BattleTechnology

The Magazine of Combat in the 31st Century

PRIMARY
Target ID: Battlemaster
Range: Medium
Target Spd: 22 kph
Wind : 15 kph ENE

Fire

SR no lock

Silence From the Periphery?

BODY saving roll at +2, and anyone 8-10 hexes away must make a normal BODY saving roll to remain conscious. For BattleTroops: halve the range for the grenade throw, then give 6 points of bruise damage to anyone within 8 dots, 4 points to anyone between 9 and 14 dots, and 2 points to anyone between 15 and 20 dots away. Underwater, grenades are still deadly weapons — but they usually end up hurting the user more than the intended target.

Melee combat in the underwater environment depends much more on skill and speed than brute strength. Few weapons are actually good for this kind of combat; Chart # 6 deals with those that are most commonly used underwater. When an attack is made, the target gets a +1 modifier on the to-hit table because of the water's slowing effect. Body location becomes very important at this point. If the weapon used is a bladed weapon, and if the character/soldier receives a head hit, on a 1-3 roll on 1D6, the weapon cuts the air supply of the character. If he/she is hit in the rear torso, on a roll of 1-3 on 1D6 the air supply itself is hit. The affected warrior then has his BODY-2 in rounds to reach the surface (he must go one level/round to avoid things like nitrogen narcosis, or "the bends"). In BattleTroops terms; take the major Damage Potential and subtract 2; that is how long the soldier has to reach the surface.

We have been mentioning special troops. There is a fascinating possibility here, difficult to train, but excellent in underwater demolitions and antiMech operations. We refer to trained aquatic mammals such as the Terran dolphin, which can be used to place explosives in strategic places, rescue divers in trouble (say someone whose air supply has been hit as above, who had also taken an incapacitating wound to the legs or underwater jump packs). They may also be used to retrieve items lost at sea or hidden on the sea bottom if the item is not too heavy. One of these mammals is equal to a squad of elite infantry in terms of antiMech operations. They are rare, so extremely expensive to train and to maintain. To train one of these mammals costs 2.5 million C-bills, the equivalent of a platoon of infantry. Maintenance costs are 7,500 C-bills per month. Remember, these are for a single creature. The benefit you get for the expenses? In BattleTech terms, they move at 3 hexes per turn, attack Mechs as if they were antiMech infantry, and each aquatic mammal can do this twice per turn. For BattleTroops or MechWarrior, the specialized mammal has 16 MPs, and as an attack a bite, which hits on an 8 or better on 2D6. The bite does 2D6 points of damage in the MechWarrior system, or 2L in the BattleTroops. For Mammal stats, generate a BODY, then take HTK from it as if it were a normal human. These mammals are usually found only on their home worlds, due to the difficulty of transport.

Finally we come to the section on special equipment. There are two new or modified weapons for the MechWarrior/

BattleTrooper. The first is the man-portable Short Range Torpedo. The second is the bang stick. The weapons called torpedos are modified versions of the standard missiles which are designed to work only underwater. These have the same ranges as their land cousins and are equally deadly. These go by the designations of SRT pack, LAW-T, VLAW-T, and Heavy SRT pack. The bang stick is a handheld weapon which electrically sets off a shotgun shell into a target when the front of the stick is placed on the target and the trigger is pulled.

Two of the most important items that the underwater combat soldier needs are a source of breathable atmosphere, and the classic wetsuit. The SCUBA (self-contained underwater breathing apparatus) is most commonly used for these soldiers. It weighs 8 kilograms; it will support a person for 4 hours of continued use. The wet suit ensures that the soldier will be ready for action by trapping layers of water between himself and the suit, which are warmed by his own body heat. It also dampens his I/R signature. This suit costs 75 C-bills. One last piece of interesting equipment is a modified jump pack. This jump pack has been modified so that the scuba tank is set between the two jets; to keep it protected, it has a special armor plating put over it. The jump pack costs 10,500 C-bills with this modification.

It is hoped that these rules will add spice to your campaigns, as well as opening a new realm of adventure and combat: the underwater environment.

BattleTechnology

The Magazine of Combat in the 31st Century

Cover: Marty Bingham
cover model from the collection of Don & Rhonda Gilmore
Interior Photography: Nelson Snook
models by Michael Haggerty
Art in this issue:
Warbirds in Flight (Centerfold Painting)
 by David Martin
Osprey
 by Roberto A Gatchilon
Rhino
 by Jeff Johnson
Drawings for Snow and Ashes
 by Gary A Kalin
Inside Job Drawings
 by Thena MacArthur
Maps by Hilary Ayer
Writing in this issue:
Caught in the Mech Flush, Flush and Flood Mud & Blood
 by Dale L Kemper
But Does it WANT to Change?
 by Glen L Mitchell
Snow and Ashes, Dashing Through the Snow, Dust to Dust: Ash to Ash, and The Heart of a Mech
 by John A Theisen
Osprey
 by Joel Connors and Steve Grant
Rhino
 by Robert Benedetti
Inside Job
 by Alan D Hoch
Underwater Rules, Valley of the Winds
 by Stefan Paul Melin-Dempsey
The Ships That Never Were
by Stefan Paul Melin-Dempsey and Hilary Ayer
 All other writing this issue
 by Hilary Ayer
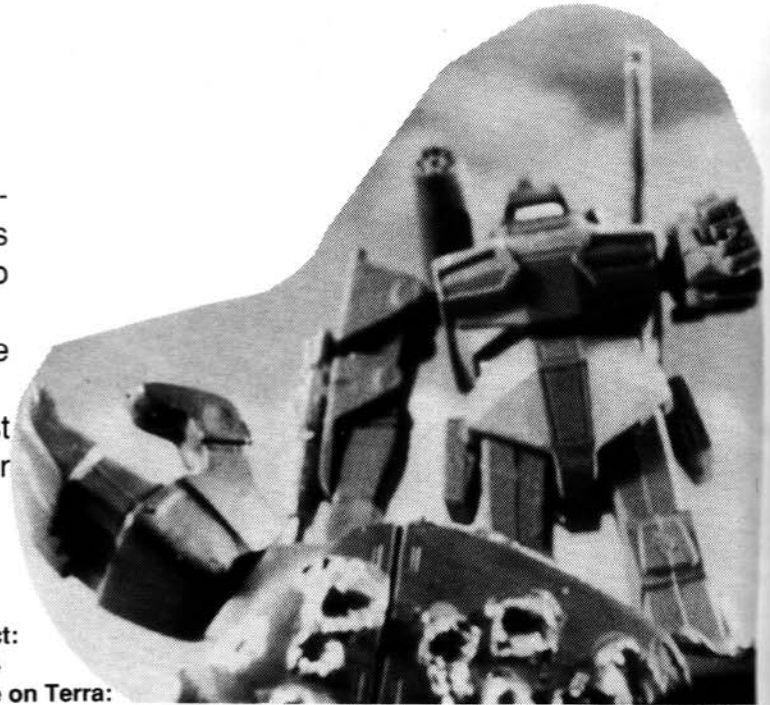
About the Cover:
"Target Acquistion — Mech's Eye View"
BattleTechnology Photographer
Marty Bingham says goodbye to
a Battlemaster. Pirate Raid, Illyria, 3045

Contents

Distribution:
American & Canada: Your favorite Game or Comic Distributor
Australia:
Jedko Games, 134 Cochranes Rd, Morabbin, Victoria 3189
UK & Europe:
TM Games, Chart House, Station Rd,East Preston, Littlehampton
West Sussex BN 16 3AG, England

BattleTechnology News Service

Archon Melissa Back to School!

