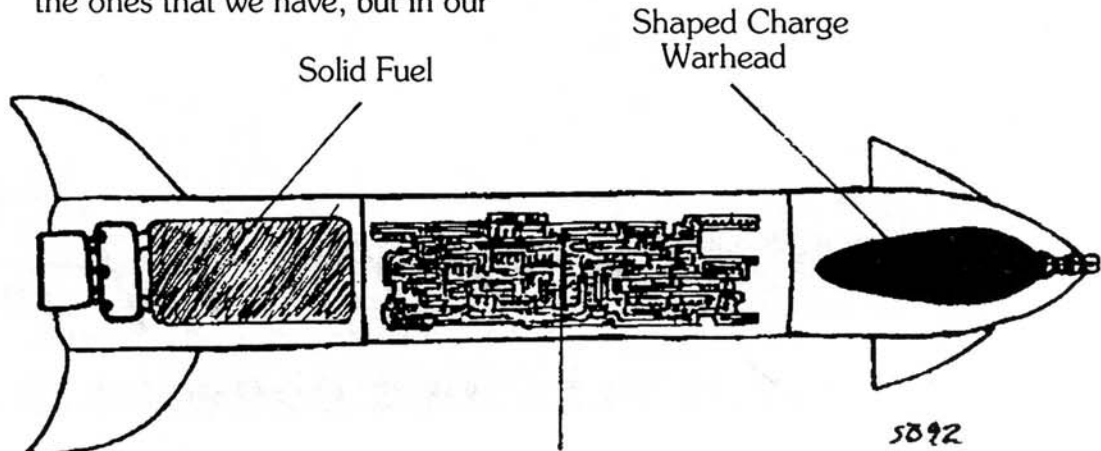
Tracking Equipment

How to Kick Goliath Where it Counts

by
Charles J. Tomaszewski

In the last couple of issues of 'Future Wars' there has been a lot of talk about Super Assault Battlemechs. These are 100 ton+ monsters that can turn an Atlas into molten slag and use a Battlemaster like a hood ornament on a '60 Cadillac. Personally I dont like the idea of 100+ ton Battlemechs or a rapid fire AC/20. They upset the balence of play. I feel a company of Atlas's, 'Mauler's, and Banshee's can raise more havoc, and maintain playability, better then these Super Assault Mechs. I know I will not use any of these in any game I run. But for those of you unfortunate enough to find yourself staring down a Plasma Gun, or see a Rapid Fire AC/20 turning your way, take heart and read on.

Today's technology has produced shells, missiles, and bombs that can penetrate the thickest armor known to man, the armor of the Soviet T-72 tank and our own M1 Abrams tank. Since the tech level of Battletech is roughly late 20th century or early 21st century the capibilities to produce these systems will still be accessible. These systems, for use with any Mech, Vehicle, or Aerospace fighter, are generic and avaliable to any side, but in limited quantities. In future articles I will report new weapons with whice to defeat these "Super Assault Mechs" and any other , silly, battlefield pests that have crept into your game.

SYSTEM #1
SABOT Shells
Sabot is French for 'boot'. A SABOT is a shell of smaller diameter then the cannon barrel that is encased in a sheath of metal to increase the diameter to that of the cannon. When fired the sheath (sabot) is lost during flight. What remains is a core of depleted uranium, known as the penetrator. This then causes the damage by penetrating the armor and causing internal damage, such is the reason for decreasing damage values and the automatic critical hit check.

The disadvantage is 1) Decreased armor damage. The actual impact causes 1/2 the damage of a normal shell externally and 1/4 the damage internally, rounding fractions up. (Ex. An AC/10 hit only does 5 points externally and 3 points internally). 2) For every 5 shells there is only 1 SABOT shell. Below are the charts for

Weapon Type	External Damage	Internal Damage	# of SABOT rounds avalible per ton
AC/2	1	1	20 rds/4 SABOT
AC/5	3	2	15 rds/3 SABOT
AC/10	5	3	10 rds/2 SABOT
AC/20	10	5	5 rds/1 SABOT

Procedure:
1. Mark on Autocannon Rounds the number of SABOT rounds Avaliable useing the above chart.
2: Use normal combat, the firer declares he is using a SABOT shell. Remove 1 round from number avaliable.
3: If hit is registered, proceed with a critical hit check with a +1 modifier.▲

Stand, I Say !!!

Morale In Battletech
by
H Barents

I have been playing Battletech for quite some time now, and it seems to me that there was always something missing from the game as a whole. Not to keep you in suspense, that thing was morale (yeah, I know, you read the title), one of the most indispensible elements of warfare, and, sadly, one of the hardest to emulate in a game system. Just recently, FASA released Battletroops with a ruling on morale which, unfortunately, does not translate

well to Battletech per se. However, the basic idea has now been presented, which has inspired me to take a whack at it, thus this article. I came close to writing this article before, under the title of So That Is What They Are* back in issue 14 of Future Wars, but I didn't quite hit the mark that time. In essence, units are ranked or rated according to their experience, training and other factors, as militia, green, veteran, elite, or crack, in that order from worst to best. With these ratings you can can simulate morale fairly well, but the tables and explainations that follow will hopefully give it a bit more depth and realism. As always, it is your choice whether or not you use these rules, but I think that I should warn you now that these rules will change the game considerably in several areas. For example, Mech combat will not go to the last armor point or the last round. You'll find that vehicles will run as fast as they can out of the danger zone and infantry will only take so much before they do the same or surrender. Mechs will surrender as well, or run, that much faster, if faced with annihilation. Though you should not let morale completely control your game, I will quote a certain short Corsican gentleman who said '-morale is to strength as 3 is to 1'. Morale is a very important factor in warfare, and it stands to reason that the men who pilot the mechs and vehicles in Battletech would prefer to come out of a battle alive and well.

The factors that must be taken into account are a staggering number, something I discovered as I began to write this article, one thing suggesting a dozen more things, and so on. At the same time, however, I wanted to keep it as simple as possible. The one major factor in all this can be found in the FASA sourcebooks; these mechs are very hard to replace or even repair, and yet I don't know how many times I've heard about battles being fought to the bitter end, I've lost count. Campaigns

help keep this tendency down a bit, but not much, and that just doesn't jive with the fact that a mechwarrior without a mech has fallen on hard times indeed. Using this as the basic premise, I have come up with the following rules for morale in Battletech.

In Battletroops FASA has set up four morale ratings, Green, Regular, Veteran, and Elite. I think that we need a couple more catagories, for example, Militia, sort of like your standard weekend warriors, which would come before Green. At the other end of the scale, we have Crack troops, with the Old Guard of Napoleans' Grand Armee or the Iron Brigade of the Army of the Potomac as prime examples, diehard fanatics who won't give an inch no matter the odds. So our new ranking is Militia, Green, Regular, Veteran, Elite, and Crack troops in ascending order. Note that never, I repeat, never, is a unit comprised entirely of one kind of soldier or another, or, in other words, not everyone will stand or run all at the same time; some will stand their ground and form a rallying point for thier comrades in the worst militia unit, and even the most fanatical crack troops will have their share of rabbits. A perfect example is the battle of New Market during the American Civil War, in which the current class of the Virginia Military Institute of 225 cadets (many still in thier teens) captured a battery of Union artillery manned by the war-hardened veterans of the Army of the Shenandoah in a vicious fight that cost the cadets over a fourth of thier number and which suceeded in halting Union General Franz Sigels' advance up the Shenandoah Valley. I think you can sum that up in one word; morale. Those boys had it, in spades.

However, I digress. Lets' get back to the subject at hand, namely, morale for mech units. The first question is when would a mech unit check morale? A good rule of thumb is if there has been no armor breach, no check need be made. Times that you would check

would be, say, a head hit; when the first internal damage is taken; after every subsequent hit (internal); after multiple hits (internal), which should require a seperate roll for each hit; and, finally, if the chart calls for a unit rout.

Now we'll see how to use the chart; first, you roll two D6 to check morale. If a sucessful roll results, no problem. If you blow it, roll again on the next chart and add or subtract all appropriate bonuses or what have you and apply the results as indicated. Lets' consult the first chart below;

Mech Morale Chart
  When To Check For Morale:
    When the first internal damage is taken;
    When subsequent or additional internal damage is taken;
    When three or more areas have taken damage (not necessarily internal);
    If hit while in a disorganized, routed, or broken state;
    If you are within 10 hexes and LOS (Line-Of-Sight) of a friendly unit that has rolled a -5 on the chart;
    Every failed piloting skill roll;
    When set on fire (Eeek! Inferno rounds!!!)

Definitions Of Results

No Effect: self explanatory
Carry On: you're hurt but you're still hanging in there; minuses to your firing and physical attacks are for the current turn only; minuses to your morale rating are for the remainder of the game
Disorganized: fuzzy and not up to your usual 100%; same as above as regards any penalties
Broken: scared, hurting, and you want out, but you're not completely licked yet; you can still defend yourself, but if it's all the same to you, you'd rather do it with friends to back you up and something to hide behind
Routed: you're gone; a troop of Girl Scouts is too much opposition right

now (well, okay, TOUGH Girl Scouts) and you are leaving by the fastest way possible; if you're unlucky enough to get routed a second time, you surrender; there is hope, however, in that your pitiful condition lasts only for the number of turns stated; from there you work your way back up

Morale Rolls

Class	Base Number
Militia	7
Green	7
Regular	6
Veteran	6
Elite	5
Crack	5

Results Table

-5   Routed 3 turns; leaves battle ASAP; all friendly units within 10 hexes and LOS make a morale check; no combat is possible

-4   Routed 2 turns; leaves battle ASAP; no combat is possible

-3   Routed 1 turn; leaves battle ASAP; defensive combat (physical only) at +8

-2   Broken 4 turns; retreats towards board edge away from all enemy units; defensive combat (physical only) at +8; no firing; if exits board unit is out of the game

-1   Broken 3 turns; retreats towards board edge; defensive combat (physical only) at +7; no firing; if exits board unit is out of the game

0   Broken 2 turns; retreats toward board edge; defensive combat (physical only) at +6; no firing; if exits board unit is out of the game

1   Broken 3 turns; runs for friendly cover; defensive combat (physical only) at +4; no firing

2   Broken 2 turns; walks for friendly cover; defensive combat (physical only) at +4; no firing

3   Broken 1 turn; walks for friendly cover; defensive combat (physical only) at +4; no firing

4   Disorganized 2 turns; no forward movement; may retreat at full movement; physical attacks at +2; firing at +5

5   Disorganized 1 turn; no forward movement; may retreat at full movement; physical attacks at +2, firing at +3

6   Disorganized 1 turn; 1/2 forward movement; may retreat at full movement; physical attacks at +2; firing at +2

7   Disorganized 1 turn; 1/2 forward movement; may retreat at full movement; physical attacks at +2; firing at +1

8   Carry on; drop 2 on the morale scale

9   Carry on; drop 1 on the morale scale

10   Carry on; -2 on morale rolls from this chart

11   Carry on; -1 on morale rolls from this chart

12   Carry on; +1 on morale rolls from this chart

13   Carry on; +2 on morale rolls from this chart

14+ No effect

Modifiers

```
Morale Rating
    Militia    -2
    Green      -1
    Regular     0
    Veteran    +1
    Elite      +2
    Crack      +3

Pluses to the die roll:
    Behind own lines                      +1
    For each friendly mech
    within 10 hexes or LOS                +1
    Behind a hill; partial cover          +1
    Totally behind hill                   +2
    In light woods                        +1
    Behind light woods                    +1
    For each hex in heavy woods           +2
    Behind smoke                          +1
    Lance leader                          +1

Minuses to the die roll:
    Lost leg                              -5
    Lost arm                              -3
    Internal:leg                          -3
    Internal:arm                          -1
    Internal: torso(c)                    -2
    Internal:head                         -3
    Critical:engine                       -1
    Critical:sensor                       -1
    Critical:shoulder                     -1
    Critical:hip                          -2
    Critical:foot actuator                -1
    Critical:weapon systems, each         -1
    Critical:jump jets                    -1
    Out of ammo                           -1
    On fire from Inferno round            -4
    Hex on fire                           -2
    Disorganized                          -1
    Broken                                -2
    Routed                                -3
```

Vehicles are pretty much treated the same way mechs are, with only a few changes; when to check, pluses, and minuses. Otherwise, no difference.

When to check:

When mech fire hits
When 1/2 of side armor gone
When 1/2 of front armor gone
When 1/2 of turret armor gone
Any rear hit
When MP is lost

No more than one check per turn. Damage is taken in Disorganized, broken, or Routed states.

Morale Rating

Militia	-3
Green	-2
Regular	-1
Veteran	0
Elite	+2
Crack	+3

Pluses to the die roll:

Behind hill	+2
In light woods	+1
Each light wood hex	+1
Behind heavy cover; stone wall, building, etc	+2
In heavy woods	+2
Behind smoke	+2
Lance leader	+1

Minuses to the die roll:

Side armor hit	-1
Front armor gone	-2
Turret armor hit	-1
Weapon	-2
Each MP lost	-1
Immobile	-4
Disorganized	-1
Broken	-3
Routed	-5
Out of ammo	-3

Units will surrender when routed or broken when recieving second rout result.

Results Table:

2 or less Rout; leave ASAP; all units in LOS check morale; surrender if unit is immobile.

3 Rout; leave ASAP; surrender if unit is immobile.

4 Broken; four (4) turns; retreat at full speed; no combat.

5 Broken; three (3) turns; retreat at full speed; no combat.

6 Broken; two (2) turns; retreat with face to enemy; +6 to fire.

7 Disorganized; no movement; +4 to fire.

8 Disorganized; 1/2 movement towards enemy; +3 to fire.

9 Disorganized; 1/2 movement towards enemy; +2 to fire.

10 Carry on; -2 MR; -2 die rolls on this table.

11 Carry on; -2 MR.

12 Carry on; -1 MR.

13+ No effect.

Then there is the infantry, which is treated just like the vehicles and mechs when it comes to the charts. It is also a lot easier to tell when an infantry unit should check morale; every time they are hit, of course (ha-ha). However, if they are in a building then the building takes the hit; in this situation the infantry might take damage but they do not have to make a morale check unless they are below 50% strength.

Infantry checks:

Every time they are hit (you thought I was kidding, didn't you?)
When they fall below 50% strength

Morale ratings:

Militia	-3
Green	-2
Regular	0
Veteran	+1
Elite	+3
Crack	+5

Pluses to the die roll:

In light woods	+2
In heavy woods	+3
Each wood hex between	+1
In building, light	+1
In building, medium	+2
In building, heavy	+3
In building, hardened	+5
Behind smoke	+1
Behind walls, etc	+1

Minuses to the die roll:

Fired on by mech	-2
Every 4th man lost	-1
Caught in the open	-3
Woods on fire	-5
Building on fire	-3
Building destroyed	-5
Disorganized	-1
Broken	-3
Routed	-5

Two rout results or a rout and a broken result call for surrender.

Results Table:

1   Rout; leave ASAP; surrender if no clear escape route.
2   Broken; two (2) turns; retreat by cover over open terrain away from enemy; no fire.
3   Broken; one (1) turn; retreat from enemy; no fire.
4   Disorganized; one (1) turn; no forward movement; +4 to fire.
5   Disorganized; 1/2 forward movement; +2 to fire.
6   Carry on; -1 MR.
7+ No effect.

In conclusion, I would like to say that these morale rules as presented are not an end-all; in fact, they are just a starting point for you to use. I'm sure a better morale chart can be done and with a little effort you can make one up that will fit your campaign or whatever. What these rules are is a start towards correcting some things that I personally do not like in the play of the game. They are rather easy to incorporate into the game and if you find yourself in disagreement with something here, take it out; I won't be offended. Morale is seldomn properly addressed in most wargaming systems, but it should not be an over riding factor in the game, either. When you plan for morale effects in your battle plans it adds a whole new dimension to the game. It takes a lot out of a force if a unit suddenly runs, or decides not to fight and surrenders, as happens sometimes in miniatures games (the good ones). Also, when you suffer adverse results there is no need to let the other side know; just note it on your record sheet and leave them to guess what's going on, just like in real life. All results are one turn unless otherwise stated on the chart, except for the rout result, which takes units right off the board. The fortunes of war take on a new meaning with the introduction of morale. You could win or lose initiative and it might not matter if your troops morale is high. Planning assaults becomes harder as light troops with a high morale will stand their ground against a ton of mechs and vehicles. As a suggestion, most troops should be either veteran or regular, with the majority being regular. In certain situations a few of the troops could be green, and when attacking a planet there will almost always be militia troops present. Elite troops...well, now we're talking about units like Wolfs' Dragoons, or the 5th Sword of Light, who would most definitely have several crack units wiht the rest being mostly elite with a few veteran units as well. The Black Widow Company is an excellent example of a crack unit, as are the Kell Hounds, and yet they will need replacements to fill their battle losses, and usually they are either regulars or veterans, though an occassional green kid will slip in (notify next-of-kin, please). This article, in conjunction with the article in issue #14, should enable you to put together some pretty good units. I have done the Americal Division in this fashion, which you will be reading about in a future issue, hopefully to your enjoyment. Till next time...▲

The Gatling Laser

by
Karl Sanders

The Gatling Laser is the result of the old question of how to reduce the heat build-up of the laser and, at the same time, get more of a 'punch' out of it. In response to this, I have proposed the following; a system of rotating barrels, much like the Gatling gun first used in the American Civil War. Ideally, this system utilizies the lag time between firings to cool the barrels and, at the same time, increase the damage potential of the laser itself. However, tests show that the damage curve, as well as the range of the system, falls a disappointing 33%. On the bright side, design considerations such as structural stress factors, redundancy systems, and other engineering problems were met with a lack of concern for the accepted methods of weapon system construction, and, thus, produced a system that wieghs 36% less then a medium laser and one that retards heat build-up by a astounding 75%! Given the increased rate of fire, six shots instead of one, the potential of the Gatling laser system is staggering.

Gatling Laser Statistics

```
Damage: 2 points per hit
Shots per round: 6; roll to hit as SRM 6
Range: Short: 1-2
       Medium: 3-4
       Long: 5-6
Tonnage: 4 tons
Critical Spaces: 2
Cost: 50,000 c
```

The Swing Fire Missile System

The Swing Fire Missile system is a conversion package that can be used to modify any existing SRM or LRM system on the market today. Basically, the SFM is a modified missile rack that allows the pilot to change the LOS of his missile racks 180 degrees in a combat situation. Specially reinforced swivel assemblies and a larger, flexible missle feed system are integrated into the basic missile rack at a surprisingly low cost. Sadly, the mechanism is relatively delicate and is unable to stand up to extreme punishment other than standard operation. Also, due to the flexibility of the set-up, accuracy suffers as well; the 'give' necessary to the swivel assembly functioning properly is a matter of a variant of an average of 4 degrees per actuation of the system. With all it's faults, the test reports filed by a number of pilots who utilized the system in simulated combat were generally favourable, thus insuring that the design will probably be seen in the future on the field.

```
Tonnage: 3 tons per rack
Critical Spaces: 2 per missile rack
Cost: 75,000 c
```

Rapid Fire Autocannon (Pom-Pom Guns)

```
Damage: Same as Autocannon
Range: Cut 1 hex off of close, 2 hex off of
medium, 3 off of long.
        An AC 5 would have a rang of 1-5 short, 5-
10 medium, 11-15 long.
Ammo: Same number of rounds per ton.
Heat: Double normal heat, even when firing one
round.
Tonnage: Add 5 tons to AC weight.
Criticals: Add 2 to normal AC criticals.
Note: This system allows the AC to fire twice per
round. Each shot is rolled
        for seperately.
Cost: Add 100,000 C-Bills per AC used.
```

Rapid Fire Autocannon systems have been worked on for a very long time.
House Marik has finally come up with a system that is fairly reliable. Though still prone to breakdown (Roll twice on the weapons malfunction table and take the worst result) it can now stand up to combat most of the time. House Marik has taken several Riflemen and modified them by taking out the Large Lasers, reducing the engine size, and added 4.5 tons of ammo thus turning them into monster AA platforms. But even in the field they are able to fire for a considerable period of time with 110

rounds of ammo. This makes it very good in a fire support/AA role. An Atlas varient taking out the SRM 6 pack and ammo,
the two medium lasers, and replacing the stock AC 20 with a Pom Pom system and adding a ton of ammo has had mixed results.

Long Range Flamer

```
Damage: 5 plus 5 heat levels 1st turn
        2 plus 5 heat levels 2nd turn
        0 plus 5 heat levels 3rd turn
Range: 1-4 short
        5-8 medium
        9-12 long
Ammo: 15 per ton
Heat: 8
Tonnage: 5
Criticals: 2
Cost 65,000 C-Bills
```

The Long Range Flamer is a very deadly weapon. When it strikes a Mech the blaze stays on the Mech like an inferno missle hit, thus it takes three turns to burn out. If you hit it twice continue the damage while adding the new damage to it.
Thus when hit three turns in a row the damage would be 7. Add 1 heat for each hit if a previous hit is still burning, up to a maximum of 10 heat per turn. This weapon has been found to be deadly to all forms of combat equipment, though it is not as easy to hit at the longer ranges (+2 at medium, +3 at long). On a miss roll a die, on a 1-3 it hits one hex short of the target, on a 4 to the left, 5 to the right, and on a 6 it hits behind the target. The hexes hit catch on fire. If LR flamer ammo is hit scale the damage as if the Mech had been hit that many times by the weapon.