Tharkhad, Jan 31, 3041

Archon-Princess Melissa Steiner Davion holds her press conferences in person. Today she stunned newspeople by announcing that she intends to enter September's class at The Nagelring in order to become a mechwarrior! "It is a tradition that the head of House Steiner be a mechwarrior," she explained. "When so much else is changing, we need to hold onto our good traditions. I must admit I find a personal satisfaction, a connection with my mother, in the thought of piloting her blue Warhammer."

"I have an excellent staff. Like many a working student before me, I will attend to my work on nights and weekends. Only a major crisis will cause me to cut class!" the Archon promised, with her famous impish smile.

Patrick Kell's Son Found!

Summer, July 2, 3043

At a press conference to day, Col Morgan Kell surprised the newspersons of the Inner Sphere for what may be the last time. He displayed a message — a verigraphed message — in his dead brother Patrick's handwriting. This message acknowledged the birth of Patrick's son Christian Kell. (It was Chris Kell's mother, a sculptor in the Draconis Combine, who made the famous Kell Hound statue which is Archon Melissa's most treasured possession, the original of the statue in Tharkad's Peace Park.)

Morgan Kell announced his leave of absence from the Kell Hounds, effective today! He intends to take Chris to the Wolf's Dragoons' planet of Outreach. Chris will undertake advanced training under Morgan with the Dragoon's resources at his command. Morgan's own oldest son Phelan is about to enter The Nagelring, House Steiner's prestigious mechwarrior academy from which Archon Melissa recently graduated. Phelan is to graduate with the class of '49.

Lt Col Daniel Allard, husband of Morgan's daughter Megan and long-time trusted second to Morgan Kell, will take over the unit. Following the traditions of the Kell Hounds, he will continue with the rank of Leutnant Colonel. The only colonel the Kell Hounds will ever have is Morgan Kell.

Com Guard Gets New Chief

First Circuit, Terra, July 9 ,3043

Spokespersons for Primus Myndo Waterly today announced the creation of the office of Precentor Martial, a special precentor to head up the ComStar military. In the thirteen years since the end of the Fourth Succession War, the Com Guard has grown from small units of garrison troops at each hyperpulse generator station to an estimated fifty regiments across the Known Sphere. With the genius for organization that marks Com Star, this has become a formidable force. And a force that is no longer neutral. It seems more and more possible that ComStar is the source for the mint-condition Mechs that Theodore Kurita secretly acquired in time to use in the '39 war.

The office will be filled by Anastius Focht, a tall, strongly built person whose mysterious past involves the loss of a right eye. Precentor Focht courteously but definitely turns aside questions about his origins. "I did the usual foolish things before I joined ComStar," he says.

Prince Magnusson to Serve 2nd Term

Rasalhague, May 19, 3044

Elected Prince Haakon Magnusson won a sweeping victory at the polls yester. Although three other candidates listed for the office, it was a foregone conclusion that once founding father Prince Magnusson decided to run for the office, he would be reelected.

The popular vote is not a legal election; it serves as advisory only. The binding vote of the Riksdag two weeks from now is expected to be as sweeping a victory for Prince Magnusson.

General Christian Mansdottir, leader of the Motpart, the party of Lyran-influenced Rasalhaguians, chose not to run. Prince Magnusson is limited to two terms by the constitution he helped to write.

Historic Occasions as They Happened: A News Item From the Year 1990:

The first officially-sanctioned regional BattleTech Tournant will take place August 11-12, 1990, at the Central Pensylvania Business School in Summerdale, PA. For more about the mid-Atlantic Championship, a.k.a. 'Operation Green Flag', write to:

Games Only Emporium
200 Third Street
New Cumberland, PA 17070
or call 717-774-6676

On March 10-11,1990, the New England Regional Championship, formerly publicized as the North American BattleTech Championship, will take place.

For information, call:

The Gamemaster
617-641-1580

FASA would like to thank Mayer Fonor and Ford Ivey for their help and cooperation in getting the regional championships started.

Indicass, September 30, 3045

From August 28, 3045 to September 14, some 80% of St Ives' military forces performed scenarios ranging from insurgency in the Sarna Marches of the Federated Commonwerlth to anti-subversive defense in their own territory, from repelling a Liao invasion to mounting one of their own.

"No, the date chosen was no accident!" explained a cadet member of the Chevau Legers who perfers to remain anoymous. "It's the date the Fourth Succession War began with the attack on the Capellans. Our Duchess is rattling her sister's cage."

A spokesman for the planetary government of Ambergrist volunteered this explanation on his home world, "The militia, home defense, even the block wardens are participating in the wargames. Chancellor Romano Liao has seen fit to attack this world several times in the past. Our Duchess Candace Liao has given us the best troops in the Inner Sphere, the Second Kell Hounds, for our garrison. They've kept us alive; it's that simple. Any backup they need, they've got."

Readers whose memories of the Fourth Succession War are a little more personal then the cadet's may remember the Second Kell Hounds when they were Bradley's Bravos, heros of the long bitter defense of the planet Northwind. It's good to know that they're appreciated in their new home.
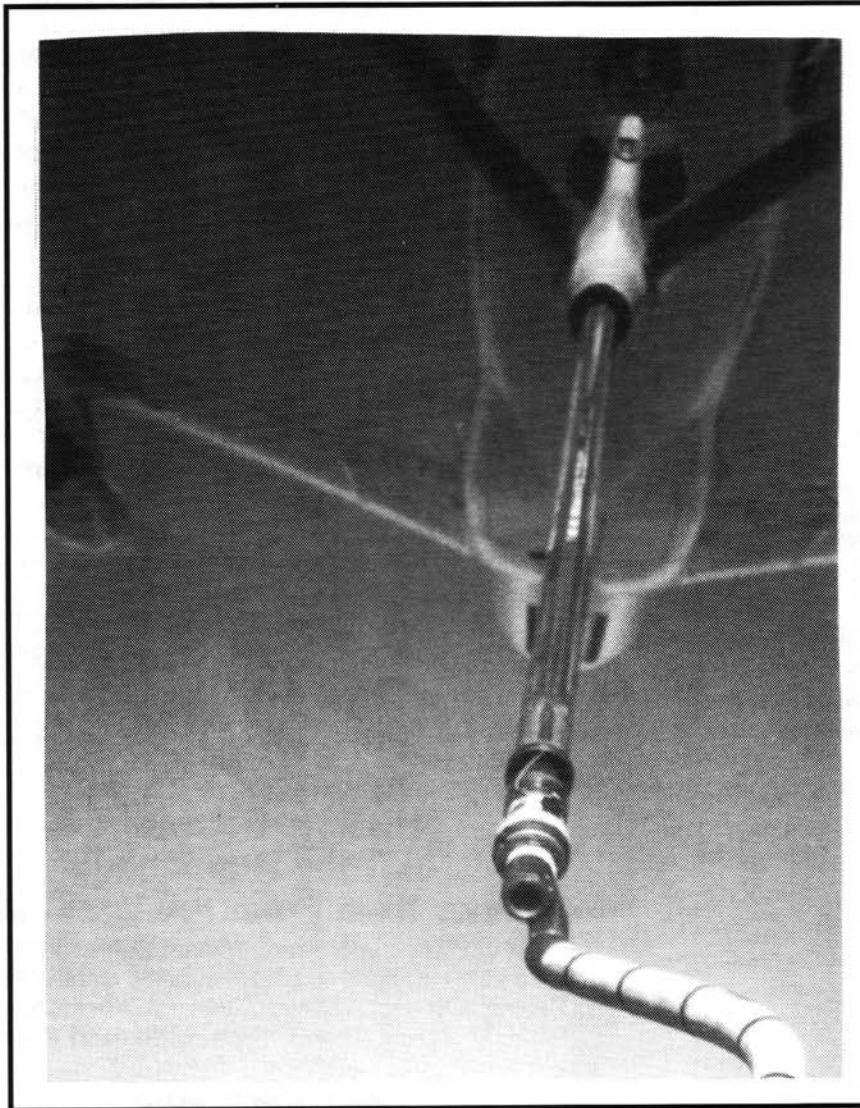
VTOL attached to St Ives Cheveau Legers refuels in mid-air during All-Ives Wargames

Silence From
The Periphery
A BattleTechnology Special Report

Silence from the Periphery?