Power Booster

Tonnage: 2
Critical: 1
Cost: 750,000 C-Bills
A power booster is able to add extra speed, power, or damage potential to any one system on a Mech. You could hook one up to the legs and add and extra 2 MP on the running speed of the Mech (no use when walking), but the heat would then be 1 heat per hex ran. You could have one hooked up to your Jump Jet system and get an extra 50% out of your Jump Jets, thus a jump 6 Mech would have a jump of 9, at the cost of double heat per hex. You could have it hooked up to 1 weapons system as per the chart below. Note you need a Power Booster for EACH weapon.

Weapon Added Range	Extra Heat	Extra Damage
PPC 3	3	5
Large Laser 3	2	4
Medium Laser 2	1	3
Small Laser 1	1	2
Gatling Laser 1	1	1 per hit
Running moved	+2 to MP. 1 heat per hex	
Jumping hex moved.	+50% to jump. Double heat per	

You can have more then one Power Booster on a Mech but each one must be hooked to ONE system and it must be noted on the sheet. When using this Power Booster roll a pair of dice, a 5 or less means it failed and can no longer be used. Using it 2 turns in a row on a 9 or less it fails, 3 turns an 11 or less means a failure. Trying to use it a 4th turn means an automatic burnout of the system. If at any time a 2 is rolled on the system test then the Power Booster burns out the system it is hooked to as well. This means the weapon is burned out and must be REPLACED before it can be used again. Same for Jump Jets. If a Leg power booster burns out the system then you can no longer run, you may walk but the Mech needs a major overhaul before it will go beyond walking speed.▲

Weapons Malfunctions During Combat

by
Karl Bruanning

Have you ever thought that somthing should go wrong with the weapons while you are in combat? Just a little somthing to go wrong with that Battlemaster's PPC when it is locked onto your mech? Well, our group has come up with a series of charts to simulate these (un)fortunate turns of chance.

In our group these charts grew out of the fact that we all felt that something should go wrong on those bad rolls. Thus double 1's ment the weapon jammed/burned out. We thought this was a bit much. People were losing weapons too often to be realistic. So we devised these charts. We used these charts in conjunction with the fact that double 1's were a miss no matter what. After rolling snake-eyes just roll on the appropriate chart and record the results. During the course of the game, some weapons could malfunction or even go out due to poor repair quality or faulty construction.

Flamers
Die Roll
1	No Effect
2	Range cut to 2 hexes
3	Add 2 heat per turn when used
4	No Effect
5	Add 2 heat per turn and +2 to hit
6	Chemicals explode, 2d6 damage, 1d6 heat for 1d6 turns

Missles
2	No Effect
3	No Effect
4	Missle Jam +2 Piloting skill roll to clear
5	No Effect
6	Serious Missle Jam Piloting skill roll and +3 gunnery skill roll to clear
7	No Effect
8	Catastrophic Missle Jam 3 consecutive Piloting skill rolls made at +3, +2, +1 with no running or jumping to clear
9	Sights off +2 to hit
10	Sights off +1 to hit
11	Shielding break down +2 heat per use
12	Missle explodes on launch, 2d6 damage and 1d6 heat

Autocannons & Machine Guns
2	No Effect
3	Round Jams +3 piloting, no movement or firing while clearing it.
4	Casing fails to clear +2 piloting to clear with no firing. Can be fired before clearing but add +1 to hit and +1 heat per turn fired thus the 3rd turn of firing would be +3 to hit and +3 heat. After 5 turns of firing jam can only be cleared by a repair roll.
5	Shielding loss +1 heat per turn when firing
6	Ammo Jam +1 piloting and gunnery rolls to clear
7	No Effect
8	No Effect
9	Sights damaged +2 to hit roll
10	Sights off a little +1 to to hit roll
11	Casing partially jams in ejector No way of clearing it. Weapon inoperable
12	Round explodes in barrel. Take AC damage to the area Weapon destroyed

Lasers
3	No Effect
4	No Effect
5	No Effect
6	Minor Shielding loss +1 to heat when used
7	Major Shielding loss +2 to heat when used
8	No Effect
9	+1 to hit +2 heat when used
10	+1 to hit +3 heat when used
11	+2 to hit +2 heat when used
12	No Effect
13	+4 to heat when used
14	+2 to hit +3 heat when used
15	+5 heat +3 to hit when used
16	+5 heat +5 to hit when used, also roll again on this Table when used
17	Burn out weapon. Can be repaired by tech
18	Total burn through take 1d6 damage and 2d6 heat

I hope you like these tables and hope that they will be of some use to you in your play. Comments and suggestions would be greatly appriciated.▲

3-D Battletech

by
H. Barents

Battletech is a boardgame that was meant to be played in 3-D, or three dimensions. I mean, look at what you get with the boxed set; counters with stands, right? It would be nice if the maps were 3-D too, but then the game would probably be so expensive that neither you nor I would be able to afford it. I know, you're saying here he goes again, and you're right. Three dimensional games are always the draw at a con, and there is usually at least one Battletech game going on at any given con. Honest. 3-D Battletech is an impressive sight, and it never fails to be interesting, challenging, and above all, fun.

There are many ways to go to build a good 3-D battletech game. At first the only miniatures available were the plastic model kits from Japan, what most of us here in the good old USA know as Robotech, though there were others, notably the Dougram series. They're nice packages, well detailed, fairly easy to assemble, and they all have moving parts even after you put them together. The problems; they are hardly ever the same scale or even size, they are fragile, they tend to fall down alot, and they are generally too big for the map. Don't despair, there are alternatives. One is to aquire the iron-on hexes from RAFM in the 2 inch size and the size problem is licked. Making bases for the figures and attaching them will solve the falling problem, and the arms and torsos still move, and even if this does sound like a lot of extra work it is worth it, believe me. Then there is the painting, which is a joy with these, they look beautiful when you're done. The one thing that is going to give you a hard time, however, is the scale problem. The closest I've seen to the right size is the 1/200 or 1/144 for extra vehicles or jets, and I recommend the N scale buildings from the model railroad outlays, as the HO scale is just a bit too big. To sum up, plastic is nice, but you have a lot of work ahead of you if you go that route, because of the limited materials available. At the same time, the finished product is impressive.

Ral Partha miniatures are the next choice. At last count, they have 36 of the 55 mechs found in the first technical readout available, with more to come in the future. The advantage here is that you are working in the accepted scale for wargame figurines and that includes terrain features and buildings and vehicles, etc. I must point out that these are lead figurines, ergo, they do not move as do the plastic ones, but on the up side, they come with their own bases and they are a lot more sturdy than the plastics. Interestingly enough, the figures are the same size as the cardboard ones that come with the boxed set. Hhmmm. Anyway, the cost is anywhere from 3 to 5 dollars, but they're a good investment for your game, and they are pretty much to scale with each other, as opposed to the plastic. Also, RP has since come out with 8mm infantry packs as well, and when used in conjunction with the vehicles they make (few in number, but they are growing) and even modified GHQ vehicles, you have just about everything your little heart desires. As an aside, if you don't like the bases on the RP figures, try pressing them in balsa wood, or, I think they still make them, mayfair has a setup called Standing Orders that work just as well, and you can pick them up for a mere $8 per pack of 500.

As you see, there's a lot to choose from. Lucky gamer, thy cup runneth over, cause there's still the Robotech figures put out by Dark Horse (I think they're still available) to consider. These run about the same size as the plastics, but they have nice bases that fit the standard game map hex perfectly. Detail on these figures is excellent,and

they paint up beautifully, but they also go for anywhere from $4.50 to $7.50, and they are a bit of a pain to put together. DH also has the Mekton figures, which run in the same price range as the Robotech figures, and they paint up well, too.

Now comes the terrain. In the realm of the man-made structure, we have a number of manufacturers of fine wargame buildings. GHQ leads the pack, with Greenfield Garrisions putting out about a dozen buildings that range from factories to farms to an abbey! Little Mini Buildings has at least twenty-five different types (some of them come pre-ruined), and they have a good assortment of ultra-modern SF type buildings that are stackable as well. They run fairly expensive, from $1.75 for a single cottage-type structure to $2.25 for a two-story and $3.00 for a factory; interestingly, if you look at what I just wrote you'll notice that the bigger they are, the less they seem to cost. Again, hhmmm. All told, the effect of a complete city set-up is down-right awesome; it also gives a perspective on how small the cities in Citytech are, almost like you're dealing with a starbase instead of a normal city. Now I have by no means named all the companies that sell this kind of stuff; looking back, I realize I forgot to mention Galia (sorry guys), and there are others, you just have to look for them. Personally, the thing I like best about cities is the ease with which you can draw a LOS (c'mon guys, no shooting through the buildings).

Speaking of normal cities, consider that an average city or town usually covers several square miles. Now imagine a city setup that covers a normal city; what you'd have is a whole game board with nothing but buildings! Remember that a single game board is an average of the equivalent of 1/2 to 1/3 of a square mile, and the mind starts to boggle. As a matter of fact, the town I grew up in, Zeeland, Michigan, was about 1 1/2 miles from one end of

the town to the other, and about a mile wide at its' widest. There were only 5000 people in Zeeland! If that doesn't get ya, try to imagine Detroit on the Citytech scale! Alright, enough...that is a little out of bounds, but it's great to dream, isn't it?

Trees. Aarghh...this has got to be one of the biggest pains in setting up a decent 3-D battlefield, bar none. There are several ways you can go with this, the easiest being going to your local model railroad shop (boy, talk about your dying breed) and give them a scale to work with and I'm sure they'll come up with something. Woodland Scenics puts out about the best I've seen, and the price range is fairly reasonable. Another option is to take the RP bases and stamp the suckers out of balsa wood and use lichen for the light woods squares. The bottom line on woods is that they're going to take some time and effort to do right but the end result is worth it.

Hills are next, and they are the most time-consuming things to build for a 3-D wargame setup. There are only two options open to you here, and they boil down to whether or not you want to be able to place your mechs on the hills or not. Again, a good model railroad shop will have some excellent terrain features to choose from, but it's highly unlikely that you'll be able to stand a mech on any of them due to their realistic surfaces. Choice number two; make your own. First I'll let the groaning die down. Really, it's not as hard as you would think, just exacting and time-consuming (if you want a good-looking finished product, that is). Cutting out the hills in gradients of the RP bases is one of the quickest and easiest ways to make hills, or if you're into the artistic side of things, whip out the old X-acto knife and go to it and sculpt yourself a geographic masterpiece. Shortcut hint; styrofoam is compressible. Just take a base and press down nice and hard for a few seconds and viola!, instant hex. After that you can spray on a coat of

paint or hand-paint the sucker if you like, and now your game has a higher degree of depth and perspective.

All in all, there are probably a few dozen ways to do things that I didn't cover, and I hope I got some of you thinking. Incidentally, I just noticed that I haven't said a word about the RAFM iron-ons; well, if you don't want to go to all that trouble, by all means, use 'em. It'll cut your work time in half, at least. Also, if anyone out there comes up with somrthing I didn't cover here, send it in! I'd love to hear some different ideas on this subject, but only you can give them. Till next time...▲
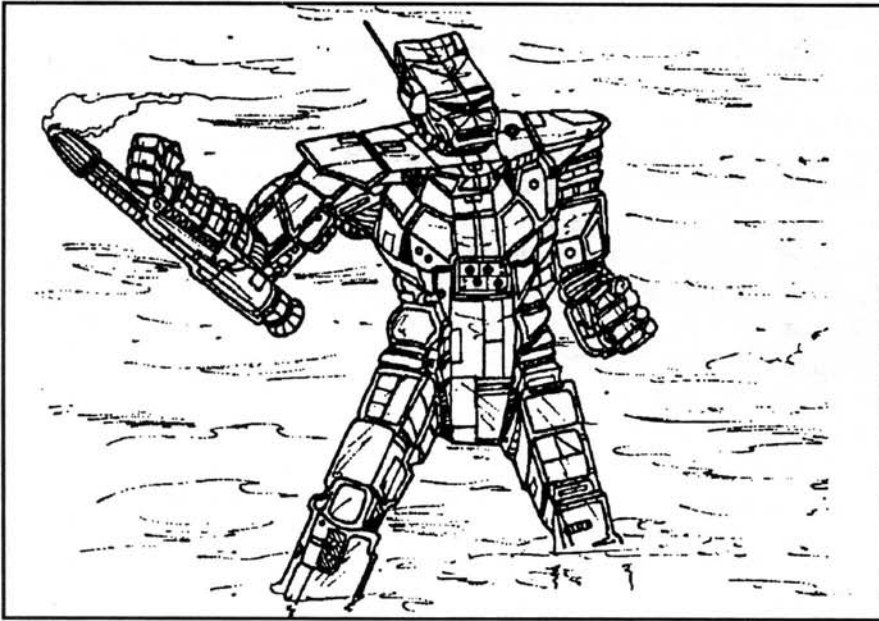
BEFORE
Atmosphere: 0
Population: 0
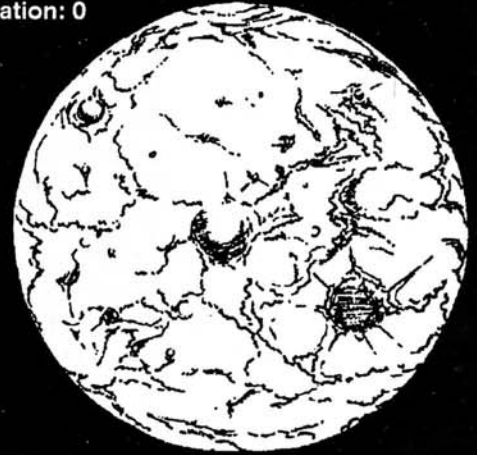
AFTER
Atmosphere: Viable
Population: 50,000+

HOLDEN PLANETARY ENGINEERS

A Question on Economics

by
Herb Barents

How many of you are running BattleTech campaigns around basically one planet and not really know what you are doing? I mean what are they doing there? What is the importance of where you are at? What I will try to do here is provide a quick and simple way to work planetary economics into the game, without a lot of paperwork. It will also allow you to know whether or not you will be repairing your mechs on time, whether or not it is really important to be here. And it might make players decide NOT to do battle, or to change sides.

How does this system work? Well it is really very simple, first you need a map of the planet. There are many floating around in various games, like Traveller or other such SF games. There are also "World Makers" or other such things avalible.(Shield Laminating and Reilly Assoc. make these things. Ask your local hobby shop for them.) These will allow you to draw out your planets, and once that is done, add in cities and terrain. What I have done is figure that each planet will have a certain amount of resources, such as light manufacturing, heavy manufacturing, mining, radioactive materials, oil, food, refining, and processing. You can add more if you like or even subtract some. Once you have decided how many of these things you want on your planet or moon then get out a different color marker for each resource. Then just start putting dots on your map. Obviously some things go in certain places. Mining would, for the most part, go in the mountainous and rough terrains, Oil can be just about anywhere. Manufacturing would likely be near a

city. Food production on Plains areas, ect. Decide how many of each type you have on your planet. Now, do not overdo it at this point. Remember that an agricultural world would have more food dots then anything else. Common sense is essential in this at all times, so use it. After you've done this, it's time to place prices on your dots.

The price I chose to use as a base for my planets is 1 million C-bills per dot. Translation, if you control one dot of whatever, you control roughly 1 million C! Thus we now have a reason for being here; money. It is also the motivating factor for whoever it is that sent you there, and it is the motivation for keeping you there. But before we go off on a tangent, lets' look at another factor. Individually, a dot is a million C; say, for example, you have a mining dot, a refining dot, and a heavy manufacturing dot in the same square, ergo, 3 million C, right? Wrong. Think of it this way; if you have a mine in county A, your refinery in county B, and your heavy manufacturing plant in county C, you're looking at some serious cost in just getting the product (in this case, raw ore) to the refinery and from there to your factory. Now, put them all in the same county. *Transportation costs drop way down*, you cut out lost production time and waste of that nature, and three million C bill dots suddenly double or even triple their worth. Once again, common sense should be used in this; you aren't likely to see a factory in the middle of a cornfield or up in the mountains, now are you?

I figure that every three months is payday, or, if you will, quarterly fiscal payments, and then you are getting into the fun part. People need to be payed, replacement parts and armor epair, etc., and in this context you have a much more realistic reason for all that mechbashing going on. Money must be properly allotted to each sector and the bills must be payed. Remember Hitler and his obsession with Stalingrad and

the Russian oil fields some 400 miles south during WW II. As a matter of fact, very few wars have ever been fought for purely idealistic reasons throughout history; conquest and expansionism are the order of the day, and I don't see it changing in the future, or not so greatly as some people believe it will. Resource wars will always be fought, no matter how advanced the society or culture. Of course, I'm just stating the obvious here, because the whole original concept of Battletech is of an interstellar society at war over the remnants of the Star League and so on.

If anybody out there did see Dune, it's a perfect example of an economic war. The main character, Paul Atriedes, states,"-he who destroys a thing, controls a thing.", and that's the next point I would like to bring up. Mechs are fine for rolling over most anything (except other mechs, of course), but when you get right down to it, mechs do alot of, I can't resist, 'collateral damage'. Subtle they are not. Even a passing consideration of the type of carnage a pitched battle between two mech forces can generate will give anyone pause that wishes to capture intact such things as factories and such. Commando forces are obviously better suited to such operations, and that opens up whole new vistas of play via the Battletroops or Battleforce systems and cannot fail to enrich your game. Then there is the further consideration of the previous quote; there are and will probably always be people who would rather see everything go up in smoke than see it captured by the enemy. I once again refer you to WW II and the 'scorched earth' policy that the Russians employed against the German panzers quite effectively (irregardless of the suffering brought to the populace, but we're not going to go into that here; too depressing). Partisan groups are a part of this, once again, the French Resistance being an excellent example. The possiblities are endless. But I will stress the fact that even if you

are trying to limit the damage wrought, it invariably occurs. Imagine a golden field of wheat or a plumed sea of corn waving gently in the afternoon breeze. Now add two anatagonistic groups of metal giants, armed with the most devestating weaponry ever devised by man. Mother Nature is in for a hard time. Crops crushed underfoot, burned, shredded by missile and shell. Not pretty. Conversely, man-made structures, factories and such, may survive more-or-less intact unless the battle is particularly intense or lengthy for any number of reasons. The bottom line is, wars invariably destroy what they are being fought for; pretty perverse, huh? Also, remember that the powers-that-be (or at least the ones holding the pursestrings) might pull the plug on this or that particular operation for the simple fact that this is not going to pay for itself, even in the long run. But if they still stand to make a profit, hey, sure, throw a few more mechs and what have you in there, the goose ain't dead yet.

All in all, I hope that this article has given you some ideas (that's why I write the darn things) and perhaps suggested a few new things to add to your game. The whole object here is to have fun. If you don't agree with an idea or concept, don't use it, or, even better, write up an article and send it in, pro or con, and when I get a chance, I'll print it. The subject matter here is by no means exhausted, and there is more than a few things that I haven't covered, so send me a line on it. There should always be a reason for sending the mechs out to play, and believe me, this is the big one. Till next time...▲

ALTERNATE RULES FOR BUILDING MECHS IN BATTLETECH

by
Clell Flint

In Battletech there is one glaring error in the mech construction rules that states that no matter whether a mech wieghs 10 or 100 tons it has the exact same amount of internal space to allocate to components. Obviously, this leads to such ridiculous situations as a 20 ton mech with an LRM 20 mounted on one of it's armatures; such a poorly constructed mech would, realisticly, either fall over or it's arm would fall off, considering that the LRM wieght is half that of the mech itself. In order to correct this oversight and make the game more realistic (realistic, you scoff, in a game like this? So, humor me), I present the following modifications...

First, the number of critical spaces a mech has in each location is now determined by it's wieght classification.

```
    Light Mechs (0-35 tons)
      Head                      5 critical
locations
      Each Arm                  6 critical
locations
      Each Leg                  7 critical
locations
      R/L Torso                 7 critical
locations
      Center Torso             11 critical
locations

    Medium Mechs (40-55 tons)
      Head                      6 critical
locations
      Each Arm                  8 critical
locations
      Each Leg                 10 critical
locations
      R/L Torso                10 critical
locations
      Center Torso             14 critical
locations
```

```
    Heavy Mechs (60-75 tons)
      Head                      7 critical
locations
      Each Arm                 10 critical
locations
      Each Leg                 12 critical
locations
      R/L Torso                12 critical
locations
      Center Torso             18 critical
locations

    Assault Mechs (80-100 tons)
      Head                      8 critical
locations
      Each Arm                 12 critical
locations
      Each Leg                 16 critical
locations
      R/L Torso                16 critical
locations
      Center Torso             20 critical
locations
```

Heads

All mech heads are not the same. Mech heads as defined in the game are rated by SP; Light mechs have 3 SP, Medium mechs have 4 SP, Heavy mechs have 5 SP, and Assault mechs have 6 SP heads. Unlike standard Battletech rules, mechs may only double their armor points, not triple them, for the head. All mechs then allocate two critical spaces for sensor gear; adding special or additional sensor equipment takes another one critical space and a weight adjustment of +.5 tons. Light mech cockpits take up one critical space, wiegh in at 2 tons, and require one critical space for the life support system, leaving only enough room for the pilot. Medium mechs and most heavy mechs have 3 ton cockpits that fill one critical space and an additional critical space for the life support, and have enough room to squeeze in a passenger, most probably a tech. Assault mechs and a few heavy mechs have 4 ton cockpits which require double the critical spaces in size and in life support (2), and will seat a pilot, a gunner, and, in an emergency, a passenger as well. The wieght (but not space) of the life support equipment is included in the cockpit wieght. Extra life support equipment takes an additional critical space and wiehgs .5 tons.

Engines

The amount of space that an engine takes up in the center torso of a mech depends on how much it wieghs (see

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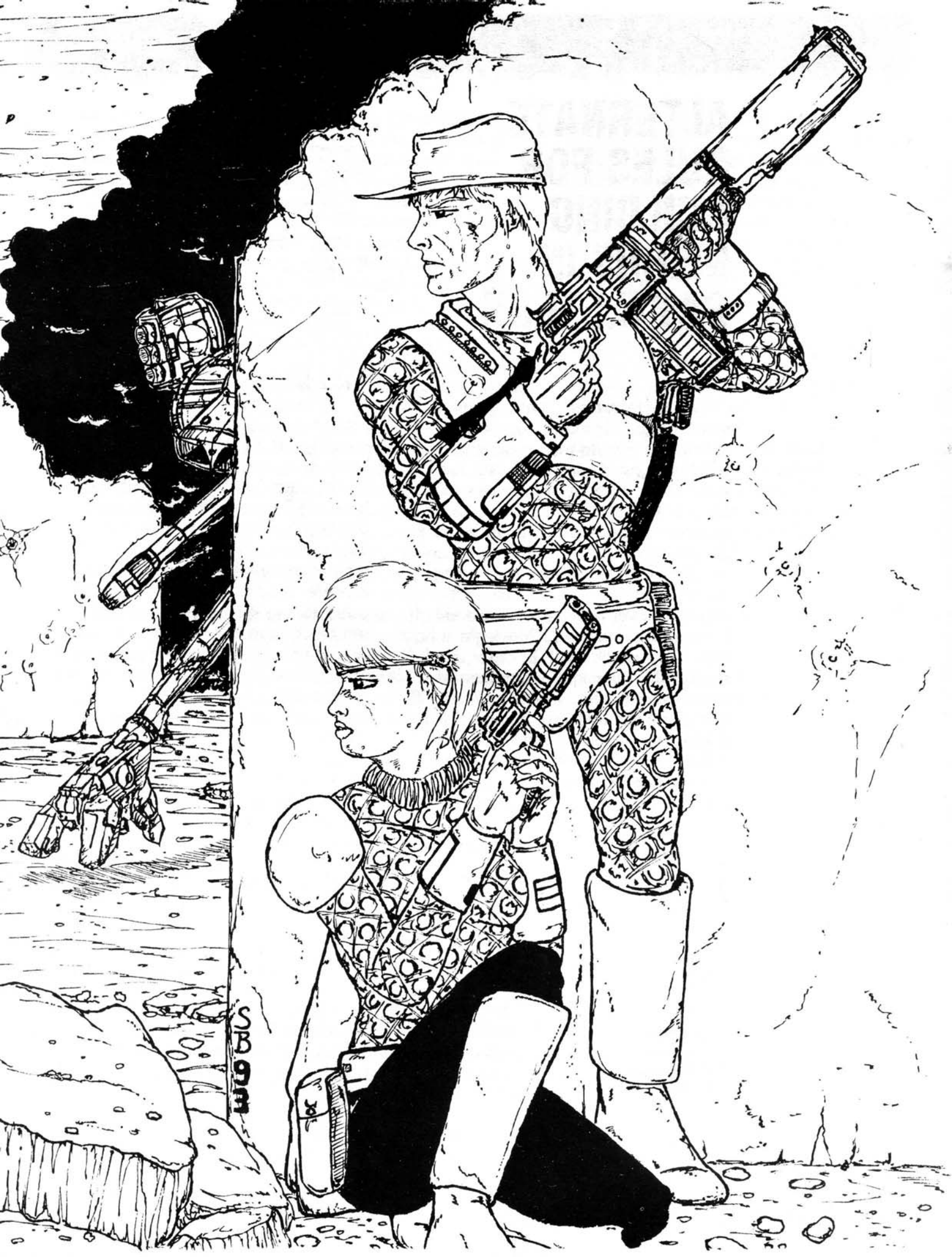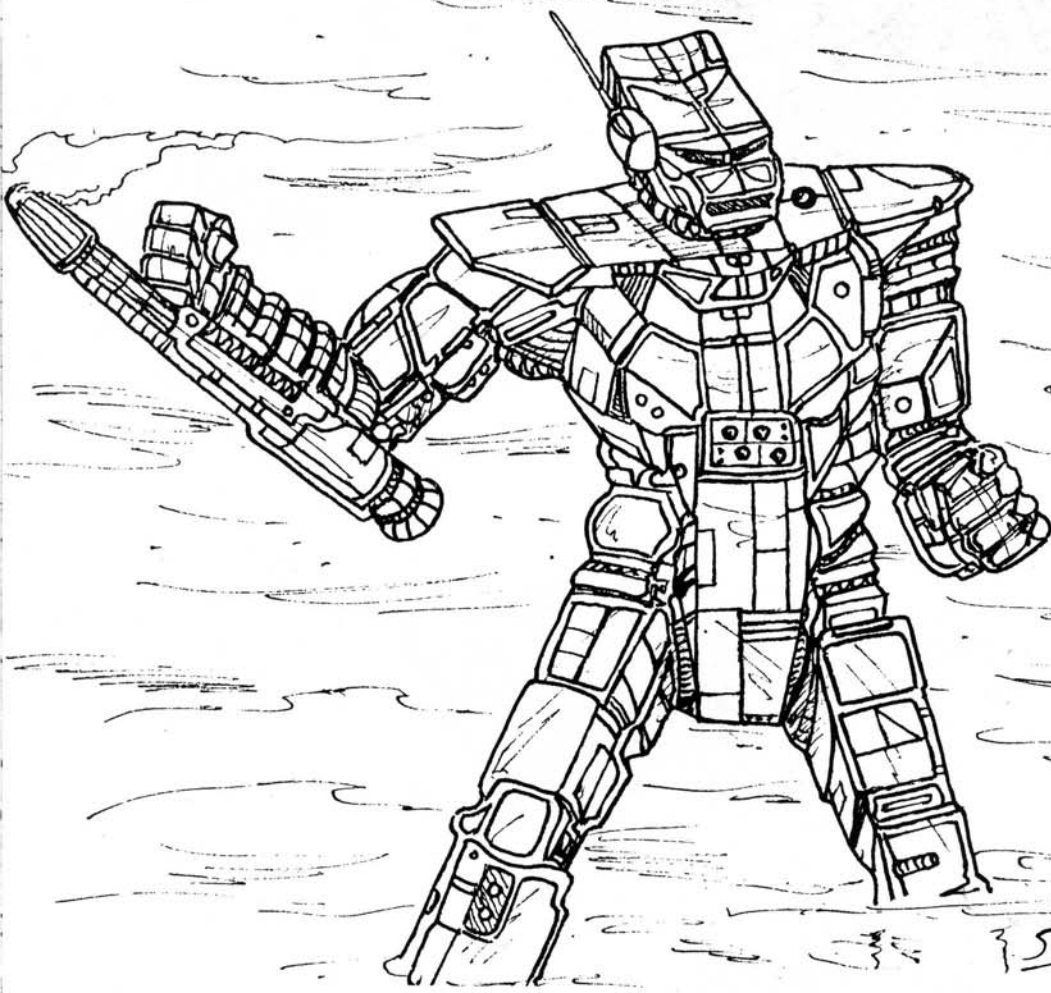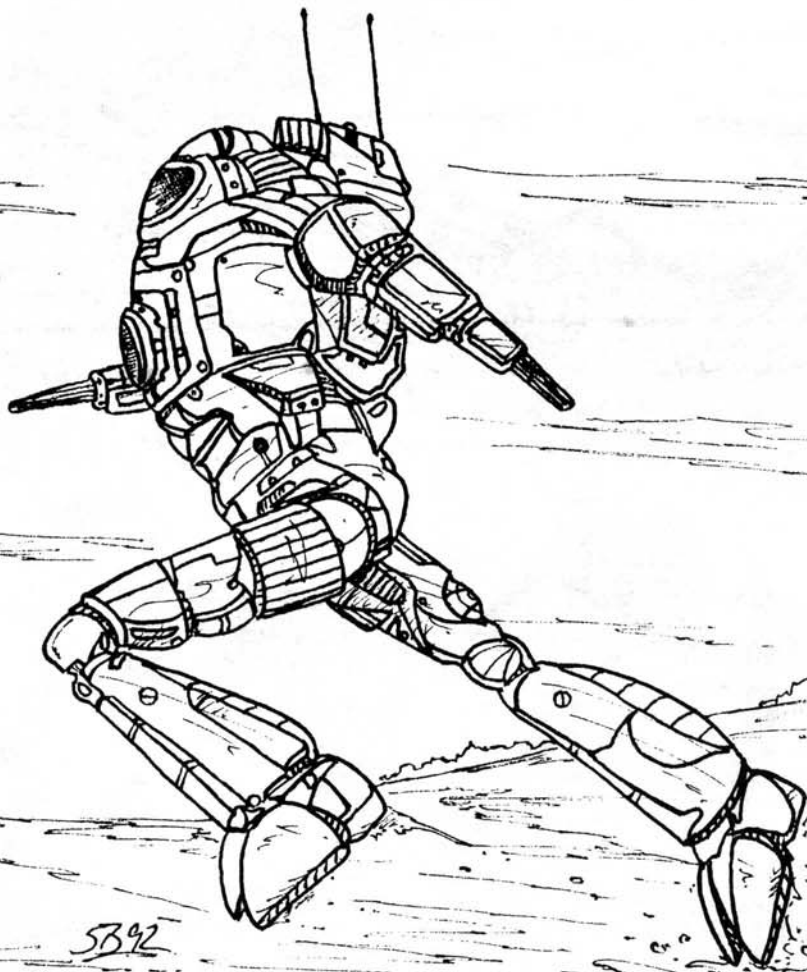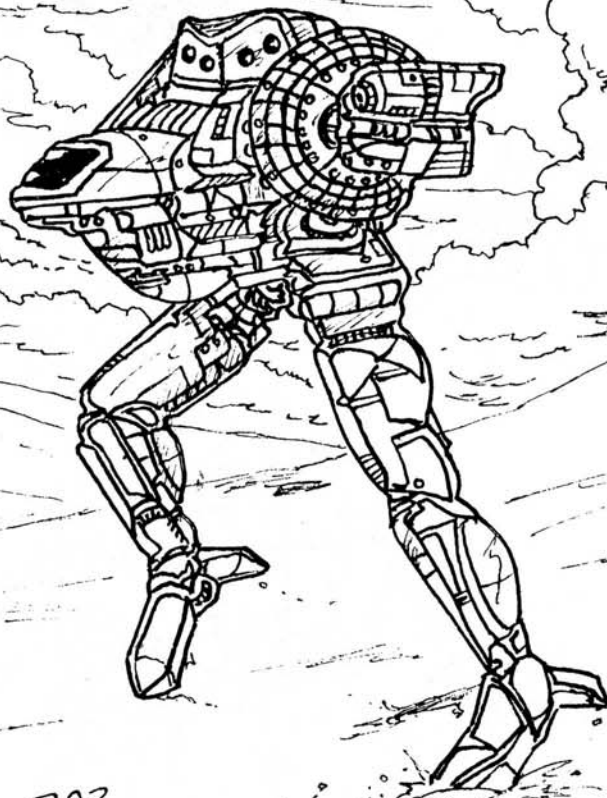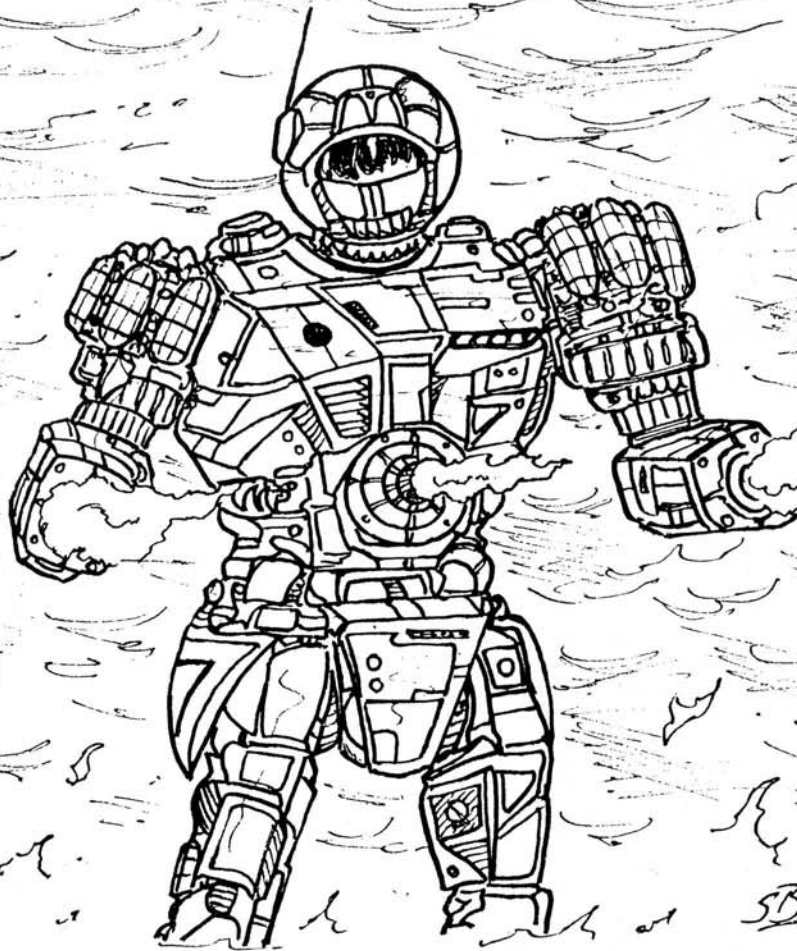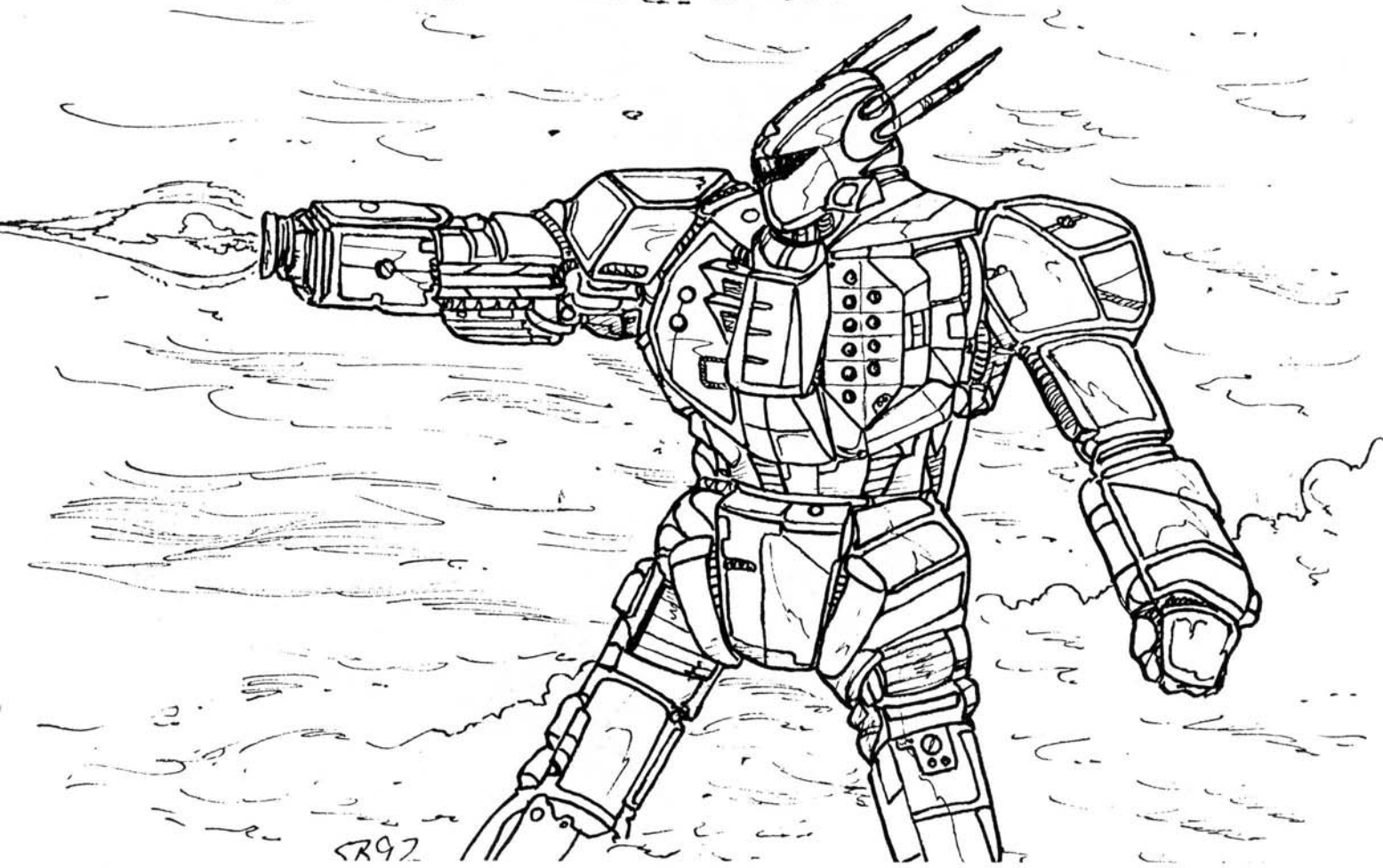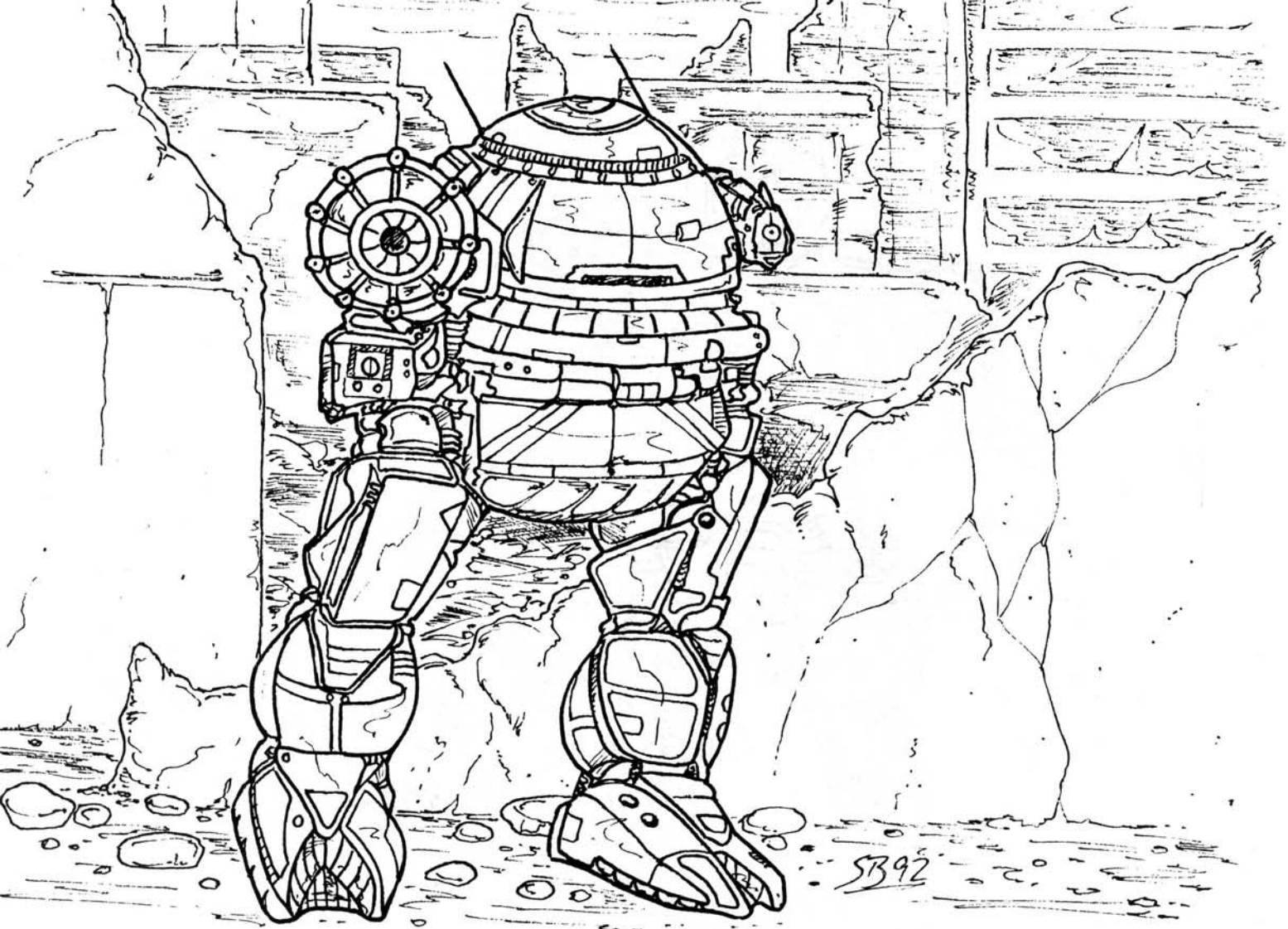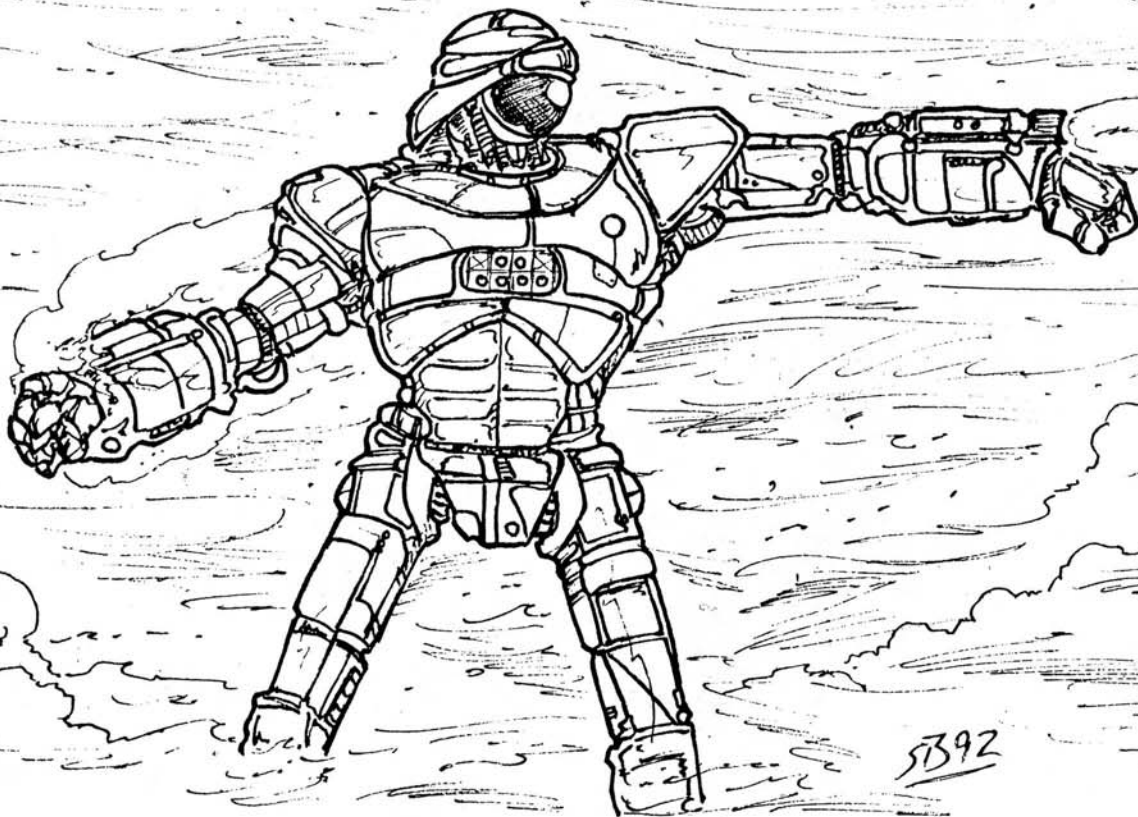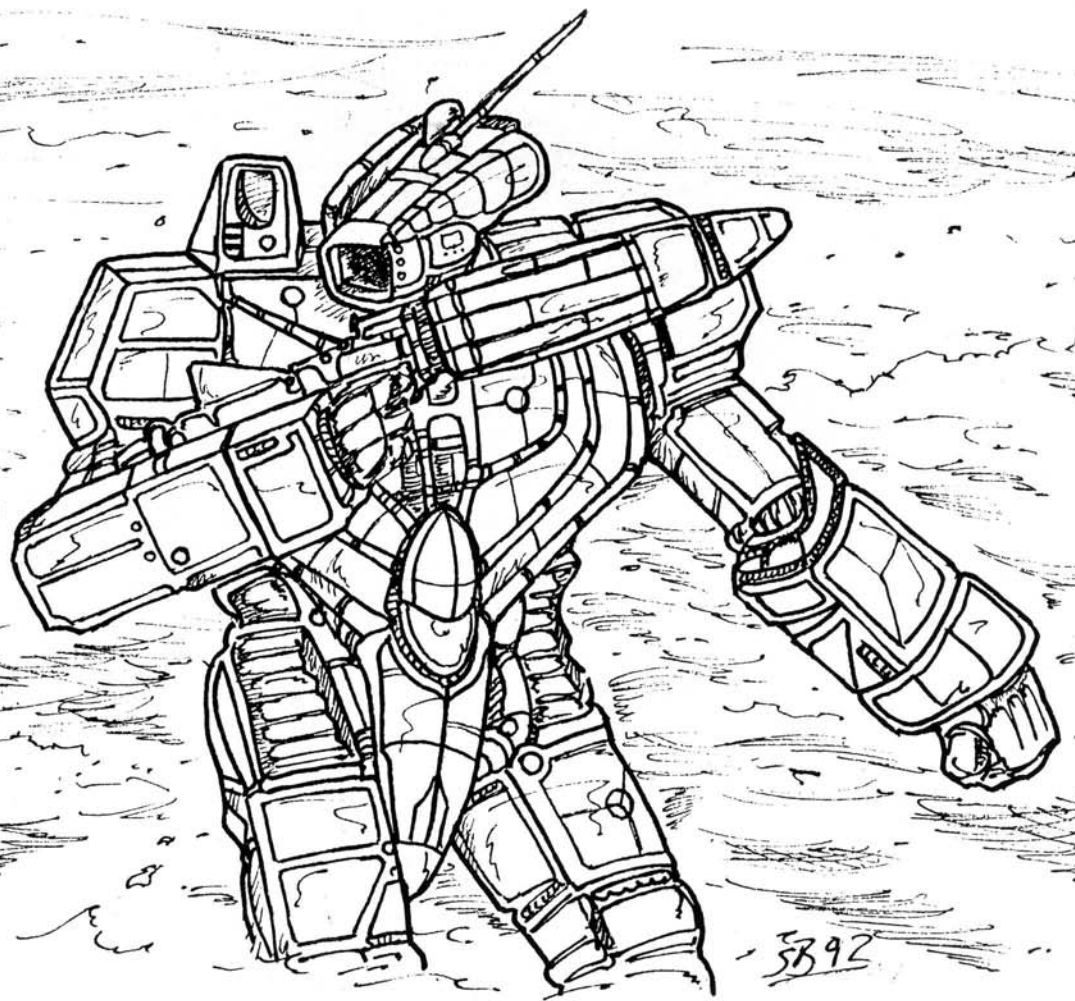