Chancellor Romano Liao keeps a prophet at court, much as other rulers have kept a jester. Bowhani Ali is fond of giving statements to the press. "When the Periphery falls silent, prepare for doom!" he trumpeted at our reporter last winter.

History has certainly shown that if we ignore the Periphery realms and their goals for too long, they enforce our attention with raids and bloody war. When the warlike states are noisy, we know what they're doing, and can make plans to do before we are done to. When the Periphery is quiet, that's when you need to worry. That's when something is being planned. At great expense, BattleTechnology has prepared this survey of the major Periphery power groups. In some locations, such as the Liao-Davion border, things are about as you'd expect — good and noisy. In other places, far removed from that lively scene, there is that ominous silence.

We'll start at one o'clock on the ComStar clock with the Outworlds Alliance, bordering Davion & Kurita. This republic has been using the years since the Fourth Succession War to strengthen its trade relations with the Inner Sphere. In its dangerous location the OWA must be discreet. President Neil Avellar played a masterly hand by seeking aid from ComStar. Now Com Guard units help him to keep off the pirates, while ten educational teams spread the word of the Blessed Blake through the Alliance worlds. Once this relationship was firmly in place, Avellar could afford to improve his relations with House Davion. His wife, the former Rebecca DeSanders, is a diplomat from the Federated Suns. The Alliance coordinates defense with House Davion now, fighting off the pirates who raid for water and technology. Relations with the Federated Suns are cordial.

From the Tortuga Domains, at two o'clock, comes trouble. As Tortuga approaches complete ecological exhaustion, Lady Death and her pirates have stepped up their raids. The Davion border worlds were good pickings after the '39 war, when defense capabilities were lowered. It is even possible that some of the 'Davion Raiders' which have been bedeviling the Taurians come from Tortuga. Tortugan shipyards are supposed to be able to match any unit's paint scheme; the pirates have long preferred sneak attacks to open warfare. If the Federated Commonwealth and the Taurian Concordat war, the Tortugan vultures will feast. The Federated Commonwealth, with enemies on four frontiers, could afford only a limited war; it could be long and messy.
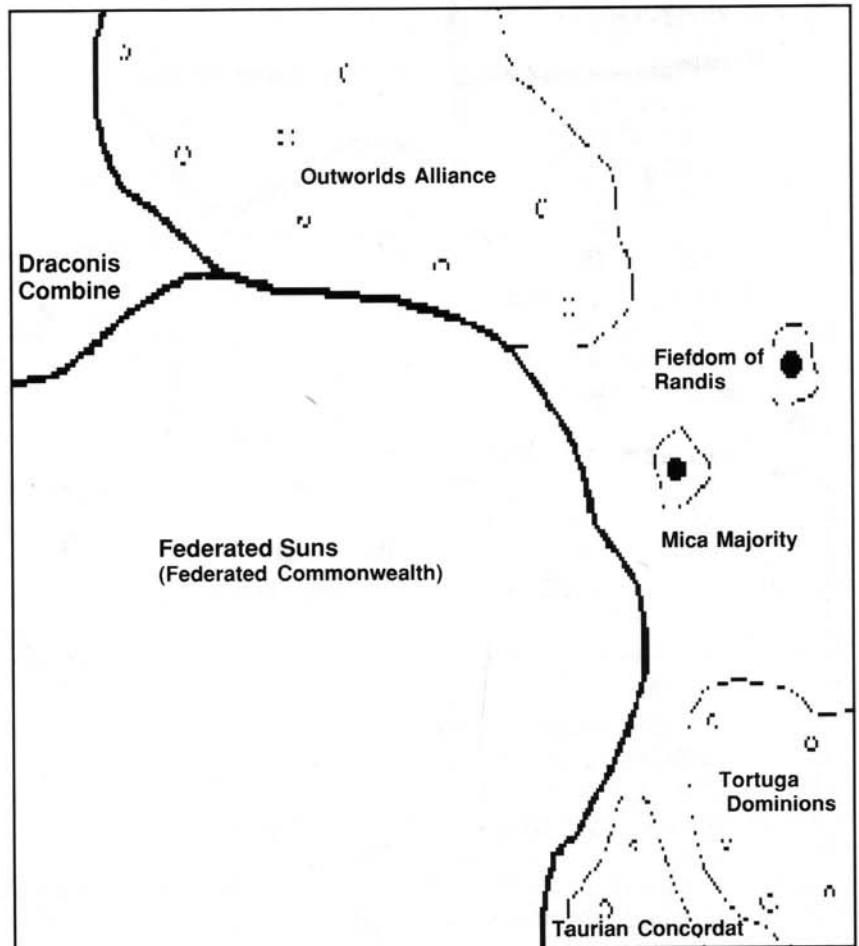
The map (right) labels the following regions: Outworlds Alliance, Draconis Combine, Fiefdom of Randis, Mica Majority, Federated Suns (Federated Commonwealth), Tortuga Dominions, Taurian Concordat.

Map labels:

St Ives

Federated Suns
(Federated Commonwealth)

Duchy of Andurien

Free Worlds League

Capellan Confederation

Magistracy
of Canopus

Devora

Herotitus

Hyades Cluster

Taurian Concordat (partial)

Priest's Planet

Hypatia

New Hope

Taurian Defense Force blasted the *Prince Andrew,* destroying her utterly. 2) In May of 3045, Dedrickson's Devils went renegade after being refused a pay increase. They raided the Concordat world of Pinard and did several million C-bills worth of damage before Concordat forces under then-General Doru defeated them. It was at first believed to be an attack from the Federated Suns; the Protector still holds that belief. It was with difficulty that he was persuaded not to keep the TDF under permanent alert. Any similar emergency could cause a war; if not with Davion, then with anybody he can reach.

Next to the Concordat is the prosperous Magistracy of Canopus, at the four o'clock position. The last fifteen years have seen the Magistracy go through great changes. Kyala Centrella decided on a policy of conquest and empire. Canopus sat out the Fourth Succession War, waiting for peace and good pickings. In 3030 the Duchy of Andurien tried to secede from the Free Worlds League. Andurien and Canopus formed an alliance. They were to come to each other's defense, to marry the heiress of Canopus to the fifth son of An-

The Taurian Concordat, from two to three o'clock, borders the Federated Suns, the Capellan Confederation, and the Magistracy of Canopus. A painful situation exists there; mercenaries seeking employment are advised to walk warily. The Protector of the Concordat, Thomas Calderon, has become certifiably paranoid. He has always been a wary man, a man who suspected the motives of those around him. Unlike the Chancellors of House Liao, his paranoia is focused... His enemies, as he sees it, are two. Within the Concordat it is the Commander of the Taurian Guard, Hadji Doru, who challenges the Protector. Doru was friendly with now-dead eldest son Edward Calderon, who died in 3034 in a DropShip accident. At first the Protector valued Marshal Doru, promoting him quickly, and depending on his advice. Now that advice seems to favor the Federated Suns, who are the Protector's pet hate. Doru favors trade alliances with their most powerful neighbor. Calderon counts two recent incidents as attacks. 1) In 3042, a commercial freighter from the Federated Suns misjudged its jump and emerged in the Landmark star system. Red Chasseurs Aeropilots from the

durien, and to invade and take over what were thought to be the pitiful remains of House Liao. Capellan troops were tougher than optimistic plans had made them out to be. Emma Centrella was tougher too. She refused to marry Richard Humphreys , and spoke against the war. When the fight was actually joined, Duchess Emma fought as a member of the Royal Guards in her Victor, winning popularity for her bravery as well as her ability. In 3031, the Free Worlds League invaded Andurien. The Magestrix of Canopus refused to honor the self-defense pact. Emma spoke out against her openly. Opposition to the Magestrix began to center around Emma. Still, it was a 'loyal opposition', verbal rather than revolutionary, until April of 3039. Assassins invaded Emma's bedroom, killing all there except the Duchess. The mother-Magestrix proclaimed her own innocence, but ordered Emma arrested for treason. The treason of remaining alive? In May of 3040, in a scene worthy of a costume vid, the Royal Guard brought Emma to her mother in chains. When Kyala Centrella ordered the execution of her own daughter, Emma calmly removed the unlocked man-

acles. It was the Magestrix who was seized and locked away. Emma's doctors quickly pronounced Kyala Centrella insane, and Emma assumed the Magistracy without a dissenting vote.