below)

```
 0.5-4.0 tons      4 critical locations
 4.5-6.0 tons      5 critical locations
 6.5-9.0 tons      6 critical locations
 9.5-12.0 tons     7 critical locations
12.5-16.0 tons     8 critical locations
16.5-30.0 tons     9 critical locations
      30.5+ tons   10 critical locations
```
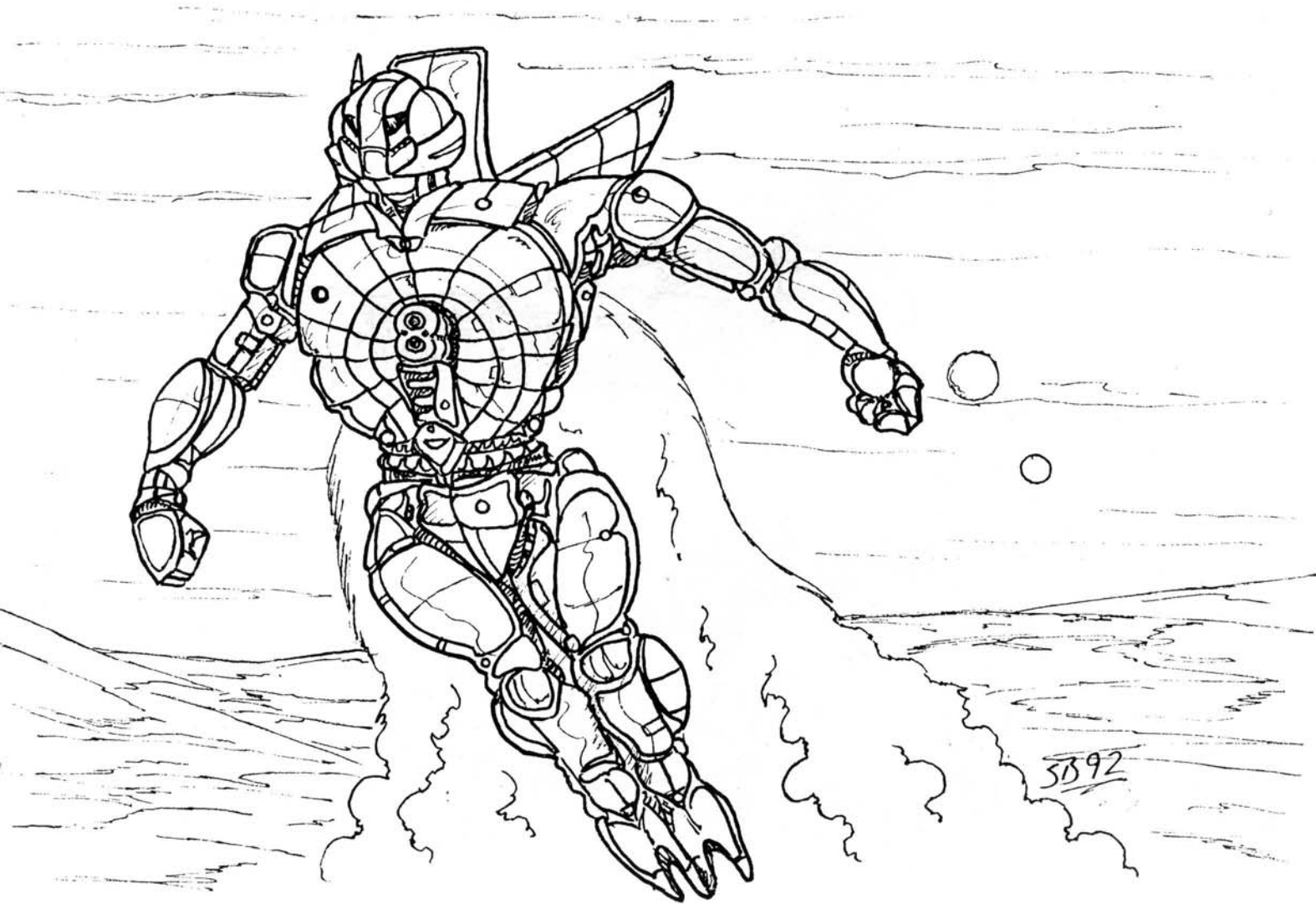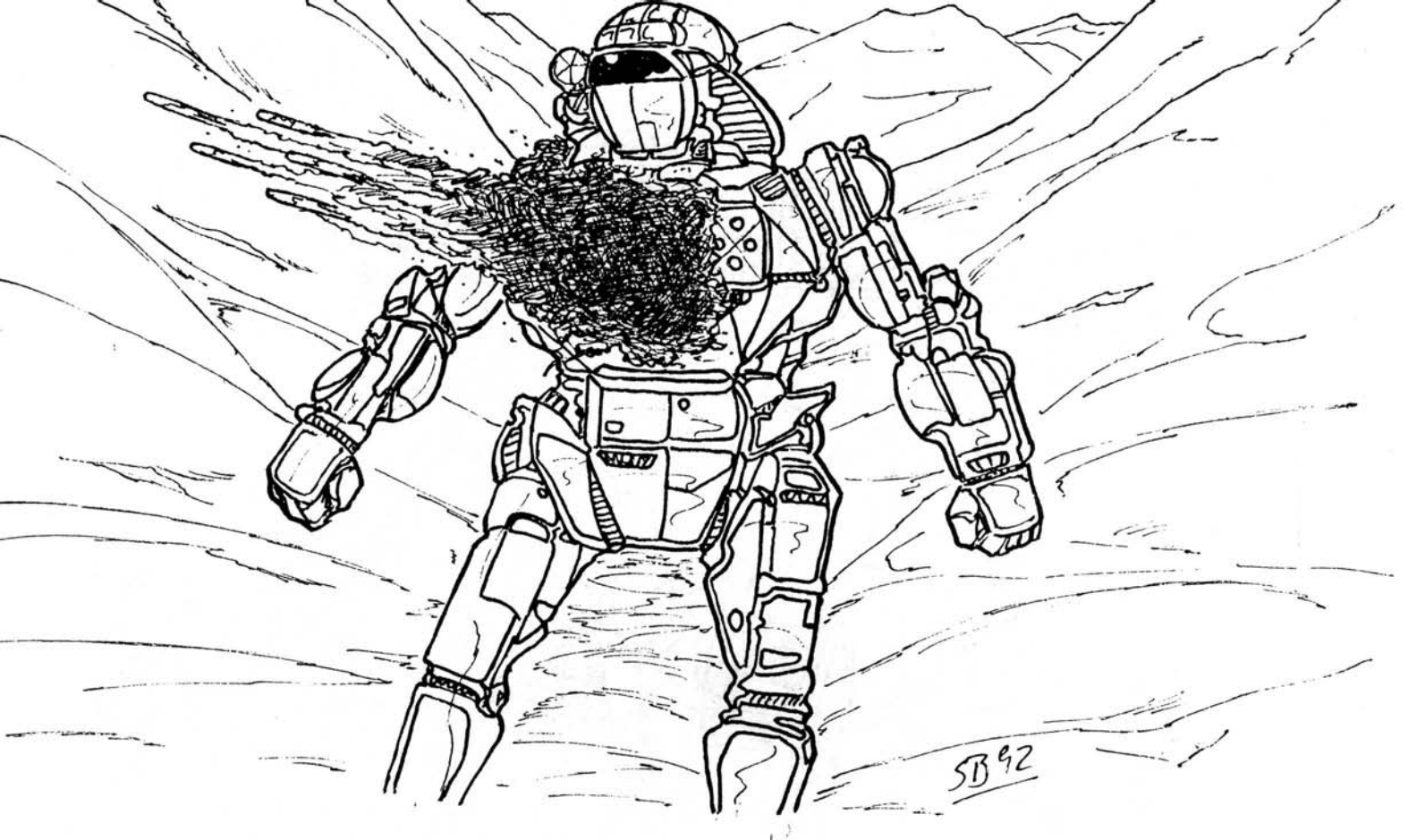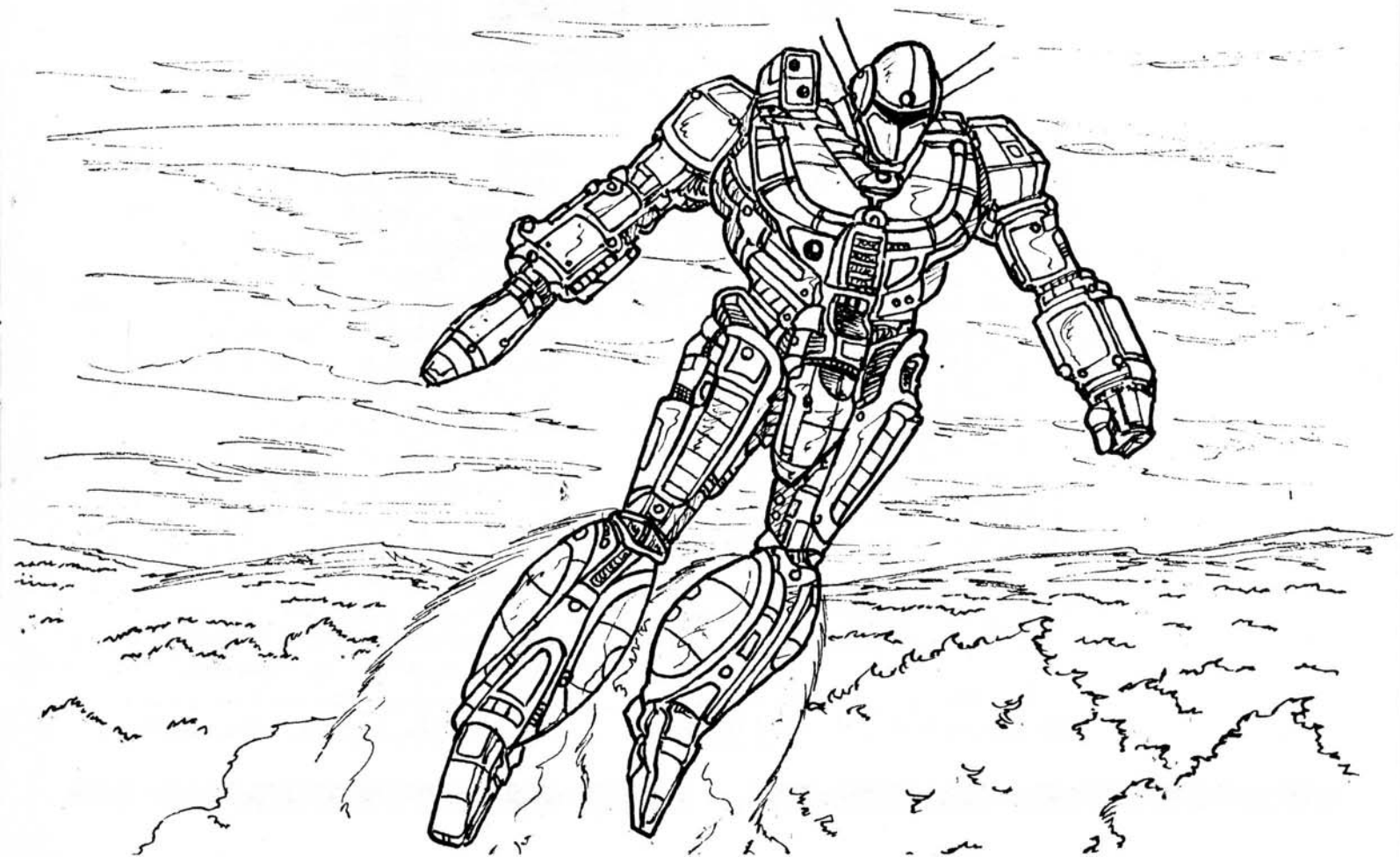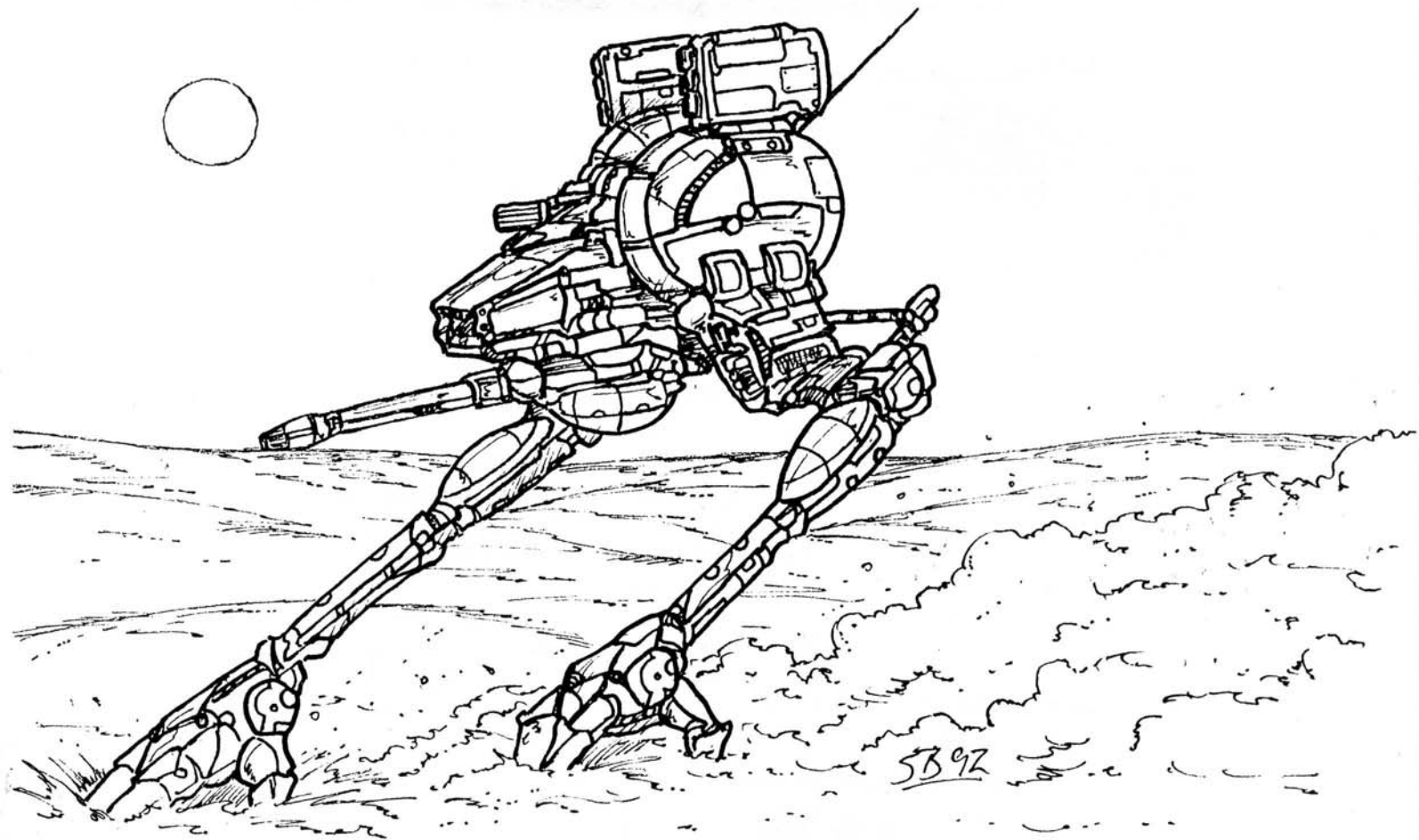
Gyros
Gyroscopes take up one critical space per ton.