Magestrix Emma has returned the Canopians to their old profitable ways. Forgotten are dreams of empire; Canopus is doing what it does best, dealing with the human body. Since their 3038 takeover of the rival 'pleasure planet' of Herotitus, Canopus has no rival at their arts. Canopian doctors and Canopian pleasure circuses once again tour the Free Worlds League, while a few venture even further. From as far away as the Lyran Commonwealth, investors build factories on lightly-taxed Canopian planets.

Of all Kyala's colonies, only four remain, all on the outward side. Devora, a military base, and Hypatia, colonized by Utopians modeling themselves after Plato's Republic, thrive seventeen years after their founding. Military bases tend to do well; the Hypatians had raised enough money to hire the best in agricultural and ecological experts to advise on their founding. Priest's Planet was founded to exploit mineral deposits for Magesty Metals. It's a mining world rather than a colony. So far, it has not attracted raids from the remains of the Fifty Star Cluster, so it is doing well. New Hope, the last of the new colonies, is at a bare subsistence level. Two years of bad harvests would mean starvation.

If Canopus and the Taurian Concordat should go to war, it *would be over the Herotitus* system. The moon of the uninhabited fifth planet in the system is newly discovered to be rich in ice — ice that in more temperate orbits would be gaseous. The frozen atmosphere is rich in some of the rarer gases, preseparated into neat pure layers by the the fact that each freezes at a slightly different temperature, forcing the still-unfrozen layers to lie above it, each to freeze in turn. The Concordat is building a new Mech factory. Canopus builds Aerospace fighters. Both need gases for myomer construction. Hot war or trade war? Only the future will tell.

Magestrix Emma, by tacitly agreeing to fill the Free Worlds' needs, seems to have won immunity from Free Worlds reprisals following the retaking of Andurien. No such immunity exists in the teeming mind of Chancellor Romano Liao. If attacks are coming from any direction, Can-

Map 1 (upper left):

Elysian Fields

Oberon Confederation

Greater Valkyrate
(partial)

Stars End

Lyran Commonwealth
(Federated Commonwealth)

Free Republic of Rasalhague
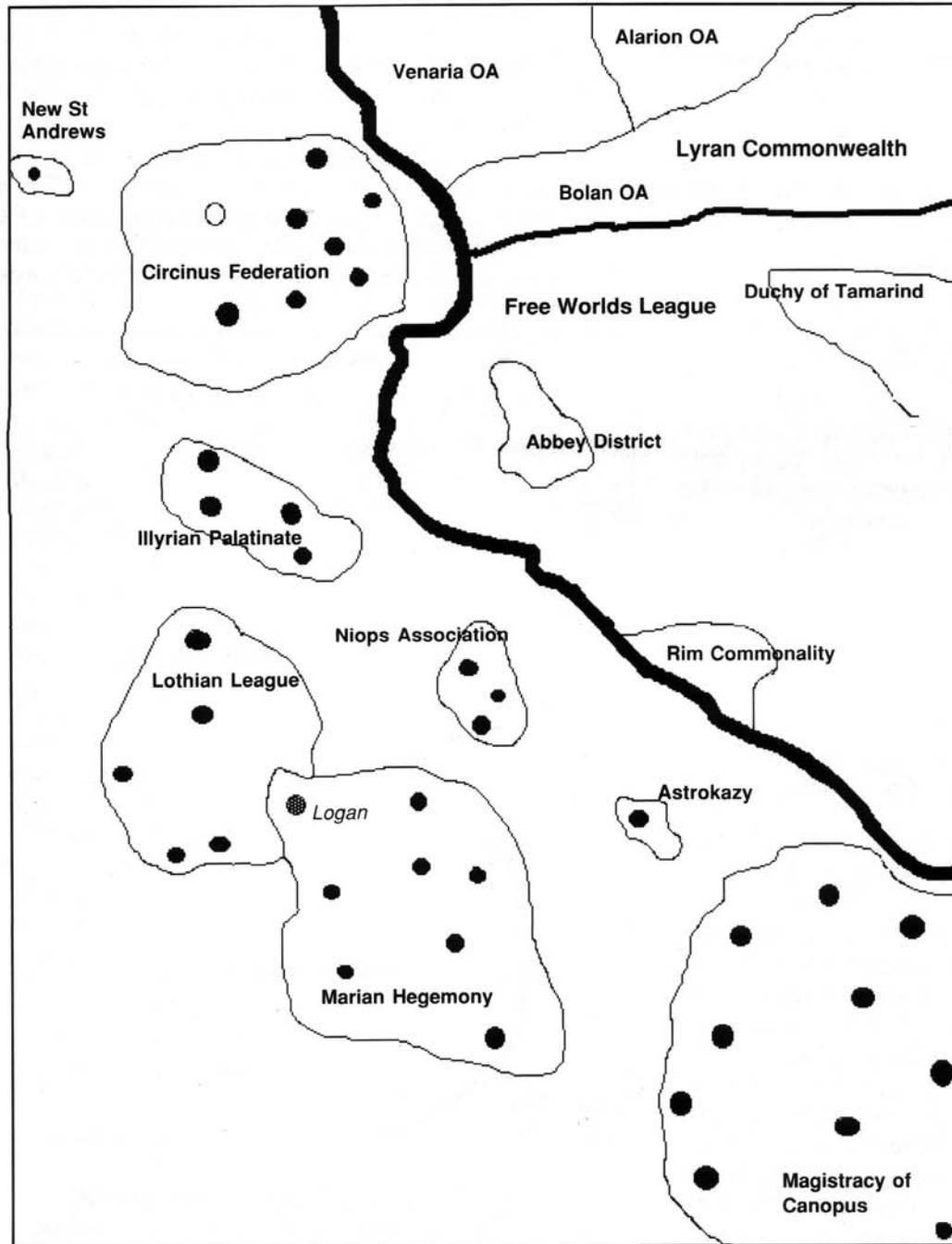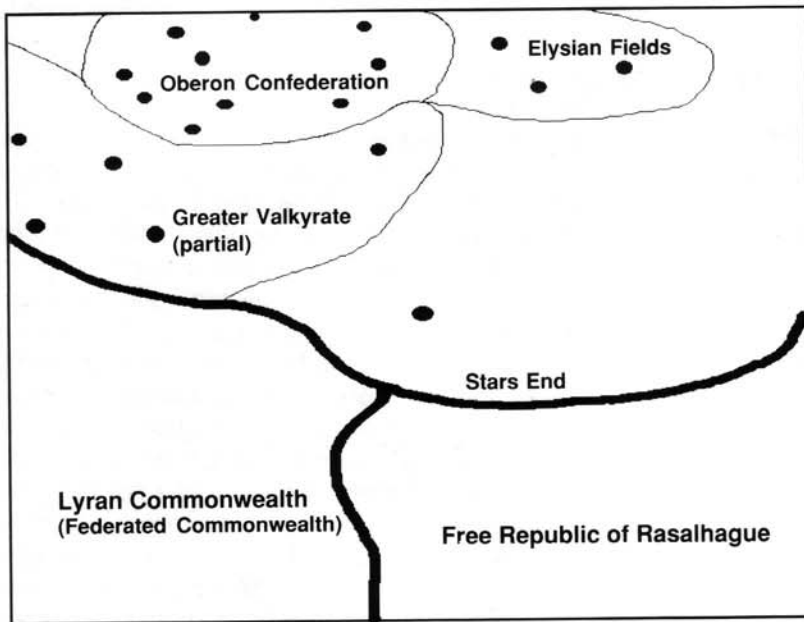
second in command to his father. The unofficial fleet policy seems to be "raid Marik (always excepting the Abbey District) until they start to notice, then it's the turn of the Lyran worlds until they muster a strong defense. Next comes a short round of raiding or extorting tribute from our Periphery neighbors. Then it's back to the Marik worlds again." (The Santinis have not prospered under Thomas Marik's unification policies. His opponents have not suffered legal sanctions, but economic ones. Fail to support the Captain-General, and you lose contracts from the government, government supporters, and everyone who does business with the government. Eventually his opponents are reduced to selling animal feed to backwater planets.)

Com Guard troops have not been made welcome here, but their educational teams have. This is the MacIntyre way of keeping ComStar happy while maintaining military freedom. ComStar has not acted to curtail the Circinus Federation's raids, so it must be

opus must remain strong on her Capellan frontier.

At five o'clock, the situation between the Lothian League and the Marian Hegemony remains strained following the 3041 takeover of the League planet of Logan by the Hegemony. A good deal of rhetoric has been expended by both sides. Marian sources claim provocation on the part of the Lothians. The League points to its record of isolationism, and refers to the Marians as outright pirates. The Lothian League has appealed to ComStar for mediation. Appreciators of the art of political double-talk admire the finesse with which the Marian Hegemony has evaded any such action.

All of the small realms at the six o'clock position bordering Marik and Steiner have been forced to cooperate with ComStar since the Fourth Succession War. With increased ComStar activity in the Free Worlds League, each of her tiny neighbors had to accept 'guidance' or be swallowed by the influence of the Blessed Blake.

The Circinus Federation is silent, all right. It's the silence of a snake digesting a meal. The Federation has enforced trade treaties upon each of her neighbors in turn during the last two decades. Circinian mercenaries filled her coffers during the Fourth Succession War, and again during the '39 War, when the Federated Commonwealth needed all the mercenaries it could buy or bribe. In 3029, Adam Cirion married Barbara Santini of the Abbey District of House Marik. Lord Cirion is the head of the 'non-official navy' (pirate force) of the Federation. Their sons Zachariah and Nathan seem to be dividing the next generation's leadership between them. Zack has won the sponsorship of aging president Bob MacIntyre. With his marriage to MacIntyre's daughter Lisa, Zack becomes the most likely candidate to sucede the President-for-Life. Nathan prefers a less formal lifestyle as

Map 2 (lower right):

Edge of Draconian Drift

Port Krin

Draconis Combine

Outworlds Alliance

Fed. Suns
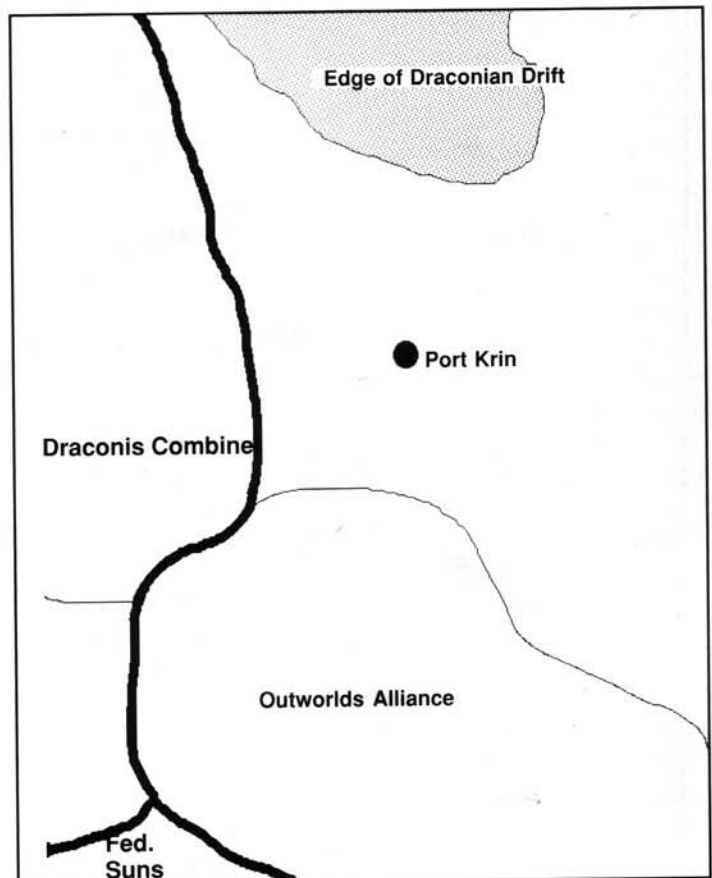
working.

The Illyrian Palatinate has done well out of ComStar mediation. After the disastrous Ellingsen-Ullerton expedition

of 3033, they have made a fortune. Pedro Ellingsen, a popular Lostech prospector from the Free Worlds League, led an expedition which uncovered a wrecked Castle Brian (fortress from the Star League Era) which turned out not to be so wrecked. This would have been great news, except that the naive Ellingsen had neglected to secure the permission of the insular, touchy Illyrians for his dig. A joint Illyrian-ComStar excavation followed (and a public show trial for Ellingsen ending in a forty-year sentence). As a result, some of the Star League technology thought to be only present in the Inner Sphere may soon appear in the tiny Palatinate. Circinian pirates are giving the Illyrians a wary peace until they are certain how much Lostech is available to them. Meanwhile, Ellingsen's fiance Sheena MacGillicudy has led a fight to free him. Citizens from all over the Free Worlds League have contributed to a 'defense fund', in reality a bribe of epic proportions. As Illyria is the planet of ultimate Free Enterprise, the attempt has a good chance of succeeding.

Close to the 8 o'clock position, in 3034, Maria Morgraine and Redjack Ryan joined their realms to create the Greater Valkyrate, uniting Morgraine's Valkyrate with the pirates of Butte Hold. Ryan's Rebels remains a strong, disciplined unit now led by Jack Ryan. The Rebels expend most of their efforts on the Oberon Confederation, but enough of their energy remains to pose a serious nuisance to the Lyran borders of the Federated Commonwealth. 27-year old Susie Morgraine-Ryan lost her left eye last year in a one-on-one Mech duel which proved that her elevation to company commander was not due to her birth, but to her abilities as a down and dirty fighter. She will have a formidable career, BattleTechnology predicts. The Blackjack Operations Area (Tamar March, Federated Commonwealth) has a sizable number of its fleet tied up in second-guessing the Rebels. Rasalhague has been so hard hit by them — fourteen raids in two months in the wedge bounded by New Caledonia, Harvest, and Outpost — that Prince Haakon Magnusson has opened negotiations with the Kell Hounds for an additional strike force. We imagine that *Valdherre* Tor Miraborg will not be a party to these negotiations!