Optional Rules For Building Walkers
In Battletech there are no rules for building 4 legged or 'walker' mechs, though there are two in the technical readout. As a matter of fact, the only rules I ever found were packaged with a plastic model of one of the walkers and they were not consistent with the mech description in the 3025 manual. Consequently, I have worked out a design scheme which is compatable

To determine which critical spaces are the turret part of the control section simply consider anything on the critical chart listed below the turret mechanism to be in the turret, and everything else is in the main part of the control section.

The hit location table uses the following abreviations; Fr for front, Rr for rear, Rt for right, Lt for left, and CS for control section.

Hit Location Tables (See table below)

Infantry and vehicles in the same hex as a walker use the hit location for Front/(Rear) with the following modifications; when a location could be either front or rear, determine randomnly which is hit and treat all control hits as center torso hits.

The center torso may only mount the following weapons; machine guns,

Die Roll	Right Front/(Rear)	Front/(Rear)	Left Front/(Rear)
2	Center Torso	Center Torso	Center Torso
3	Fr/(Rr) Torso	Rr/(Fr) Rt Leg	Fr/(Rr) Torso
4	Rt Rr/(Fr) Leg	Rt Torso	Lt Rr/(Fr) Leg
5	Rt Fr/(Rr) Leg	Fr/(Rr) Torso	Lt Fr/(Rr) Leg
6	Rt Torso	Fr/(Rr) Rt Leg	Lt Torso
7	Rt Torso	Fr/(Rr) Torso	Lt Torso
8	Rt Torso	Fr/(Rr) Lt Leg	Lt Torso
9	CS	CS	CS
10	Fr/(Rr) Torso	Lt Torso	Fr/(Rr) Torso
11	Lt Rr/(Fr) Leg	Rr/(Fr) Lt Leg	Rt Rr/(Fr) Leg
12	CS Critical	CS Critical	CS Critical

with the standard Battletech rules and my variations.
Walkers have the following hit locations; R front leg, R rear leg, L front leg, L rear leg, front torso, right torso, center torso, left torso, and control center. Walkers also have a 360 degree arc of fire.
The control center may mount a turret; if so, the turret takes up two critical spaces and wieghs 3 tons in standard Battletech. In my alternate system the following applies;

```
Light Mech     1 critical location    2 tons
Medium Mech    2 critical locations   3 tons
Heavy Mech     3 critical locations   4.5 tons
Assault Mech   4 critical locations   6 tons
```

For damage purposes this is considered part of the control section.

small lasers, and flamers. These weapons may only be used on infantry and vehicles in the same hex as the walker. They fire at short range with an additional -2 to hit modifier which gives a base to hit of 8. The flamer causes no direct damage to the walker unless the hex that it is in is on fire, then it takes the normal fire damage.
Firing arcs of the walker are shown on the attached firing arc sheet. Weapons that are not mounted in the turret but that are in the control section fire either to the front or the rear. Turrets use the standard turret rules. Leg mounted weapons fire into the arcs of thier quadrant, ie, weapons on the right front leg could fire into both the right and the front arc. Also, walkers,

having no arms, can't punch. They may, however, kick in any direction if all thier legs are intact. If they lose a leg they may no longer kick, as they will have all they can handle just staying upright.

(Note: a walker may have no more armor in any hit location than double it's structure points in that location.)

that are still operational. Actuator hits on destroyed legs, including legs with hip criticals, have no effect on movement as they are superceded by the loss of the hip or leg (this also applies to two legged mechs). Hip criticals taken after one leg ceases to function, which could have been caused by a hip critical, effect a walker the way they would a normal mech.

Internal Structure For Walkers

Tonnage	Tons Required	Center Torso	Other Torsoes	Legs	Control Section
10	1.0	1	2	1	2
15	1.5	2	2	2	2
20	2.0	3	3	3	3
25	2.5	4	4	4	4
30	3.0	5	5	5	5
35	3.5	6	6	6	6
40	4.0	6	7	6	7
45	4.5	7	8	7	8
50	5.0	8	10	8	10
55	5.5	9	11	9	11
60	6.0	10	12	10	12
65	6.5	10	13	10	13
70	7.0	11	14	11	14
75	7.5	12	15	12	15
80	8.0	13	15	13	15
85	8.5	14	16	14	16
90	9.0	15	17	15	17
95	9.5	16	18	16	18
100	10.0	17	19	17	19

Walkers get a movement point bonus if all four legs are operational. Determine walking movement as you would for a two legged mech and then multiply by 1.25, dropping fractions of .25 and rounding up the rest. This will give you the walking movement for all four legs. You can calculate the running movement using this number as the base. Also, there is a piloting bonus of +3 when all four legs are operational. However, if one leg ceases to function, be it either through a hip critical, loss of all structure, or by being blown off, then the walker loses all bonuses and moves as if it were a two legged mech. If two legs cease to function, the walker may only crawl (though it'll look awfully strange). And with three or more legs inoperative, it, of course, can't move. Critical hits to legs have the same effect on a walker as on a regular mech, except as noted above, and as follows; actuator hits reduce MP's off a walker's current movement base, which in turn depends on how many legs it has left

Placement Of Criticals

The cockpit, life support, and sensors are placed in the control section in the same way they would be placed as per the standard Battletech rules, as well as the engine and the gyro in the center torso, and the legs.

Critical hit tables for standard Battletech rules are the following; each leg one table, all torso areas except the center have one table each, while the center torso and the control section have two critical tables each. The optional variant critical spaces are listed below.

```
Light Walkers (0-35 tons)
Each Leg               6 critical locations
Lt/Rt/Fr/Rr Torso      6 critical locations
Center Torso           8 critical locations
Control Section        7 critical locations

Medium Walkers (40-55 tons)
Each Leg               8 critical locations
Lt/Rt/Fr/Rr Torso      8 critical locations
Center Torso          10 critical locations
Control Section        8 critical locations
```

```
    Heavy Walkers (60-75 tons)
Each Leg                10 critical locations
Lt/Rt/Fr/Rr Torso       10 critical locations
Center Torso            12 critical locations
Control Section         12 critical locations

    Assault Walkers (80-100 tons)
Each Leg                12 critical locations
Lt/Rt/Fr/Rr Torso       12 critical locations
Center Torso            14 critical locations
Control Section         14 critical locations
```
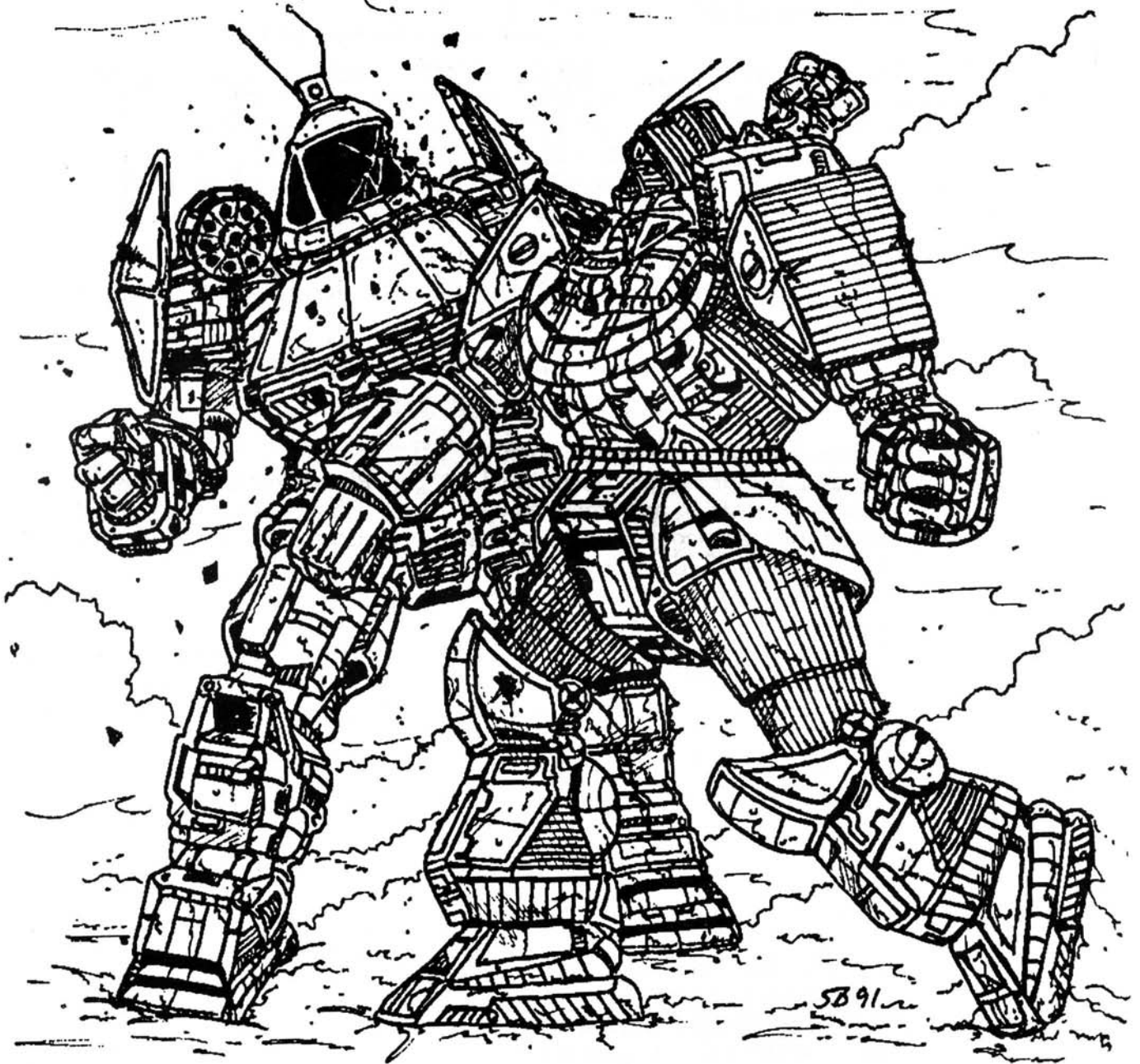
BattleTroops Review

by
Herb Barents

Along with the third Tech Readout, BattleTroops appeared at Gen Con. It hit the stores about a week before the Con. These are the Man to Man rules for use with the BattleTech game. Well you cannot use it directly with BattleTech because they are on different scales, but you can use the 'mechs and vehicles with this game. What we do have is a game with which you are able to do a lot of small unit actions, Mechwarrior, commando raids, ect. No longer do you have to play a Mech jock to have fun. Although the rules are not as simple as BattleTech, I feel that this game could be more fun. In fact I would say that in two years you will see people making entire street scenes for this game.

But exactly what is BattleTroops anyway, and what do you get. For $20 you get a boxed set board game. The cover art is nice, although I felt the downed mech could have been better done. Still the picture does capture your eye. Overall you get a nice looking box, though you are already used to that from FASA. Now for what the box contains. Four maps printed in two colors, one sheet of full color standup counters, ie cardboard Hero types, one sheet with the mech and vehicle templates. Two sheets of various status counters and markers. Plastic bases for the standup counters and a couple of dice round out the box. Of course I forgot to mention the Rule Book, 30 pages of rules, a couple pages on how to organize your troops, four scenarios, and to finish off the book about 10 pages of maps and troop record sheets. A very attractive package.

I like the way they have given you the maps to photocopy. This will allow you to play blind games by handing

sheets into the GM and him placing units on the board as they appear to the enemy. Copying the troop sheets is a must as you will run thru them very quickly. Overall a nice package, and for $20 you get your moneys worth. The package will sell the game, but the rules will allow you to play the game more then once, if at all.

FASA has come up with a nice playable system for small group actions. Like BattleTech, if you get to many units on the board it makes for a long game. What we have with BattleTroops is a skirmish game, that is a board game, but will do very will do very well for miniatures. In fact I would suggest using the 25mm Ral Partha miniatures from the start, or the Star Wars mini's all of these would be adaptable into this game. More maps will be necessary in the future as people will want more variety. I would STRONGLY SUGGEST that when they do more map sets they keep the photocopy maps as they make it easier for role playing. Since I first read the rules my mind has been running wild with the possibilities for this game. But I digress from the review here.

Back to the rule book. We have a very nice looking book that is well laid out, starting out with the basic rules and working on up for more realism and added playing time. This game has taken alot from Sniper and many other man to man games and added a few new ideas to come up with this system. The game turns are a matter of movement, moving one soldier at a time, and taking fire as you move thru LOS and firing arcs. When you are done moving if you have movement points left you can set up firing arcs of your own. Hand grenades are thrown, then you explode them as well as area of effect weapons. Side B then does the same as side A. Then there is the end turn phase. Thus you can see that all players are active in this game at all times.

The maps are laid out with stars.

You move from one star to another in this game. The star fields are laid out in a hex pattern. Why stars instead of hexes then. One reason, the buildings are square as we would perceive buildings. If they used hexes there would be to many questions as to where they and other terrain features are. But with the stars you get rid of some of these questions, plus it looks better. There are some problems with these maps in that all the floors are exactly the same. But then that is just something that we have got to put up with for now.

It costs various amounts of MP's to move through different stars. You must also spend MP's to set up arcs of fire, the more MP's that you use the larger your arc of fire. Then in the next persons turn you get to fire at them whenever they move through your firing arc and LOS. Some weapons will reach the entire map though at short and long ranges, and some will go out 180 stars. As you can see, if you have LOS you can probably shoot at it. Thus in this game thinking ahead and using good, solid tactics is very important. You must have people moving and people being able to fire at all times. Movement will allow you to get into good positions and firing arcs will allow you to stop people from getting into good positions on you.

Combat is pretty simple and is done the same as in Battletech. You have a base to hit number and from that you have additions and subtractions giving the hit number needed. If you have played BattleTech you will understand very easily.

Damage, on the other hand, is handled alot differently then what we have been used to in BattleTech. We have a chart for each soldier. There are boxes numbered from 1 to 10, a zero, and a dead box. Each weapon has a lethal damage. This is how many boxes it will fill up. When you reach the dead box your dead. Now you say, but the best weapon has 4 levels of lethal

damage, this means that it will take 3 hits to kill someone. No it will not. You know that if you get hit in the right spot your dead. Or if you get hit in a different spot it could take alot longer for you to die. You roll 2d6 to determine which box you start marking damage from for the hit. For example, say I get hit with 4 lethal damage, I pick up 2d6 and roll a 3, Box 3, 2, 1, 0 would be checked off. I am unable to do anything now. If I were to be hit again and roll a 6 I would mark off the 6, 5, 4, Dead boxes and that piece would be dead. If when I was hit the second time I rolled a 10 I would have marked off the 10, 9, 8, 7 boxes, almost dead but not yet gone. This is a very good system to allow for the various types of hits that could occure and still keep the game very simple.

They also have sections covering different types of weapons. Basically they give you rules to convert MechWarrior weapons to this game system as well. They cover grenades, plastics, satchel charges, and support weapons in the rules, giving you various charts and tables to use. They cover mechs and vehicles in the rules as well and although there is alot of space devoted, they are very easy and just have to take you through a number of items. If you get hit with a mech, you are dead. Even a Small Laser does 12 lethal damage.

The rules cover how to attack mechs, the conversions to bring the BattleTech mechs and weapons and time scales into the right areas. Although they do some fudging, it isnt much and keeps the game playable. They gloss over mech to mech and vehicle combat refering you to the BattleTech rules. Really, this game seems to take both game systems and do a very good job of joining them. Although you can pick at alot of things, they have made both games compatible and you will find out fairly quickly that a mech in the city will not stand up long against troops of infantry.

They have added Morale into this game. You have a base number, depending on your status, that will determine if you will run. They have also added a new ratings, Green, Regular, Veterans, and Elites. They all have their base to hold numbers with various actions modifing the die roll. This is something that could be modified and used with BattleTech.

Overall I like very much what FASA has done with this game. I feel that it is a very good addition to the line, and I can see various uses for this game. It should be a very good seller for them and parts of this game will interest a lot of people whether or not they play BattleTech. It's worth the $20 and people should be playing this game for some time. Good buy, good game.▲
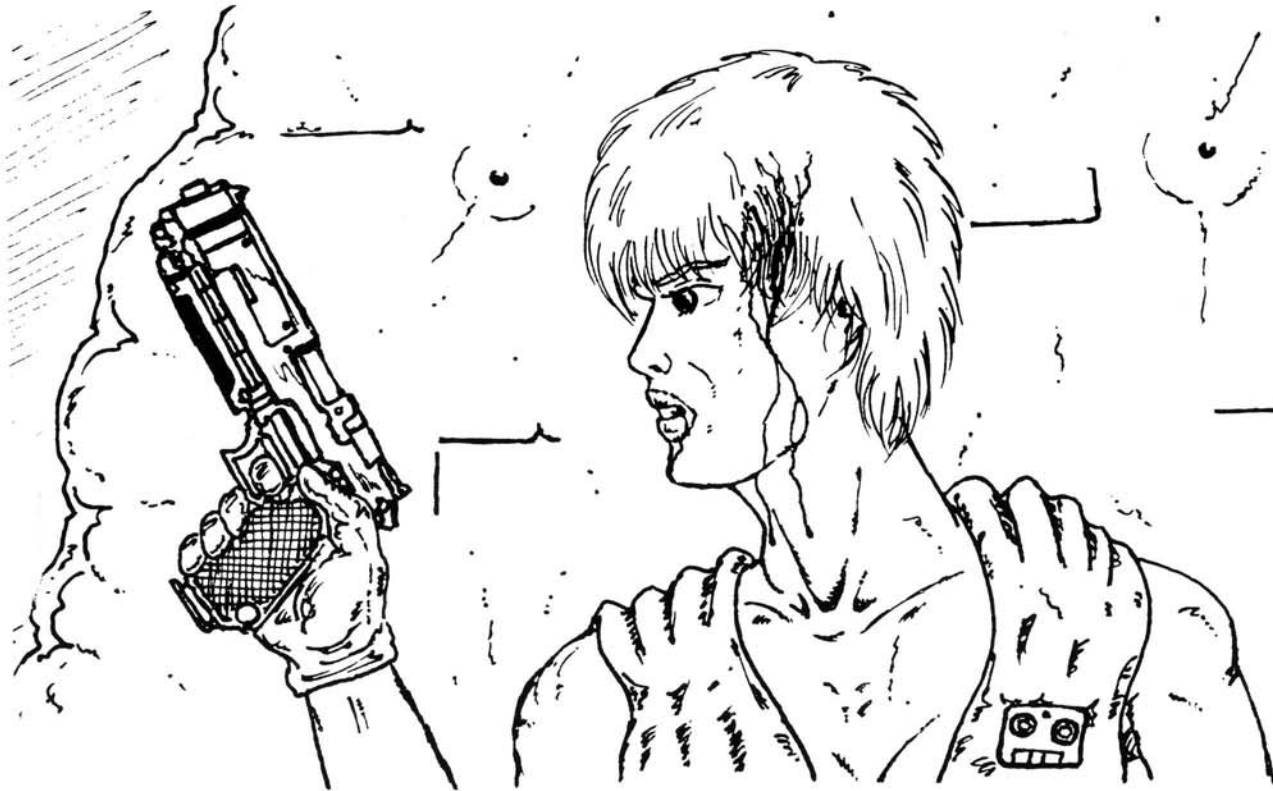
Battletech Planetary Assault Rules

by
Michael Reese

Reference:
MEGATRAVELLER by GDW
SASS by Craig Taylor Jr.
THE COURIER, Vol VI, No. 3

These rules will provide a "strategic" campaign for Battletech based upon the assault of a planet and the campaign following for control of that planet. It can be usedseperately to create tactical Battletech games or within an overall campaign game. The rules adopt certain aspects of Megatraveller to create the planet and are based on the system expounded in the SASS article (SASS stands for Short And Simple Strategic) noted above. The Battletech rules Miniaturized, i.e., play is on a tabletop using three-dimensional terrain and a scale of one inch equals one Battletech hex. (Note: 1/285 scale would be three inches equals one Battletech hex.)