In 3035, the Oberon Confederation (nine o'clock) began a military buildup. Avoiding direct confrontation with the Greater Valkyrate, they have concentrated on a successful series of raids on the truculent Free Republic of Rasalhague. The aging Duke Hendrik showed much of his old shrewdness in choosing subordinates. Jack "Ripper" Fong, Oberon's aerospace commander, and Minus Torkillson, originally from Oberon's Protectorate The Elysian Fields, who rose from the

ranks to Mech Force leader under Hendrik, seemed ready to square off for a civil war once the Old Dragon had died. ComStar reported loss of contact with Oberon, and hence loss of its relays to the Confederation and Elysian Fields, over a year ago. (This is particularly distressing to the proponents of the One Star Faith, who had almost achieved the amount Duke Oberon demands of them in return for following their visions of Kerensky to the planet Elissia.) We can only conjecture as to who died, who's fighting, and who's likely to win. BattleTechnology will bring you updates as and when we receive them. As always, we'll pay a news bounty to warriors bringing reports to our various offices.

It may not be surprising that the Star's End pirates are ranging farther from home. The hyena, however valiant, does not challenge the lion nor the tiger for prey, nor stand close when the two seem likely to fight. If Duke Hendrik's successor goes to war with the Valkyrate, Morgan Fletcher may lead Star's End forces to snap up the pickings. Until then, border worlds beware!

The Draconis Combine is lucky. Much of the Draconian Drift is unstable asteroid belt, isolated uninhabited systems, or non-threatening small groups who prefer not to be notice by their giant neighbor. The Alshain District must fight off raids from Santander's World, but these forces prefer to strike at the smaller forces at Rasalhague's command rather than risk the wrath of the Dragon. From there to Port Krin, near the Davion border, nothing menaces the Combine.

The slavers of Port Krin trade the right to explore possible Lostech sites on their worlds for the Combine's outmoded Mechs. House Kurita dictates the terms of these swaps. Port Krin is a blot on the face of the universe, but no threat to the Kuritans. In fact, victims of pirate assaults from all over the Periphery are sought in the slave markets here by their grieving families. The various 'merchant' houses here hire frequently. There's probably a job for you here. But you have to be hungry to take it. Life expectancy is poor — and most mercs draw the line at slavery. Not much can be said about the government of Port Krin, because it changes from year to year as yet another gang ousts the thieves in power.

Port Krin's other neighbor is the Outworlds Alliance. The OWA maintains neutral formal contact with the Draconis Combine. Aside from a misstep on the world of Enif (see scenario, this issue), no recent actions are noted. Avellar is a good employer to the units he already hires, but is not in the market for new ones. The last thing he needs is to look like a valuable ally to anyone!

For More Information about Periphery Affairs, see *The 20-Year Update,* Published by the FASA Corporation

Snow & Ashes

From an anonymous diary narration
detailing the destruction of the Second Phoenician Irregulars
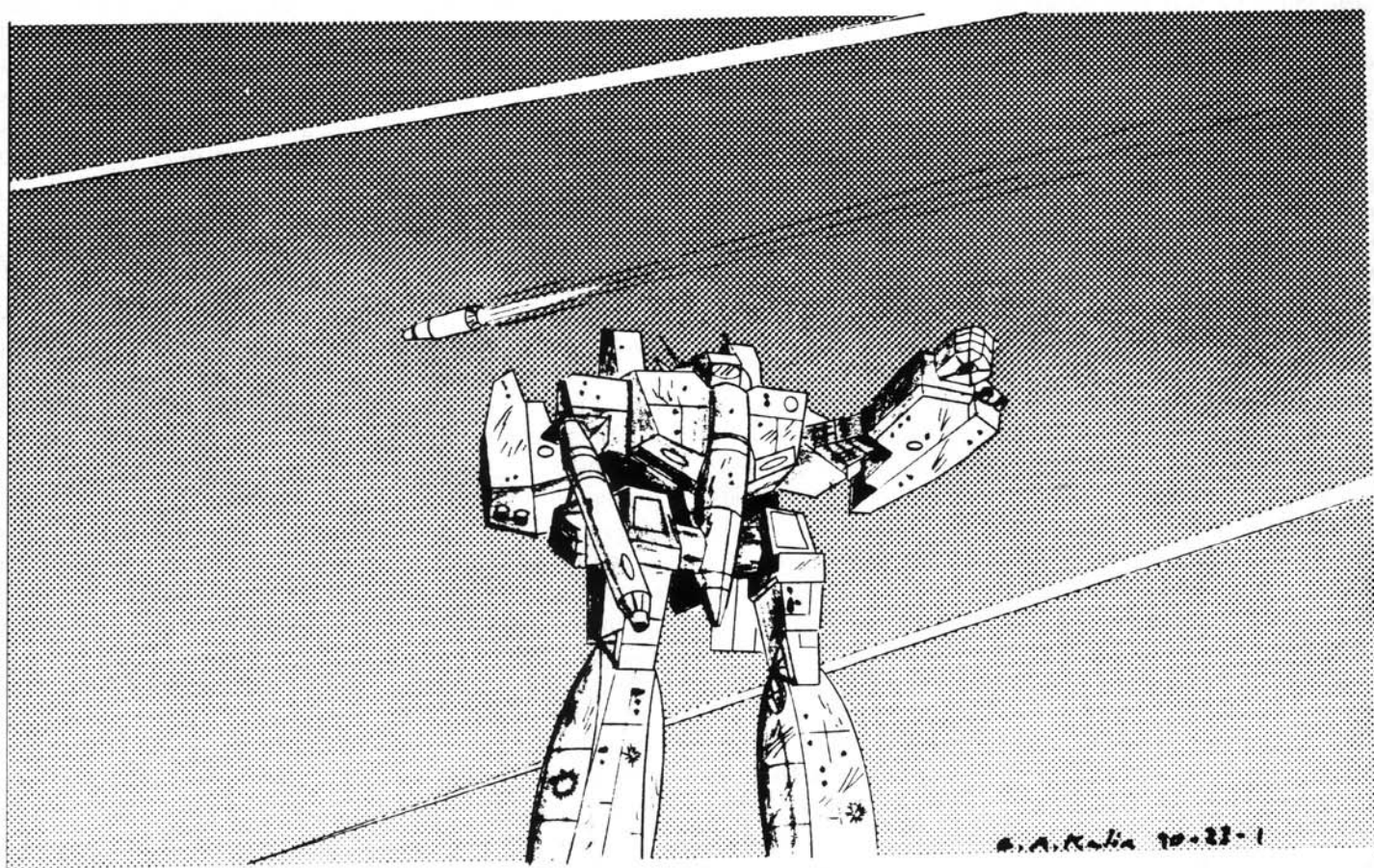
"And that, Major, concludes our report." The young, recently-promoted captain in Intelligence finished with a rush, looking nervously at his new superior.

The major gingerly placed a sheaf of flimsies down on the desk, then got up from his chair and slowly paced the small office, hands clenched behind his back as he walked. The silence grew.

Turning to stare at his anxious underling, he responded slowly, "Are you sure that this, this — warrior's journal — is all that remains of the Second Phoenix? Astonishing."

"Quite sure," the captain replied defensively. "It's all in the report. Not only was the mercenary unit wiped out, but it's almost as if it were never there. Oh, there are a few pieces of light debris, numerous scorch and ballistic impact marks, and some Mech and tank tracks scuffed through shallow snow into the ground. But hardly indicates a massacre."

The major stopped pacing. "Not very much to go on."

"No , sir. The snow obliterated a lot of the evidence."

"Hmm." The major resumed his movement.

"A member of the salvage crew found the narrative quite by accident, in an improvised time capsule buried in densepack snow half a meter or so beneath what appears to have been the site of the last confrontation. It was apparently dropped or jetissoned from the warrior's vehicle. As you saw, a hardcopy script is included in the report."

"Why would anyone take the time to bother?" The major asked, frowning.

"The salvage leader believes the author may have been trying to preserve some record — something — of the unit's history for posterity. It's obvious the journal wasn't finished, but he clearly believed his own end was near."

"No indication of who the author was?"

"We feel that it was a male mechwarrior, likely not an officer. Except for that, the point of view used in the narrative makes it impossible to be certain. My own hunch is that it was a Dervish pilot with the Fire Lance, but it's only a hunch."

"Astonishing. What else do we know?"

The captain looked down at a hand-held microcomputer, then looked up again.

"It wasn't easy, but the Re-enactment Team thinks they can simulate the battlefield conditions that led to the massacre of the Second Phoenician Irregulars, based on what little data is included in the journal, and some related technical data. plus what is known of the attacking force. The holographer has already been programmed, and we can project the image in here."

"How good is the simulation?"

"Best estimate is eighty-seven point three percent accuracy."

The major sat down once more, put his feet up on one corner of the desk, and fixed his eyes on the opposite wall. "That's something I want to see."

1 Jan 3045

A new year, a new world, a new assignment, and a new journal. There's a sense of newness here, as I begin with "Day One" in this volume. It's funny. Though we can't really feel or observe it in a literal way, we could almost sense the dropship and jumpship that landed us here when they departed the system. Sepulveda won the betting pool on the exact hour when our transports left the system; I was a close second.

5 Jan 3045

I don't like this planet. At least I don't like being cold, and this is the heart of the winter season in this world's northern hemisphere, on this fifth day of January, 3045. Brrr.

Major Grizok has reorganized what's left of the Second Phoenician Irregulars. Not too many weeks ago, we were a mixed mercenary force three full companies strong. Since then, we've lost four BattleMechs, thirteen armored vehicles, and all of our organic air support in defense against a series of raids launched at the last planet we were guarding. Now that we are here, everyone is hoping for a long quiet period of rest. We can use it.

The Command Lance now contains an Orion, a Phoenix Hawk, an UrbanMech and a Patton tank. (We would be a laughingstock among merc circles, if anyone knew we were forced to include a tank in our Command Lance, but times are hard — and they aren't getting any easier.) The Fire Lance contains four Dervishes. The Recon Lance has one Locust and two Pegasus scout tanks. The Medium Tank Lance has two Vedettes and two Strikers, and the Light Tank Lance has four Scorpions. That's it. This garrison assignment is a godsend, if anyone cares to believe in such things. I still do — sometimes.

9 Jan 3045

Even though we've landed and everyone is settling into their regular routine, there is still one question on everyone's mind: where exactly are we? This is what some of the company is saying:

— "I still say we're in the Gotterdammerung system!"

— "And I still say you're crazy. That's halfway across the Commonwealth!"

— "No, no. We gotta be on either Outpost or Richmond."

— "Could be some little dirtball planet not shown on the ComStar charts" Couldn't it?"

— Can't be Richmond. I've been there , and the air composition here isn't right for Richmond."

— "Aaagh! I don't give a raxx' rear what planet we're on. All that matters is that we're stuck here."

— Who ever heard of dropping a merc garrison without telling them where they were landing?"

— "Weird times we live in."

— "Thank you for that profound philosophical insight!"

— "Oh, get pickled!"

We hope the Old Grizzly will tell us soon. If he knows.

14 Jan 3045

A major named Lelkino has arrived. Major Grizok said he's with Military Intelligence for our employer, but that's off

the record. I have my doubts, though: Lelkino doesn't look bright enough to even *have* intelligence, let alone be *with* them.

After Grizok met with Lelkino, I asked him when we could know "the big secret." Commander looked almost pained. Said *he* didn't know yet where we were. Really got him torqued too, I could tell.

15 Jan 3045

We had a big meeting today. Lelkino held an open briefing, and even the tankers got to attend. It was a big disappointment.

According to some very small print in our mercenary contract, the unit was to be informed of its exact duty station and nature of its assignment only: "when such information is of significance, or when the absence of said information would prove detrimental to morale or might otherwise impede

I didn't believe Lelkino for a nanosecond.

or hinder the unit's effectiveness in accomplishing said assignment." Sounded like garbage to me.

Someone stood up (Two-Guns, I think) and asked what our actual mission was, said morale *was* becoming a problem. Everyone has been assuming standard garrison duty, but you know what "assuming" can do. Especially to mechwarriors, and in spades. Lelkino hemmed and hedged and futzed around, finally agreeing that we were in fact on garrison duty — after someone else said it aloud. I didn't believe Lelkino for a nanosecond.

Then Captain Behr demanded to know why our contract called for about double the regular pay rate for a garrison contract. Lelkino made some more noises, like calling us an "elite mercenary unit with unique combat qualifications." Imagine that. Everybody left the meeting with their tails dragging.

19 Jan 3045

We had a minor ground tremor early this morning! Half the unit didn't know what was happening, and the other half couldn't believe it was happening. I had been in a quake before, but no matter how many times you're in one, it still catches you off-guard. Fortunately, there was no damage.

The biggest surprise was that there was no mention of seismic activity in Lelkino's briefing on this still-unidentified planet. That should have been in the report. I guess it's just one more thing we don't know about what we're doing here or why.

After Lelkino, Old Grizzly and Two-Guns Sepulveda decided to keep the troops busy by making busy-work for everyone. In the last four days we have staged defensive perimeter drills, inspection drills, no-Tech breakdown drills, parade formation drills, and a half-dozen field tacsims (tactical simulations). About the only thing we haven't tried is an "Abandon dropship" drill! It's all a waste of time, but at least it keeps our hands and minds occupied.

Word came down that there would be no more exercises for a couple of days. To celebrate, a few of the gang are planning a little party for this evening.

20 Jan 3045

Don't remember much. Got stinking drunk last night, and I woke up on report. Called Captain Behr "Sugar", and I think I made a pass at her. She didn't respond very favorably to either. For tonight's mess, I'm peeling about 15 kilos of the local winter tuber, some sort of cross between an onion and a turnip. They make my mouth and eyes water at the same time.

22 Jan 3045

Another 14 cm of snow fell today. I can't *wait* until summer.

27 Jan 3045

We began maneuvers again today. Something very weird is going on, though — we are spending an awful lot of time practicing combat tactics against really big Mechs. I mean it's ridiculous; where is anybody going to come up with an entire Lance of Marauders or Warhammers out here? (Wherever 'here' is.)

Late that night I asked Christy Wellington (the new Medium Tank Lance Leader) if she had heard anything interesting. She said these tacsims were Major Lelkino's idea. I said, "So surprise me already." Shortly after that, she did...but it had nothing to do with what we had been discussing.

28 Jan 3050

Another day of maneuvering, both on and off the field. We practiced making recce surveys, trying to get the most information about an unidentified vehicle near the edge of the horizon, using visual and remote contacts. This was actually sort of fun (I hope no one ever learns I said that), as each Mech and tank crew took turns trying to spot and check randomly-selected 'enemy' vehicles as they popped up over

the hill. Then the weather turned nasty, with light snowfall, but a driving wind. Couldn't see or identify anything until it was within a couple hundred meters, and by then it'd be too late.

But, all in all, it wasn't too bad. In fact, today we even christened our bivouac area "Happy Valley". Skippy and Renegade Chang and I were just being facetious, but Captain Behr thought we were serious. I didn't have the heart to tell her differently. Isn't life joyful?

29 Jan 3045

Another big surprise today in the briefing hut. Major Lelkino unexpectedly announced that we were only the vanguard unit for a large garrison, and our reinforcements should be here by the end of next month. He added that he would be leaving us sometime before then, but that he was "very pleased with the quality and professionalism exhibited by the Second Phoenix during its specialized training." Half the time nobody knows what he's talking about, and we don't think *he* knows during the other half.