The Basic Rules

1.0 Organizing the armies.
1.1 Commanders: First, decide what players will be on what side.
1.1.1 Let the players select a Commander-In-Chief and rank the players in order of seniority.
1.1.2 When the CIC is not present, the highest ranking player for a side present handles any and all strategic operations.
1.2 Army Size: Balance the strategic game armies the same way that a huge tabletop battle would be balanced using the available miniatures. Recommended are two methods:
1.2a First, give both sides a weight of forces available. For example, each side gets 5000 tons of mechs and Armored
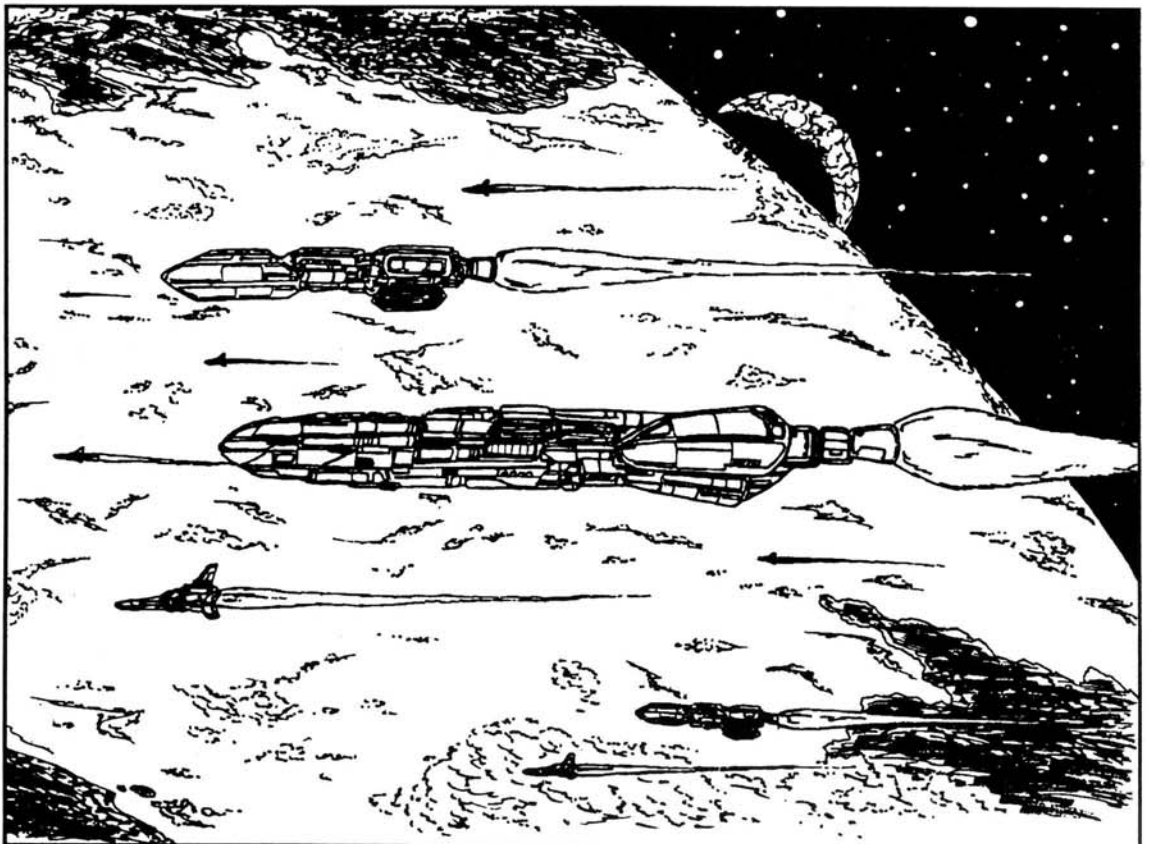
Fighting Vehicles (AFV), Self-Propelled Guns (SPG), Armored Personnel Carriers (APC), miscellaneous vehicles (Missile carriers, hovercraft, armored cars, armored scout vehicles, etc.), and infantry. One platoon of foot infantry equals 5 tons. Motorized infantry (in trucks) equals 10 tons. Jump infantry and paratroopers equal 10 tons. Armored infantry (in APC or hovercraft) equals 5 tons plus the weight of the vehicle.

1.2b Second, give each side a regiment based the standard regiment as outlined in FASA's Mercenaries Handbook. If running a large "space" campaign, just use the units in that campaign. Having fair sides is not important in this case.

1.2.1 Available Figures and Army Sizes: It is strategic madness in this system to have every unit massed in one place at one time. Therefore, it is safe to allow 120% to 150% of the painted units avaible in the armies.

1.2.2 Organization: The units should be organized and officered appropriately for the units used.

1.2.2.1 Special units, such as Long Toms, should be limited. A regiment might have a company, but no more than a company. The normal/average mech regiment has mostly medium mechs.

1.2.2.2 Guidelines should be laid down conforming to the period (i.e., regiment has X numbers of Aerospace fighters and three battalions of three companies of three lances of four mechs in it. No mech over 100 tons. All units must conform to Battletech rules.).

1.2.2.3 Dropships and Fighters: If your unit does not have these in its' organization, or if organizing now, then add the dropship types listed below. You may use only enough dropships to carry your force, and no more. You may use Type DSA only to fill out odd requirements (i.e., DSB and DSC are standard. A regiment would not be carried in DSA's). You may recieve a number of fighters equal to the capacity of your dropships. Note: DSA may carry only light aerofighters.

DSA (Leopard) 4 AFV/Mech, or 2 PLT Infantry, plus 1 light Aerofighter unit
DSB (Union) 12 AFV/Mech, or 8 PLT Infantry, plus 1 Aerofighter unit.
DSC (Overlord) 36 AFV/Mech, or 24 PLT Infantry, plus 3 Aerofighter units.

Air Transport. A transport counter (4 planes) can carry 1 Lance/Platoon Mech or AFV, or 4 Infantry/Paratroopers.

Sea Transport. A ship counter (4 ships) can carry 1 Mech/AFV or 8 Infantry plus 1 Aerofighter or fighter unit.

1.2.3 Troop Substitution: The units organized for the strategic game should be identified by name or number. The identifications do not need to have any relationship with the figures actually available (although that can be done) so that for a tabletop battle, any available and suitable figures may be substituted for the paper strategic figures.

1.2.3.1 Using paper units avoids many of the problems encountered when specific units are not available at a meeting when a battle is due to be fought.

1.2.3.2 This is also the reason that your strategic armies can be larger than the total number of painted models actually available, as the same models can be used as different units at different battles.

1.2.3.3 However, if you do have sufficent figures and a fixed order of battle, then the paper units will correspond to the actual units.

1.2.4 Order Of Battle Sheets: The Referee or CIC must prepare complete order of battle sheets of the strategic armies showing the strategic unit identifications and organizations, unit strength, unit quality and/or troop types, general officers, and their commands. Leave room next to each unit to mark losses.

1.2.5 Maneuver Elements: The maneuver elements for the strategic game should be company sized. A company can be from 2 to 5

lances/platoons (standard is 3 for AFV, 5 for infantry) in size. Normal size is three lances/platoons for mechs and AFV, five for infantry units (HQ, 3 line, 1 heavy weapons). A recon/scout or a leader unit may be used representing a lance/platoon. These are the only units that may be that small and represented by a counter.

1.2.5.1 There is no reorganizing of elements between or transfer of figures between different maneuver elements during a battle.

1.2.6 Leaders: Where leaders are present (representing the players), seperate leader units (i.e., command lance/platoon) may be used. Where there is no special leader unit the leader is considered part of the unit.

1.2.7 Indigenous Forces: There may be a planetary defense force or local defensive forces other than that of the players (i.e., the players' employers). It will be represented up to ten maneuver units broken down as 5 infantry, 3 armor, and 2 air units plus 5 dummy counters. The type will be determined by the tech level of the planet.

Tech	Infantry	Armor	Air
0-3	None	None	None
4	Rifle	None	None
5	MG	WW II	Light Aircraft
6	MG	1950-1990	Jet Aircraft
7	SRM	1990-BT Tanks	Jet Aircraft
8	SRM/Laser	Mech	Aerofighter
Quanity	Roll for Armor/Air		
Die	Result		
1-2	L (T5 & T6)		
3-5	M		
6	H		

These forces are placed by any neutral judge, or by the defending player if no seperate judge.

1.2.8 Counters: Make up sets of contrasting color 2-sided cardboard counters with identifications of the maneuver elements (called combat counters) for use on the strategic matrix, and also have about half that number of counters for use as dummy counters. Senior generals (i.e., players) should also be represented by a general counter (i.e., command lance) each. If you have 10 maneuver units, you will have 10 combat counters, one for each unit, plus 10 DSB counters (10 Union dropships, if appropriate and if all maneuver units are mech/AFV, less if infantry), and 10 Aerofighter counters. Total; 30 combat counters. In addition, you would have 15 dummy counters for a grand total of 45 counters. A counter would be blank on one side (the up side) and have a number or letter on the other side for identification. Dummy counters would be numbered but identified as dummies on your table of organization sheet. A counter can represent;

1 command or recon lance/platoon or;
1 company of infantry or;
2 light Aerofighters (LAF)/medium Aerofighters (MAF)/ heavy Aerofighters (HAF) or;
2 tech 7-8 jet fighters (treat as LAF) or;
6 tech 6 jet fighters (treat as LAF) or;
24 tech 5 prop-driven aircraft or;
1 dropship DSA, DSB, or DSC, or;
4 transport aircraft or;
4 naval ships

2.0 Strategic Matrix-The Planet
2.1 Drawing A Strategic Map
A strategic matrix consists of nothing more than a sheet of ruled cardboard marked off into boxes. The turns are equal to one line per 1000 km diameter of the planet. The columns equal land or water columns. In addition, there is a seperate box labeled Orbit, which represents the near space around the planet. Be sure to make each box large enough to hold at least two stacks (one per side) of the cardboard counters.

2.2.1 Each box represents a possible tabletop battle site, and needs for the potential battlefield. Those of you using the Battletech hexboards can assign an identification number or letter to each map sheet, randomnly determine the different assemblies (per land boxes) possible, and mark how they are to be placed and oriented in each box. If using miniature terrain, use the sample random terrain provided below, rolling for the terrain in each square foot of the tabletop. The generic type of terrain in each square should be indicated on the matrix. Roll for the

exact terrain after it is determined a battle will take place in that square.

2.2.2 Setup Areas: When setting up a tabletop battle, the same side always enters and/or is placed on the same edges of the tabletop with reference to the strategic matrix boxes. Decide before the game which edges which side uses. For example, Side A always uses the top side of the box and Side B the bottom side of the box.

2.2.2.1 Defenders: If one side occupies the planet, then all of its' units are placed on the tabletop first at the start of the battle, but no closer than 500

equals lines on the matrix).

2.2.3.2 Atmosphere: Roll 2D6-7 plus planet size. If size equals 0 then the planet is in vacuum.

```
1-3 Trace Atmosphere (treat as vacuum)
4 Thin (tainted)
5 Thin
6 Standard
7 Standard (tainted)
8 Dense
9 Dense (tainted)
10+ Exotic
```

Tainted air requires breathing apparatus or filters or pressurized vehicles/mechs. Thin through dense is viable. Exotic requires a body suit or space suit or pressurized vehicle/mech. Exotic is lethal if breathed, and will
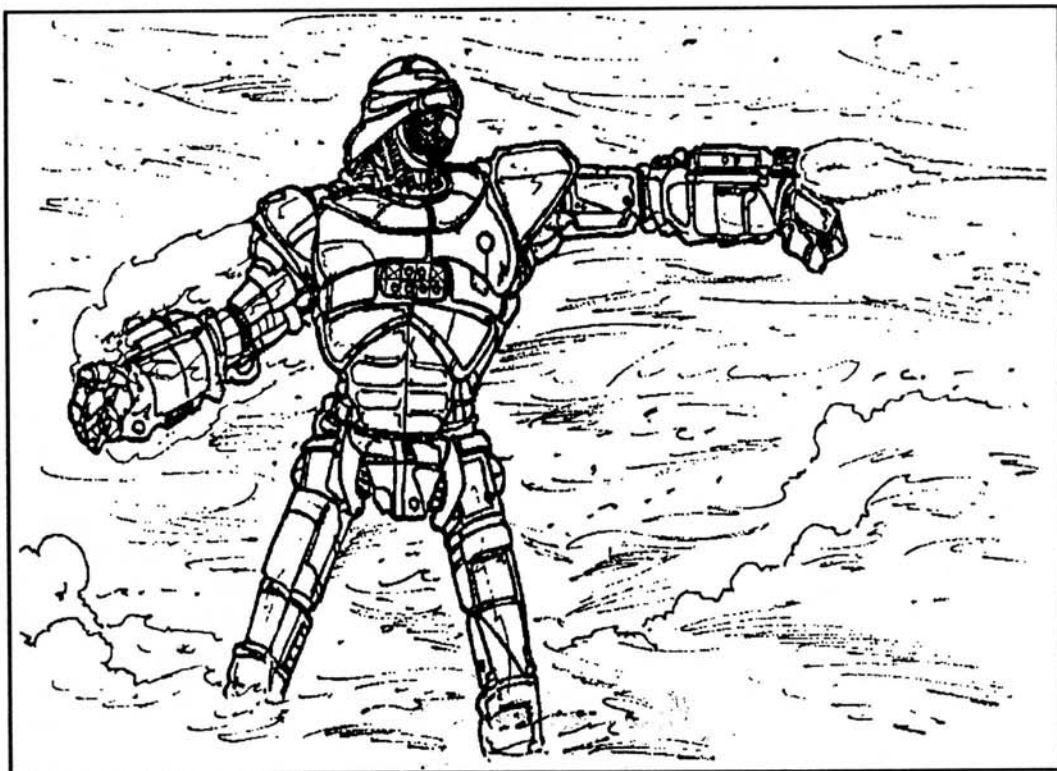
meters (16 hexes) of the other sides starting edge. Units which have not moved may be fortified or dug-in and hidden.

2.2.3 Determining Planetary Makeup (from Megatraveller)

2.2.3.1 Planetary diameter is determined by 2D6-2 in thousands of kilometers (A roll of 9 would equal 7000 km). A 0 is an asteroid, 1-4 a small planet, 5-7 a medium, and 8-10 a large (Earth is an 8 on this scale). An 11+ is a gas giant (size given here

damage air seals and equipment in time.

2.2.3.4 Hydrographics and Continents: Roll 2D6-7 plus planet size. If size is 1 or less, hydrographics is 0. If atmosphere is 1 or less or 10 or more, apply a die modifier of -4, with the result being the % of water. Example, Earth is a 7, or 70% water, thus the roll would have been a 6 (6-7+8=7).

2.2.3.5 Technology: Roll a D4 and modify as follows; if size is 0-1, add 2, or if size is 2-4, add 1. If atmosphere is

0-3 or 10+, add 1. If hydrographics is 9+ add 1, if 10+, add 2. Maximum tech is 8.

```
0 (or less) Hunter/gather
1 Ancients
2 Pre-industrial
3 Industrial (WW I)
4 Atomic (WW II)
5 1950-1960
6 1961-1990
7 Battletech aerofighters and AFVs
8 Succession War period
9 Star League
```

2.2.3.6 Layout

A. For each 1000 km diameter, there will be one row on the matrix. If size is 0 or 1, there will be one row.

B. For each 10% of hydrographics, there is one water column seperating each land column. However, the maximum number of columns on the matrix is ten. Earth would have 12 lines, with 7 water columns and 3 land columns.

C. Types of terrain are:

P   Plains
H   Hilly
W   Wooded/Hilly
F   Foothills
M   Mountainous

D. Overlying conditions affecting the types of terrain are:

```
C   City (Metropolitan)
I   Ice
D   Desert
J   Jungle
Terrain Type
```

	Plains	Hilly/wooded	Foothills	Mountainous	Desert
Jungle					
Hill Class 1	-	1-3	1-12	1-20	1-03 As
Other					
Hill Class 2	1-3	-	-	-	4-13
Types					
Steep Hill	-	-	-	21-40	-
Hill/Lt Woods	4-6	4-6	13-18	41-45	-
+					
Hill/Hvy Woods	-	7-9	19-21	46-55	-
Marsh	7-8	10-15	22-24	-	-
All Hvy					
Stream	-	-	-	56-58	14-17
Woods					
Farm/Village	9-14	16-21	25-28	59-64	-
Village	-	-	-	-	18
Except					
Field	15-34	22-35	29-38	65-67	-
Fields,					
Lt Woods	35-39	36-44	39-58	68-73	19-25
Marshes,					
Hvy Woods	40	45-50	59-70	74-85	-
Farm/					
Grass	41-100	51-100	71-100	86-100	-
Villages					
Desert	-	-	-	-	26-100

Notes:

1. All hills are class 1 unless described as class 2. Mark the center of the 1 ft square with a small triangle to indicate a hill. After completing the map, determine the midpoints between the hills. This is the radii of the base of the hill. Where hills are indicated to be in adjoining squares then it is one hill. Hieght of a hill is 10 meters for a 1 ft, and 10 additional meters for each adjoining hill. Thus if three 1 ft squares where adjoining then that hill would be 30 meters high. The radii is drawn around the hill and represents the lowest point of ground. Hill topographical crests are then drawn with the crests connecting the different hills at the point the hills touch.

2. Class 2 hills in the desert is a sand dune and within 100 meters of the dune rather than 200 meters you can be seen. The ground within 100 meters of the dune is soft sand. Connect class 2 hills by a line. This indicates the two endpoints of a class 2 hill. If there is only one class 2 hill indicated on the table, then the other is off the table. Roll 1D8 for the direction the hill line will go off the table; 1 is north.

3. Steep hills are as class 1 but having a slope of more than 45 degrees.

4. Light woods = WRG open woods. Heavy woods = WRG dense woods. In desert light woods equals an oasis. Roll 1D6 for the number of buildings in the oasis. Heavy woods cover the entire square, light woods are sparse patches.

5. Marsh = boggy ground in WRG. Connect marshes with streams/rivers. Marshes cannot be on a class 1 hill. Streams flow along the low ground between hills and on level ground. Streams run off-table if only one marsh using ruling in 2. above. Streams connecting marshes should be continued to run off the table.

6. Streams are treated as marshes except there is no marshy area and instead you have the stream only. In desert a stream equals a wadi (dry stream bed).

7. If roads and towns are placed before the random terrain is rolled, then treat as farm. Otherwise, treat as a village. Connect villages with roads. Roads stay on level ground where possible and avoid marshes. Where they cross a river there is a bridge or a ford, or in the case of a wadi, a cut. Roads are often lined by trees.

8. A village in the desert is also an

oasis.

9. If harvest season (normal fall, ie july-sept) then the field is up (ie the grain or corn is high) or if you chose, roll 1D6; on a 5-6, the field is up. Roll only in the fall. Treat as a wheatfield. If the field is not up then treat as grass or boggy ground if raining. Fields are either bordered by hedgerows (as in Normandy, France) or at the least trees on the windward side.

10. If the terrain is hilly then treat light woods as plains/no woods and dense woods as light woods.

11. Jungle terrain is treated according to the type of underlying ground. Thus if the ground is flat use the plains table, and if hilly use the hilly/wooded table. The difference is that after placing all of the terrain all of the table is covered in dense heavy woods (jungle) except for fields, marsh, and farms/villages. Roads and streams cut through the jungle but only their own width as the jungle comes right up to them on all sides. Connect farms/villages not adjacent to the fields by trails (ie width of a man or a ATV).

12. Arctic regions have only plains, hills, or mountains, all of which is covered by ice and snow.

3.0 Playing The Game
3.1 Starting The Game: Use competitive die rolls to determine who goes first. If defending a planet that side rolls at a -2 (-20%). The C-I-C (or ranking player) going first places any one of his counters in any of the first turn boxes or the orbit box. The other C-I-C then places one of his counters. Repeat until all counters are either in the first turn or orbit boxes.
3.1.1 All counters should be placed and inverted on the strategic map so the other side cannot tell the real counters from the dummy counters. The players of a side may look at their counters at any time.
3.1.2 After completing the intial set-up, every turn is played the same.
3.2 Playing A Turn: A turn on the

strategic matrix consists of resolving the situation in orbit and in all the boxes on the current turn line. Only the current turn line is resolved; ignore boxes on later turn lines even if they contain units from both sides. Each resolution of a box will require a tabletop game. At the start of a turn the orbit box is resolved first. Combat is conducted in orbit until only one side retains units there.

Fighters and DS are allocated points. 1 point for a LF or a LAM, 2 points for a MF, 3 points for a HF, and 5 points for a DSA, 8 points for a DSB, and 12 points for a DSC. An orbital station has 8 points. Losses in combat will be by points. Losses will be taken from LF, then MF, then HF, and finally from DS. DS engage only when they have no fighter escort left. If the planet has fighters (ie atmospheric craft) they take no part in the orbital combat but can be used in lieu of aerofighters in ground attacks.

An orbital battle takes place in orbit around the planet. Each side counts up all the points of all the aerospace fighters in the orbit box. The battle is fought until one side has no aerofighters left. That side then may wtihdraw its DS or count up all the points of all the DS it has in orbit. The other side adds the points of its DS to its remaining fighters. The orbital battle is then fought until one side or the other has no fighters or DS in orbit. If there are any orbital stations in orbit then the remaining fighters and DS may attack them. Note that destroying an orbital station does not knock it out of orbit. The winning player in orbit has the option to attack or not attack the orbiting station(s) and, if successful, the option to destroy it or capture it.

Fighter Engagement Table

Roll 2D6. The attacker is automatically the side with the greater number of points;

Roll 2D6	Odds (attacker/defender)				
	1 to 1	1.5 to 1	2 to 1	2.5 to 1	3 to 1+
2	2/1	3/2	2/2	1/1	1-1/1
3	1/1	1/1-1	1/2-4	1-1/1	1-2/1+1
4	1/1	1/1	1-1/1+1	1-2/1+1	1-2/1+2
5-9	1/1	1/1+2	1-2/1	1-3/1+4	1-4/2
10	1/1	1/1+1	1-2/1+1	1-3/1+5	1-5/2
11	1/1	1+1/2	1-2/1+2	1-4/2	1/2+2
12	1/2	2/3	1-2/1+3	1-4/2+2	1+1/2+4

Roll 2D6 and compare the results to the odds (ratio of attacker to defender). The cross-indexed result is the number of D6 rolled, modified by + or -, or not at all. For example a roll of 6 on 2D6 at 2/1 odds means the attacker loses a number of points equal to a D6-2 and the defender loses a number of points equal to a D6. DS are counted in the numbers only when all the fighters are gone. Partial damage points (ie, 1 point when you have an 8 point DS left) indicates a damaged fighter or DS. A damaged ship will withdraw to the planet. Once the battle in orbit is completed, then the winning player has a choice to drop his troops in DS and/or his remaining fighters in orbit into any of the land squares of the current turn line. This step is done immediately. For battles on the planet, first place the units leaving orbit into the land squares they are deploying to. Then the ranking player for each side secretly writes "fight" or "withdraw" for each of the boxes in the current turn line in which both sides have counters. Then, going from left to right on the current turn line, the written orders are revealed, compared, and resolved.

3.2.1 Withdraw Decisions: For the moment, skip any box or boxes where both sides have fight orders or which contain the counters of only one side. In the boxes where one or both sides have withdraw orders, the withdraws to other boxes are resolved immediately when the box is reached.

3.2.1.1 Any or all of the withdrawing counters may be moved down one line in the same column (turn 1 line column 1 to turn 2 line column 1).

3.2.1.2 Any or all of the withdrawing counters may be moved down two lines and shifted to an adjacent column. (turn 1 column 2 to turn 3 column 1 or 3) NOTE: This is subject to water column restrictions.

3.2.1.3 If both sides in a box have withdraw orders, use competitive die rolls to determine who moves first, then alternate moving one counter at a time until all have been moved from the box. NOTE: Neither player should know if his opponent is moving real or dummy units.

3.2.1.4 After all withdraws are finished, all counters that have fight orders in a box from which the enemy withdrew are moved as covered in 3.2.1.1 and 3.2.1.2 above.

3.2.1.5 Units having dropships to carry them or aerofighters which are withdrawing may withdraw to orbit or to any other land box in a turn line below the current turn line.

3.2.1.6 Only naval units and hovercraft may use water columns for movement. If a water column is located between two land columns, any ground units shifting between these land columns must be hovercraft or transported. Transport may be by naval craft, hovercraft, air transport, or by dropship. If naval craft then the ships must be located in the adjacent water column to the land column the unit is withdrawing from. Hovercraft and units moving to ships will first move to the water column and then when next moved move to the adjacent land/water column. Units moved by air transport or atmospheric fighter units may move up to three boxes in any combination, as long as the unit ends up in a lower turn line (ie, three down, one down and two left or right). Units having dropships to carry them or aerofighters which are withdrawing may withdraw to orbit or to any other land box in a turn line below the current turn line.

3.2.2 Fight Decisions: Boxes where both sides have orders to fight are resolved next. If both sides have orders

to fight, but both sides prove to have only dummy, general, or recon units in the box, (having only these in a box must be revealed if both sides have fight orders) both sidess must withdraw, as covered in 3.2.1.3. If one side has at least one combat counter in a box and the other side has all non-combat units, the side with the non-combat counters must withdraw as covered in 3.2.1.4. If both sides in a box have orders to fight and each side has at least one combat counter, then a tabletop battle is set up. Resolve tabletop battles in the order of the boxes, from left to right. If all combat counters are aerofighters/atmospheric aircraft and/or dropships with no ground units, combat is resolved on the fighter engagement table.

3.2.2.1 Tabletop Setup: The tabletop terrain and entry /setup edges are already determined from 2.2. The forces engaged are determined by the combat and general/recon ciunters in the box, which manifest themselves when the figures that they represent appear on the tabletop (miniature rules featuring hidden movement may conceal even this).

3.2.2.1.1 Wether the forces enter or are set up on the tabletop depends on the miniature rules and local customs for setting up the game. It is suggested that you use the format that you feel comfortable with and that works well with the rules. The whole purpose of this article is to allow the players to set up tabletop battles pretty much as they always do while adding a strategic flavor to the game. However, if normal practice is to have both sides enter from the table edge or start in the first twelve inches (360m), then it is recommended that the players forces defending the planet start anywhere on the table but no closer than 500 meters (16 hexes) from the attackers table edge. Units dropping in from dropships or in dropships from orbit land in accordance with normal Battletech rules on turn one.

3.2.2.1.2 For multi-player games, the ranking player for a side does not necessarily have to be a battle's commander; let the players rotate the duties of commander and subordinates over a series of battles to give everyone a chance to play at the various levels. Alternately, one player on a side can serve as commander for all tabletop battles fought in one column, another player for the battles in another column, etc. Additionally, if a player's general counter is present, that player is the commander. If more than one general is present, then the ranking general is the overall commander.

3.2.2.2 Battle Length: Again, this depends on the rules in use. All battles should be required to last a certain specified number of tabletop turns before determining a winner. The number to use should be decided before play begins and should permit most battles to be finished in the period of a typical local gaming session (for a 4x6 table I recommend 15 turns; length of game will usually depend on the size of the table).

3.2.2.3 Determining A Winner: Yet again, no hard-and-fast rules apply, but a common system appropriate to the miniatures rules should be determined for all the battles before the game begins.

3.2.2.3.1 Use systems that work best with the miniature rules. Battleforce by FASA has several good ideas on what has to be done in a battle.

3.2.2.3.2 For rules systems that typically end with both sides still on the table at the end of a specified number of turns, I recommend that you assign points for casualties (each side gets the number of points equal to the weight of destroyed mech/AFV, 1.5 times the weight of captured mech/AFV, and half the weight of mech/AFV that withdraw off the table before the game ends), and for key terrain objectives (buildings, fortresses, hills, crossroads, bridges, etc.). The winner can then be determined to be the side that has the

most points at the end of the specified number of tabletop turns that constitute a battle. To avoid inconclusive, marginal wins, a minimum number of points more than the other side may be established as a requirement of victory-otherwise the battle is a draw.

3.2.2.4 Retreat From A Battle: As soon as a battle is finished, the ranking player on the losing side must retreat the side's counters into another box or boxes on the strategic map.

3.2.2.4.1 Any or all of the retreating counters may be moved down one to four lines in the same column.

3.2.2.4.2 Any or all of the retreating coumters may be moved down two to five lines and shifted to an adjacent column (subject to rules for water columns and air/hovercraft/dropship movement).

3.2.2.4.3 For every line moved down (less the extra number of lines required to change column) a retreating counter 'recovers' 20% of it's losses in the battle (ie, from 20% to 80% of the losses can be recovered, depending on the number of lines moved). Round all fractions down when computing this. Note that this applies only to losses sustained in this battle – no percentage of earlier losses can be replaced. Percentages are by weight of units lost. Replacements are also by weight (ie, lost a Marauder and a Stinger - 75 tons and 20 tons = 95 tons, minus 20% = 19 tons recovered). Replacements can not be heavier then the replacement tonnage. Dropships and aircraft/aerofighters cannot be replaced. Unused replacement tonnage is lost.

3.2.2.4.4 Once all retreating counters have been moved, the ranking player on the winning side moves their counters and recover losses as per 3.2.2.4.1 through 3.2.2.4.3 above.

3.2.2.4.5 If the battle is a draw, use competitive die rolls to determine who moves first, then the ranking players for each side alternate moving one counter at a time until all units have been

removed from the box as per 3.2.2.4.1 through 3.2.2.4.3 above.

3.2.2.4.6 These moves after a tabletop battle are the only time that casualities can be recovered.

3.2.2.4.7 After recovery, both sides count up their losses and record the involved units' current strength on the order of battle sheets. If desired, allow badly reduced units of the same type and quality to be reorganized within the same combat counter into fewer but larger units by disbanding a unit(s) and transferring the figures to other under-strength units, etc. Show all transactions on the order of battle sheets.

3.2.3 One Side Only In A Box: After all battles are resolved, any boxes containing only the counters from one side are moved as per 3.2.1.1 and 3.2.1.2. This is also done in the box order from left to right.

3.3 Continuing The Game: As soon as one turn is completed, the next turn starts, using the counters in the boxes on that turn line, etc, until a strategic game winner is found or all turns are finished.

4.0 Winning The Strategic Game

4.1 Who Wins: The winner of the game is the first side to gain 16 victory points and also have more victory points then the other side. If neither side has 16 victory points and a majority by the end of the game, the side with at least 3 more victory points then the other side wins. All other results are draws. Winners capture the planet. Losers may not attack this planet for twelve months game time. In a draw, the attacker must withdraw off-planet, losing any units for which he does not have transport (ie, dropships). However, if the attacker so chooses, he may re-attack the planet at any time and the game resumes as before.

4.2 Gaining Victory Points: Victory points are gained for what happens in a box, as follows.

4.2.1 0 victory points for both sides if both withdrew from a box, if both had

only decoy and/or general/recon counters with fight orders in the box, or if neither side had any counters in the box.

4.2.2 1 victory point for a side in a box that has fight orders when the other side has withdraw orders.

4.2.3 1 victory point for a side in a box that wins a tabletop battle.

4.2.4 1 victory point for both sides if a tabletop battle ends in a draw. Exception: To prevent both sides from doing nothing, set some minimum standard of activity (% casualities, number of melees, etc) to qualify for one victory point each. If the minimum is not met, both sides get 0 victory points (see Battleforce for example).

4.2.5 2 points for a side in a box that wins a tabletop battle by eliminating, capturing, and/or driving all enemy forces from the tabletop. This also applies if one side decides to cut their losses and end the battle by exiting the tabletop before the agreed number of tabletop turns are completed.

4.2.6 2 points for a side in a box where there are no enemy counters or where the enemy counters have fight orders but are revealed to be decoy and/or general/recon counters by scouting (see 6.2) or by the presence of an enemy combat counter with fight orders in the same box (must be a land unit).

5.0 Box And Column Restrictions: Specific boxes can be made more or less important then other boxes in terms of victory points. For example, marking a +2 or a -1 in the corner of the box would show that a side that wins or draws a battle or forces a withdrawal from that box gets two more or one less point then normal. Such a box might contain the planet's starport, for example (+2), or be a desert (-1).

5.1 A good way to show that one column is more important then another is to include positive and/or negative boxes in proportion to their importance.

5.2 The positive and negative should approximately cancel each other out on the entire strategic matrix.

5.3 No peeking! At the end of a meeting the players may wish to list their counters from the strategic matrix and place the lists in sealed envelopes until the next meeting.

6.0 Recon And Intelligence: A number of factors can be added to help or hinder a campaign.

6.1 Operating In Home Territory: Units attempting to invade a planet are hindered by a lack of accurate maps and not knowing the terrain.

6.1.2 Give the defender some extra decoy units.

6.1.3 Don't provide the attacker with maps of the battlefield until after he has determined where his combat units will come onto the table and any units arriving from orbit will be dropped.

6.2 Recon The Enemy: Before deciding on fight or withdraw orders, the sides in a box compare their scouting forces in that box. Recon forces are considered to be light mechs, recon AFVs, and air units. Some recon forces may be rated more (up to the individual player(s)).

6.2.1 Allocating Recon Forces: For each box (left to right) the ranking players write the number of recon counters located there that they wish to use, including air units. Not all recon/air units have to be used. A light mech company counts as three recon units. Only those listed will count for recon purposes.

6.2.2 Using Recon Forces: The number of recon counters written for each box is revealed and compared.

6.2.2.1 If the number of recon units deployed is equal, no recon takes place.

6.2.2.2 If one side has more recon counters then the other, divide the larger by the smaller. For every full 10% advantage in the ratio of larger to smaller, the ranking player on the larger side may flip over one enemy counter in that box to see what it is (ie, 18 vs 28 then 28/18 = 1.55, or a 55% advantage; the larger side would be allowed to flip over five enemy

counters). If rule 6.1.3 is being used, the attacking/invading player may utilize 10% to obtain a copy of the map for the box. If one side has recon units and the other does not, the side with the recon units in the box may flip over all the enemy units in the box and determine the battlefield layout (map).
6.2.2.3 All flipped counters remain upright until the time comes for them to leave the box. Then, they are inverted before being moved.
6.2.2.4 Recon units used as such may not be used in the battle for the box. They are preforming recon, not engaging in combat (this also applies to air).
6.2.2.5 The side which has control of the orbit box may turn over any one counter in all the boxes for that turn line (orbital recon).▲

The Goliath...
A New Look

by
Herb Barents

At first glance, the GOL-1H Goliath seems to be a pretty impressive mech. When one takes a closer look, however, certain things become evident; as far as defensive capabilities go, it's a monster, packing 14.5 tons or 232 points of armor onto its' giant frame. Weaponry is fairly good, with a PPC on a turret arrangement (360 degree field of fire), twin LRM 10s', and two MGs' for that personal touch. The only problem there is the lack of ammo for the LRMs', 12 packs each launcher, which in an extended fight can leave the mech out of luck. It's when you look at the configuration that the real disadvantage of this mech becomes apparent, ie, no arms. This thing's a walker like right out of Star Wars, one of only two in the whole 3025 Tech Readout, and as such is a bit difficult to run, seeing as it really has no close range capabilities other than the MGs'. Many mech pilots figure that if they draw a Goliath they're doomed, but I tell you now that is not necessarily the case; with a little thought and flexability a good mechjock can turn a Goliath into a lethal beast on the battlefield...

First of all, the Goliath is (obviously) not run like a man-like or humanoid mech, but more like a robotic steed; back in the Middle Ages, in the days of the knights errant, the great warsteeds that they rode were as fully as dangerous as the knights themselves (I use the word 'great' in the context of big; the horses that the knights rode were the ancestors of the modern day Clydesdales, called, I believe, Pinchots...and why am I telling you this, you're gamers, you probably already know all this!?). In respect to this, I present Mechwarrior Robert

James, pilot of the Fancy Dancer, who has brought the piloting of this rather tempramental mech to a state just sort of pure art. Years of experience obviously has something to do with it (he's a 12 year veteran), as James has perfected the kick attack. Simply put, if some poor fool happens to get behind James, he runs the risk of a couple of multi-ton legs in his face and the resultant damage therefrom; the Fancy Dancer plants its' front legs and kicks with the back two, just like a mule. In addition, an attacker from the front or sides (yes, he can handle two opponents at once) risks the rearing attack, ie, striking with one or both of the front legs against one or two opponents. Pretty sly, huh?

Also, proper use of the weaponry systems can make a big difference; the Goliath packs a fair amount of firepower, though limited, but judicious use of what's at hand can make the Goliath deadly. The MGs' are fairly easy, since they are pretty much useless unless one is toe-to-toe with ones' opponent, or if used for their primary purpose, anti-infantry. The low number of shots available to the LRMs' means that the smart mechpilot will conserve his ammo and take only the best shots. Lastly, the PPC, as already noted, is mounted on a turret that gives a 360 degree arc of fire; given the power and the range of the weapon, and the fact that being an energy weapon it has no ammunition concerns, the PPC is your first and best weapon, and should be used accordingly.

Now I think that we should address how to translate these attacks into Battletech terms. Lets begin with the Physical attacks. The Rear Kick attack strait back is a piloting skill roll plus 2, with a base to hit roll of 4. You take into account all modifiers to hit and a missed kick is an additional piloting roll at plus 5. Damage is calculated as a kick with both legs. Thus the Goliath does 2 hits with 16 points of damage each. Roll on the to hit location table

for each hit. This shows us that most mech's will fall to this devestating attack. Now on to the Rear Side kicks. To do this a piloting skill roll of plus 2 must be made, with the same base to hit of 4. If you miss no additional skill rolls are needed. Roll for damage as normal. For the Front Kicks, a piloting roll at plus 3 is needed. Base 4 to hit and roll damage on the Punch Table. An additional piloting roll at plus 4 is needed if you miss. If you kick at more then one target the plus 1 secondary target modifier applies, and another piloting skill roll at plus 4 if you miss. Like the steeds of old, these new steeds can get you out of trouble, if you are skilled enough.

Note that when doing ANY of these kicks above there can be NO weapons fire that turn. This is a complicated maneuver and takes all the pilots concentration and skill just to remain standing. All movement and terrain modifiers are in effect here, and the base to hit is 4 instead of the normal 3 for kicking because of the additional difficulty.

A very skilled pilot can do many wonderful things with a Goliath. They can turn this machine into a death machine at close ranges. It should be noted that a person would have to attain a piloting skill level of 4 to even attempt these maneuvers with any reasonable chance of success. And in Mechwarrior RPG terms he would need a Dex of at least 8. Thus a lot of levels would have to be earned to be able to pull this off. Although in a pinch anyone could try it. It could mean Victory or Death using these special kicking rules.▲
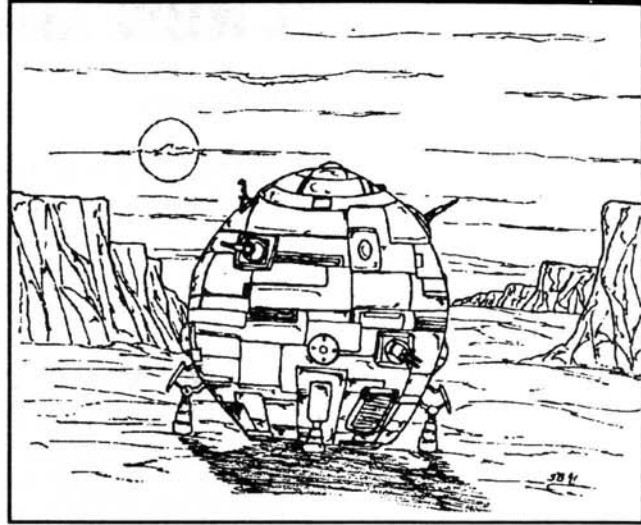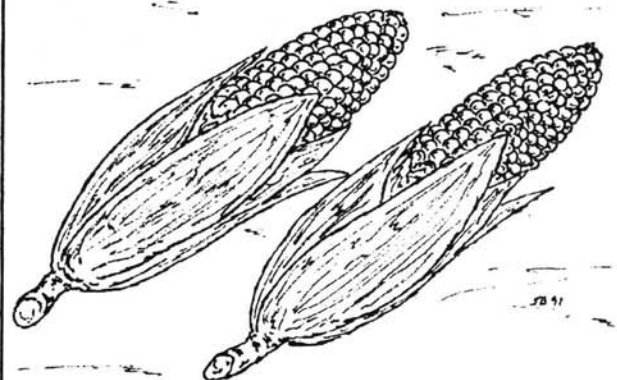
THE LONG RANGE WARS

by
Herb Barents

There you are, playing on two boards in Battletech and saying to yourself, why don't I have a longer range factor? The limited ranges just seem so short when you're using the mech miniatures, they almost seem to get lost on that big board. And then you compare the weapon ranges to what they are today, or even what they had in WW I, and the mechs come off looking pretty weak. A fellow named Mike Reese commented on that fact a few issues back, but what I want to address here is a way to increase the ranges and still keep the flavor of the game. We'll look at and discuss a few different options which might help in any big, multiple board games you might play in the future, and feel free to use some or all of them, okay? Alright, then... First off, we have to somehow increase the weapon range without making the game too deadly; if the range increases, then the hit charts expand accordingly, and then you're hitting the other guy way out there... sounds a bit boring to me. What I suggest is that instead of expanding the ranges, let's make a couple of new range classifications. After long range you'll have extended range, followed by extreme range. Extended range is equivalent to the long range factor, or twice the long range. As an example, take the standard medium laser with a long range factor of 9; double it, you have extended range, or 18 hexes. Extreme range is double the extended range, in this case, 36 hexes!!! I can hear you now, boy, that's a lot of space! A PPC would range in at 18 long, 36 extended, and 72 extreme, and a LRM ranks 21 long, 42 extended, and a whopping 84 extreme! Hang on, be-

cause the lowly AC 2 comes in at 24 long, 48 extended, and 96 extreme; the thing is, if you whip out the old calculator, the AC 2 figures in at a converted range of 1-3/4 miles, and the old WW I ordinance still comes in ahead. A bit more up to date, take the main guns of the USS Iowa for an example; I don't have the exact figures (some of that stuff is still considered classified), but those suckers can toss a shell the size of a Volkswagon anywhere from 30 to 40 miles! Sheesh! So, from an overall viewpoint, we're not really in the ballpark even with this extended-extreme stuff, but more still in the game scale then anything else. Interestingly, we havn't really been trying to up the ranges on anything as much as we're trying to get the shell to the target, aka accuracy, and that's only been in the last 10-15 years or so (editors note; some of you might have caught those news articles about the Iraqi 'super-guns; if not, imagine something with a 170 foot barrel with a diameter of 14 inches and an estimated range of up to 1000 miles). The gunners on board the capital ships at say, Jutland, were hitting maybe 10% of the time, on a good day. In the American Civil War, accuracy was a appalling 3-5% on the average; the Monitor-Merrimac battle, which lasted over two hours and was

fought hull to hull most of the time, reached an astounding (for the day) 23%, or just under one shot in four hitting a target literally next door. Accuracy hasn't been the thing that won battles up until the Sixties (1960s), when we started fielding "smart" weapons, and some of them are still pretty dumb (ed. note; depending on whos' figures you accept, the Gulf War hit ratio runs anywhere from 75-35%). Alright, so what, you say. The bottom line on this is that if we're going to extend the ranges you can hit at 2-4 times, we have to come up with a way to balance the odds and the damage you do. Try this; firing at extended range gives a base 10 to hit, and at extreme ranges 13. I know, it might as well be impossible, but that's the point; it's not, it's just extremely hard, and, of course, if you hit at those ranges, lucky. It seems to me that if you have a LOS on your target you should be able to take a shot at it, at least. Also, if you're playing using the Mechwarrior Skills you should be able to build yourself up to the point where you can start hitting at these ranges. However, if you think about it, things are never that easy... Some modifiers to this are as follows; walking, +2 to hit. Running, +3. Jumping, +5. Target moving 7-9 hexes, +4. Target moving 10+ hexes, +5. What's that? Crazy? I said think about it. Hitting something at the ranges we're talking about should be considered an act of God, not "good gunnery". Anybody who tries to claim that is blowing smoke, and he's not fooling anybody. However, say the target for some reason is standing still or only moves up to 6 hexes, which at these ranges is almost the same thing. Say you fire at the target this turn, it repeats its' move (or lack thereof), and you fire again at -1, repeat, -2, get it? You're ranging the sucker, that's right, you're getting his range. Remember though, these arn't cumulative. If you lose the target, ie he moves out of your LOS, you have to build it up all over

again. Also, you must fire with the same mech each time; one mech cannot find the range for another. This, of course, works only with extended or extreme ranges, not for long or medium or short.   Now what good is this, you say? Consider; your opponent has entered extreme range and you begin to range him. On an average, when he gets into extended range, you'll be at -4, giving you a base to hit of 6, plus any other modifiers. A perfect example would be a defender in the classic hull down position behind a hill or rise, with the attacker using all his guile to get close without letting the other guy get his range and hurt him before he can hurt back. As a suggestion, you might want to use blank counters to mark the mechs being ranged or tracked, and by all means, keep a record of which mech is firing at which enemy mech; definitely avoids arguements...   Now this one should really rock you. Eight sided die instead of six. (yep, he's gone) My reasons being that, though the game will definitely get a bit bloodier, it provides for a better % chance to hit and helps make those long shots a bit more obtainable. I also suggest base to hit of short 4, medium 7, long 10, extended 13, and extreme 16, and a 2 or less is an automatic miss no matter what, and a 16 is an automatic hit, period. Though I would suggest that if you use this option that you drop the ranging option, or most battles will probably be over before you get within 10 hexes of your opponent. The idea is to simulate the chance and random factors that make war, no matter how long or how hard someone studies it, the most unpredictable of sciences.   In closing I hope that these ideas have given you something to work with. Use them all or maybe just the one that struck your fancy, either way, it should add a new dimension to your game and, hopefully, make it more enjoyable. Till next time.▲

MECHWARRIOR IN A BOX

by
Mark Stock

Most people I know never play Mechwarrior. I don't know if it's because they don't like it, or that they don't understand the rules. Because of this, I've set a goal for myself; to make MW more fun and more realistic. This means a completely different set of rules for movement, and some alterations in combat. These rules are optional, so clear any changes with your group before you use them.

Here is a list of the phases:

1. Initiative Phase
2. Movement Phase
3. 1st Ranged Combat Phase
4. 1st Melee Combat Phase
5. 1st Damage Adjustment Phase
6. 2nd Ranged Combat Phase
7. 2nd Melee Combat Phase
8. 2nd Damage Adjustment Phase

First of all, these new rules involve a movement system based on the one found in MW. Squares, instead of hexes, are used because important MW scenarios occur mostly indoors, and the only place you find hexagonal buildings is in nouveaux riche communities. You can play on graph paper, which simplifies the GM's job considerably. Each turn represents 2 seconds and each square is 2 meters per side.

Initiative Phase is unchanged because of ease of play; consult MW

Movement is different in that in MW an MP (movement point) is used for movement only. To better understand the system I am using, remember that MP from now on denotes a specific amount of of physical exertion. For example, standing still is zero physical exertion, crawling is maximal exertion in a prone position, walking is normal, everyday exertion, dodging is abit more
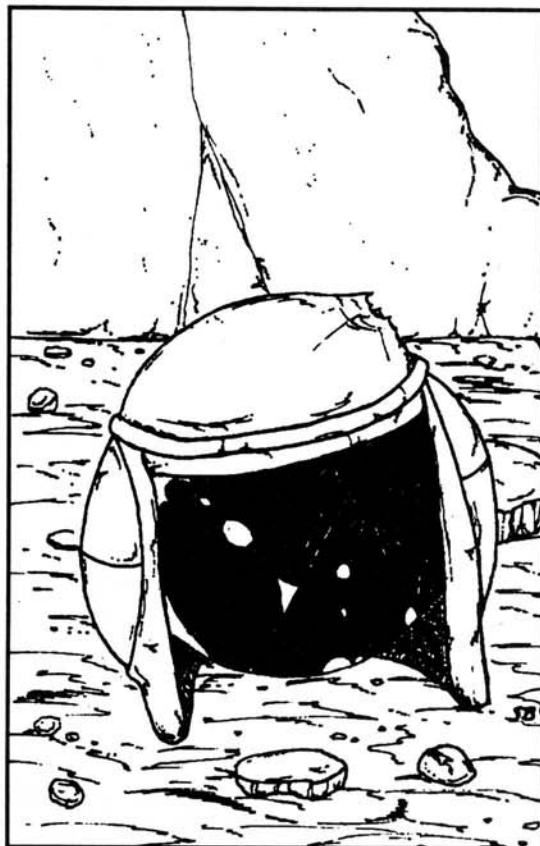
than that, running is double that of walking, and sprinting is all-out, full effort without holding back. This is why you can't conduct ranged attacks while sprinting. Thus, you get 0 MP standing still, 1 MP for crawling, 2 for walking, 3 for dodging, 4 for running, and 6 MP for sprinting.

If you wish to change your facing, you must expend 1 MP to change 90-180 degrees, and 2 MP for 270-360 degrees. All these values are constant with the basic game parameters. Also, the chart below represents the MP costs of movement while keeping face forward.
(insert stupid graphic here)

So, if you wish to back up at a running pace, you can move 2 squares. Other special actions are the same as in MW except for jump and climb. You must spend 2 MP for each meter of rope or ladder that you climb. To jump, you must end your movement in the square that you wish to begin jumping in. On the next turn you declare that

you are jumping and you jump the number of boxes equal to or less than the number of boxes you moved during the previous turn. You must jump forward, and if you didn't move the last turn you may still jump one box.

Encumberence is easy. If you are carrying more than your body score times two (not including normal clothes), you reduce the MP allowance for each action type by one. This means you can't crawl, and you only have 3 MP if you choose to run.

Next, scrap the reaction phase; however, if you think this would seriously detract from the game, by all means include it.

In the ranged combat phase you will have to convert your weapon range into meters, which is fairly easy to do. As for LOS (line of sight), common sense is your best bet. You can't fire if you exerted yourself at sprint capacity, if you haven't readied your weapon, or if your readied weapon is out of ammo. If you can fire, you can select the fire type. All weapons can fire single shot. Only rifles and SMGs can fire a 4 round burst or a ten round burst, but only the SMG can fire at full auto (rock n' roll!), which is the equivalent of a 20 round burst. The blazer, the sonic stunner, the bow, the SRM launcher, and the flamer can only fire once per 2 seconds, but all others can fire a single shot twice per turn. The rifle and the SMG can fire 2 bursts of the same type (ie, 2-4 shot or 2-10 shot) per turn. It takes one turn of no sprinting or firing to change fire type on a burst-capable weapon.

If you fire a single shot, there is no to-hit bonus, but a 4 round burst gets a -1 to hit, a 10 round burst a -2, and a 20 round burst a -4.

Combat occurs twice each turn. There are two 1 second intervals per turn. For example, if you had your gun pointed at your target last turn, and you intend to keep firing at the same target this turn, you can fire at both of the 1 second intervals. However, if you just acquired your target this turn, you may

only fire one shot or burst, depending on your previous fire type. Weapons that can only fire once per turn always take the one shot in the 2nd firing interval. Damage from the 1st interval takes effect before the 2nd interval starts.

To count range, simply count 2 meters for every horizontal or vertical box, and 3 meters for every diagonal box in the direction of the target.

The to-hit modifiers are the same as in MW, with these options; -2 for all shots within 4 meters; +3 if you jumped; +1 if the target jumped; +2 if the target sprinted and then jumped; -2 for one round of careful aim; -3 for two rounds of careful aim; note: no extra bonus is allowed for any subsequent turns spent aiming. -3 to -5 for a scope only if used during careful aim; +1 for each 15 meters if the target area is in partial darkness; in total darkness, only if you can hear the enemy or track him by his muzzle flash or if you can fire a 10 round burst or more for +3; +2 for each 5 meters in total darkness if you can hear the enemy; +2 for each 10 meters if can track the muzzle flash; an IR mount on your weapon negates all modifiers; remember that these modifiers only apply if the target is in the dark

Melee combat is essentially the same, except that you may punch twice or kick once per turn. Light weapons (clubs, knives, etc.) can be used twice per turn, while larger weapons (swords, chairs, whips, etc.) can only be used once. Note that you have to pick up a chair (1 MP) before using it.

The Tech Read 2 rules for grenades could use a bit more detail (at least in my opinion), so I have developed the following chart for those of us who like a finer line to things. The table is rated for mini grenades; if you use a micro, shift down one column, or if you use a maxi, shift up one. Note that if you are in the same square as an exploding grenade (ouch!), you will recieve 2D6 fragments.

Range	% chance to hit	# of hits
< 2 meters	100%	1D6+2
2.1 - 4 m	80%	1D4+2
4.1 - 6 m	50%	1D4
6.1 - 10 m	20%	1
10.1 - 15 m	5%	1
15.1 - 20 m	1%	1

Each fragment that hits does the listed amount of damage in Tech Read 2 (3D6 for the mini). Anyone within 15 meters of micro grenade, or 20 meters of a mini or maxi, must roll to see if they are hit. Note that a maxi has a 5% chance of hitting at a range of 15 to 20 meters, but no chance at longer ranges. Everyone within range and in LOS must roll the hit %. Anyone with partial cover from the blast halves the chance of being hit, providing that the cover is heavy enough, or if in a prone position. If only the arm(s) and head are exposed, multiply the to-hit roll by .2. Note that no matter what cover you have, if you roll and are hit, you always take the full number of hits.

The damage adjustment phase also occurs twice per turn, and all damage taken in the previous combat (ranged and melee) phase takes effect. The personal hits- to-kill points are allocated differently, as follows:

Torso	30% of total HTK
Legs	20% of total HTK
Arms	10% of total HTK
Head	Common sense or GM call

The hit location tables are very similar to the HTK allocation chart. The hit charts are for full view, partial cover (waist-high), and full cover (arm(s) and head exposed:

No Cover

1. Head
2. Right Arm
3. Right Leg
4. Right Leg
5. Torso
6. Torso
7. Torso
8. Left Leg
9. Left Leg
10. Left Arm

Partial Cover

1. Head
2. Right Arm
3. Torso
4. Torso
5. Left Arm

Full Cover

1-3. Head
4-6. Firing Arm

Each hit taken is painful, to be sure, but the MW system does not take this into account, so I have come up with what I call a pain factor. For every hit you take, you must save against the average of your Body and Learn. If you fail the roll, you suffer a +2 to all skill rolls. If successful, I suggest a GM call on whether or not the player will suffer a +2 to all actions employing the injured area. All other rules about damage, critical hits, healing, etc., are as per MW.

Please keep in mind that these optional rules were written with the express purpose of making MW more realistic, and, hopefully, more enjoyable. They are open to all manner of interpretation and change, but remember, they were designed for greater realism, so be logical, and above all, have fun. ▲

City Raid:
BattleTech Scenario
by
Herb Barents

The morning broke clean and crisp, though the streets were empty, the militia was on alert. The three Maulers were in place and the three VTOL's were on the pads warming up. The alert was called early this morning, Dropships approaching, but where would they attack, if they got through the aerofighters? Would it be the government buildings, where some high ranking officials were meeting? The factories that were producing some munitions? The spaceport could also be a target. A raid could do damage anywhere, and as head of the militia it is up to you to decide what to do.

It did not take long though, the first of the dropped mechs appeared. It looked like they were heavies alright. Good thing the infantry were in place, four squads in the government buildings, two in the downtown area, and two more in the factories. The three Maulers were also in place, one in the factory area, on the warehousing, and the last covering the government buildings. All the vehicles were still in their sectors, 8 in each militia area. With their speed we will await the landings and then rush them to the scene. The 2 Ottawa's and the one Blackfoot are ready for takeoff. The attackers are starting to land. There is an Archer, a Battlemaster, and an Atlas dropping into the spaceport! The warehouses are having problems too. A Crusader, Thunderbolt, Archer, and Wolverine have dropped there, and more at the spaceport where a Maurader, Rifleman, and Crusader also land. And then by the militia building #1 a Battlemaster and a Crusader land,
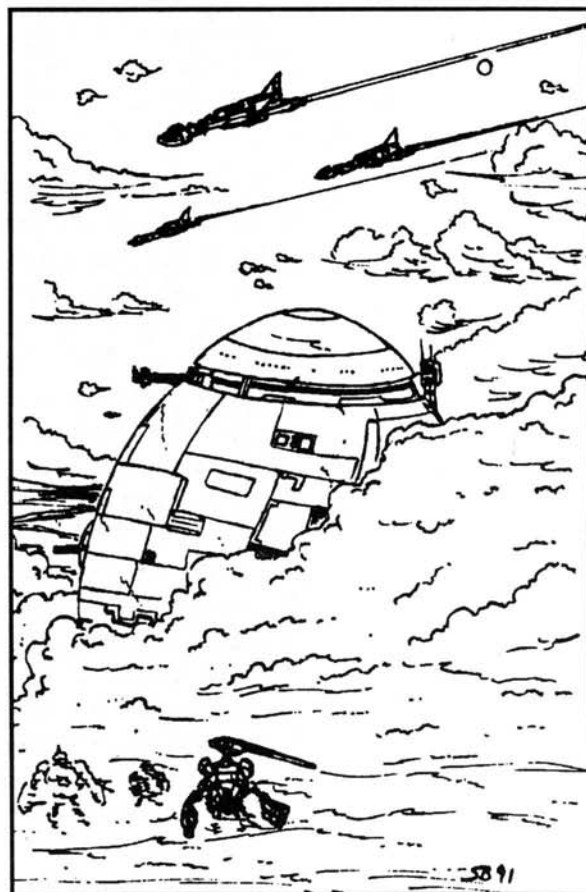
as well as yet another Atlas. Boy are we being outgunned here. It is a good thing that the 2 medium lasers in each redoubt are working.

They have landed and the VTOL's take off for dear life. Although one doesn't make it too far, but it did some damage on a Crusader before the Rifleman nailed it. Orders are given for the vehicles to come forth and move on the spaceport, as that seems to be the target of this raid. Things start to heat up quickly as the Mauler in the warehousing is taking it from an Archer and a Crusader, the Thunderbolt wants a piece too. The Blackfoot is hit but continues. The other Ottawa is also hit but puts some damage on the Wolverine. The Blackfoot retreats to the factory area and hover's there letting loose with its weapons, in turn helping out the Mauler, and then turning and helping out the other Mauler in the factories.

The vehicles are starting to come

Dragon's Breath. 70 tons with PPC's, and well , there isnt much left when the Buzzer's attack from the rear with Inferno's. The Battlemaster falls under a hail of fire from some Moths and Dragonfly's armed with PPC's and medium lasers. An Atlas comes up and blows away a Bully shortly after, and a couple of Moths are immobilized but still capable of firing. It seems like the attackers cannot decide what they are going to do. One force is attacking the warehouse area, though only the mechs. The factories seem safe, but the militia compounds seem to be getting hit hard. One is almost destroyed. The government buildings are taking a pounding. Then the attackers start to wear thin. The Thunderbolt goes, one Archer retreats, the Locust is cut down, a Crusader dies, as does the Rifleman. An Atlas goes and the other is severely damaged. As the government building comes under attack a counterattack is launched and a Wolverine dies. With losses mounting the attackers leave. The above was a brief description of the battle fought at the Fort Wayne convention in November. It was a pretty good battle and a lot of fun. It is also somthing that can be played over again in many ways that will not yield the same results. the map appears on the next page. This will give you an idea of what we played on. The size is about 4 mapboards with all sort of buildings and additional terrain.▲

forward, and just in time. The mechs are leaving the spaceport and moving forward. Orders are given from the top to protect the factories at all costs. The Buzzer's, armed with Inferno's, attack and hit a couple of targets. The attackers knock out 2 redoubts and are moving forward. The Bully's let loose with LRM fire. The Ottawa gets hit a second time and crashes, an Atlas and a Wolverine are attacking the militia base #1. The Maurader comes up to attack the Mauler in the factory area, as the Battlemaster's take on the Mauler protecting the government buildings. The vehicles let forth a deadly barrage. The Maulers are taking alot, but they have almost knocked out the Thunderbolt. 8 medium lasers hit as well as 1 large.

The Rifleman moves up to help out with the attack on the government buildings, but is met by a pair of

Battletech Game Books

by
H. Barents

Just recently Nova Game Designs climbed aboard the Battletech bandwagon with the release of four Battletech game books; Shadow Hawk, Griffin, Wasp, and Warhammer. Let's take a look at them...

Based on the Lost Worlds gaming system, the NGD game books are meant to be played by two people, for which you need two books (ah, sly marketing ploy). The actual game begins on page 49, where a basic description of the situation is given and you are also given from 8-10 optional responses with corresponding pages. Akter picking your response, you then turn to the page indicated and record your heat build-up. Your opponent then tells you what his response was and the corresponding page number. You then look up the number he gave you on your page; the number will be the next page that you turn to. On that page will be a further description of the action and a further list of options. In addition, information regarding hitting, giving or taking damage, and additions or subtractions to your base number will also be on that page, as well as any restrictions that your previous actions may bring about. These steps are then repeated until one or the other is either defeated, disabled, or dead. All in all, a fairly simple and straight-forward system.

Now, I think it should be noted that these game books are quite different from the Battletech game system that you are no doubt used to. One of the biggest differences is the way heat is handled. As the battle progresses, the heat builds, slowly, steadily, mandating a fairly quick victory or an ignominious defeat as your mech shuts down in the middle of the fight. Well, sure, you say, you always have to watch your heat, that's a basic part of the whole thing, but in the game book system, the heat never entirely dissapates! Even the Wasp can overheat using this system, and that is something you seldomn hear about no matter how long you've been gaming (- there I was, moving in for the kill, and, BANG!, my Wasp overheated - rriiighhttt!). Actually, the action in the game books is more realistic, more like the novels. Small things, seemingly inconsequential actions, all conspire to bring you down in flaming ruin (hhmmm, that sounds a little paranoid). Of course, game books are a bit limited in the long run, but there is no denying that they can be fun to play. The one thing you should always remember is that that's the whole point; having fun.

Now I'd like to discuss a few more differences. Although the system is simple, its' very simplicity makes it necessary for you to think your moves through; no mech-bashing here, but a appreciation of strategy and tactics is what's called for in this game. For starters, the mech all have different reaction times and speeds. These are taken into account in the moves (or options) that you pick and the combat segments. Thus a Wasp could make a marvelous hit-and-run on that big, slow Warhammer. But at the same time, a couple of good hits by the big, slow Warhammers' PPCs', and the speedy little Wasp is a pile of flaming scrap. Because in this system, the armaments are different from mech to mech, too. As is the heat build-up, the amount of damage they do, and the overall situation as well. You see, the game books have already factored all these variables into the game; your task is to figure out the best way to use all these differences to your best advantage.

As I have said before, heat is different here, in that we have a maximum heat rating of 30. 30 is not a nice heat to be (sorry), as at 30 you are at a dead stop; nothing works, the whole mech is shut down, and you are a huge metallic

sitting duck until you cool off. 28 is also a pain, because at 28 you lose an ammo point and take two points to your armor as your ammo cooks off inside its' bin and tears up your mech. Now that hurts; getting nailed by your own ammo. As a rule of thumb, the average or median temperature that you'll be running at is 15. Also, keep an eye on the other guy, as a judicious use of firing and movement can leave you functional and him the metal duck, or, worst case, both of you standing there and simmering until you cool down. I've seen that happen in this system a couple of times already; two mechs tearing into each other until they overheat, and then they stand there, not more than a few meters from each other, colling, and then coming back up at almost the exact same time. Sorta like the 'breathers' knights would take in the middle of a fight...▲

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The Best of Future Wars contains material from the first 18 issues of Future Wars. This is when Future Wars was just starting out. This is when readership went from zero to about 600 people. Now readership is well above that and most people have been wondering if back issues are available. Yes, they are now in the Best of Future Wars #1.

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