At that point everyone spoke up and insisted on being told what our real mission was. (He blew it. I mean, NO one sends in a vanguard unit for a frontier garrison.) Lelkino did his regular dance until Major Grizok came stomping in, madder than I'd ever seen him, with a fistful of papers in one hand and a microdisk in the other. I surreptitiously flipped my pocket-'corder on.

"Garrison duty, eh? The Second Phoenix, a unit with special skills, eh?" Grizok yelled, pointing accusingly at the intelligence officer. (Grizok *never* yells at officers. Well, hardly ever...and never at majors or above.) "How long did you really expect me to believe that *kulungwhap?*" (I should explain: the word *"kulungwhap"* is a slang euphemism used on some of the Marik border worlds, and it's not a very nice term. Let's just say it has something to do with a substance not highly sought after, except in certain limited agricultural and energy-synthesis applications.)

Lelkino turned around to face the irate commander. "Major, heh, I don't know what you mean." His lackluster expression never changed, but his voice wavered a half-tone when he caught a glimpse of what Grizzly was holding. "Uh, what do you have there?"

"Just a magnetic copy of our mercenary ticket, a version of which I had never *seen* before, let alone endorsed. I found it among your possessions."

Lelkino almost showed a little honest emotion, and it was hate. "By what right do you go through my personal—"

Grizok grinned the grin of the victorious. "You are welcome to file a protest with the Lord of your choice, Major." He turned to address us. "Officers and noncoms, I have a little newsflash. We aren't on garrison duty at all — this contract refers to our own assignment here as part of a *defensive campaign!*"

The internal mike on my 'corder blew out under the ensuing noise load, and the sergeant-at-arms had to regain control with a bullhorn. Lelkino was lucky to leave the room intact.

Morale is now at its lowest point since a few years back, when a certain petty, conniving Lord in the Draconis Combine deliberately defaulted on our merc contract and left us without ready funds or a way to get off-planet. Good thing he was off-planet at the time, or we might have completed one more little assignment.

4 Feb 3045

To give things a chance to cool off, everyone was granted the last five days as rec leave, subject only to base restrictions. It meant we couldn't go anywhere, but we were free to do whatever we liked in the barracks. Some wild card games have broken out in the past hundred hours, only to die down briefly before breaking out again. It's just about the only good thing that has come out of all this; given the resources at hand, an unauthorized 'vacation' was the most generous and compassionate act Major Grizok could perform.

To commemorate the end of our 'quality leisure time' with a fitting climax, my lancemates saved the longest, hairiest bull-and-cards session for this afternoon: what is to be the fate of the Second Phoenix?

— "Another few weeks or months at most, and we'll be rotated. No sweat."

— "What about Lelkino's reinforcements?"

— "They fudged the numbers. Our pay is wrong. Everything about this job is wrong."

— "Who could possibly believe anything that liar might have said?"

— "I pass two."

— "I think we're dead. Some huge wave of BattleMechs is gonna come through the system and wipe us right off the planet."

— "From where? Where you gonna get that wave?"

— "Lelkino had us practicing against heavy Mechs for some reason, didn't he?"

— "Who could put together enough mass firepower to justify a full-fledged defensive campaign? Where would the attack come from?"

— "Another prince? How many prince cards you got in this deck, anyway?"

— "I don't think one of the Houses could do it. Everyone is still too worn out from the last war."

— "And who does that leave? The Bandits?"

— "The Second Phoenix wouldn't have a chance defending against a major assault."

— "Oh, I don't know. We aren't as big as we used to be, but I bet we'd still give a pretty good account of ourselves."

— "I'm not talking a garrison repulsing some piddly little

diversionary raid...I'm talking about keeping this world away from someone who would want it pretty bad."

— "Yah, you wait until a company of heavies comes knocking around."

— "Well, you can't blame ComStar for this one."

— "I wouldn't be surprised if Lelkino was a ComStar plant."

— "I call and raise a dec."

— "Did you know he's been confined to quarters since the Phoenix went on rec leave? I bet he's under close arrest."

— "I'll see your bet."

— "I wasn't talking to you."

— "Oh, and what makes you the expert?"

—"I haven't seen him anywhere in bivouac, and Major Grizok looks almost like his old, semi-sour self."

— "Hah! You haven't been out of here for two hours in the last five days. . .you've had your nose glued to those sticky cards."

— "Maybe, gimme one card, that fink left, just like he said he would."

— "If Lelkino leaves here, he'll be lucky not to do it feet first."

— "I'll drink to that."

— "Here too. And by the way, I just double-trumped."

— "What rotten luck."

— "Really. That makes a total of *two* years' pay you now owe me."

— "Fine. Every C-bill I earn in thirty-seventy and 'seventy one are all yours."

— "Very, very funny."

5 Feb 3045

Today was just routine. BattleMech maintenance and service checks; sighting and test-firing weapons; clocking revs on the main gyro; verifying thermal conductivity of all heat sinks. Even so, I'm just going through the motions, like a man sleepwalking.

For me it's sort of been a calm before the storm, except maybe there isn't any storm coming. Or maybe there is. I had a scary dream last night; a nightmare, to be more exact.

I dreamed I died.

I'm in my Mech, moving in formation on the field of battle, when a huge 1000-ton BattleMech jumps straight up and stomps my Mech right into the ground. Only the ground doesn't stop me, and I keep falling through the snow, the soil, and the rock beneath it, and I can't stop falling until I reach the center of the planet. When I reach the center (I'm still alive, in the dream), I see a bright fire-lit sign. On one side of the sign, it reads: The Name Of This Planet Is On The Other Side. I turn to look at the other side of the sign, and it reads: But You're Dead, And Dead Men Can't Read Signs.

After reading that, I fall instantly dead.

That's when I woke up. And knowing that there is no such thing as a 1000-ton BattleMech is strangely not comforting at all.

6 Feb 3045

Less than a half-minute remains before elements of the Second Phoenician Irregulars make contact with a hostile force of unknown origin or intentions. I've turned on the Mech 'corder.

— "Recon Lance to Command. Have sighted two Lances advancing, range three-zero-zero meters, located due north and north-northeast, respectively."

— "Identify."

— "First Lance contains Victor and three Catapults. Second Lance contains exact opposite. Repeating, four assault and four heavy Mechs approaching at maximum speed, heading due south."

— "Look, they're all white!"

— "Repeat?"

— "Uh, the attacking BattleMechs are completely white in coloration. They look like mechanical polar bears."

— "Polar bears?"

— "A large, omnivorous, semi-aggressive species of thickly-furred mammals, known to inhabit polar regions on certain planets."

— "Never mind. All units, close to optimum and open fire."

— "I'm hit! Aaagh!"

— "Look out! Incoming!"

— "Where's the rest of the Phoenix when we need them?"

— "There's more than one sector to patrol; we can't risk everything on defending just this one area."

— "Watch out for those twenties on the Victors.!"

— "Hit him! But it isn't having much effect!"

— "Damage critical now, power plant on auto shutdown."

— "I'm on fire, what should I do?"

— "Punch out! Punch out!"

— "Did you hear something?"

— "Earthquake! Ohmygod, *earthquake!*"

— "Keep firing — maintain laser tracking!"

—"I'm getting out of here!'

— "We can't stop them if we run away!"

— "I don't think we can stop them no matter what we do!!"

7 Feb, 3045 (Morning)

Everyone who survived the night is exhausted, physically and mentally, after what happened yesterday, but this has to be logged. We got hit badly, being horribly outclassed by some really first-rate heavy BattleMechs and mechwarriors. Maybe Major Lelkino wasn't as far off as everyone believed (or hoped). Some units fought, some units retreated, some units were crippled or destroyed, while some underwent a

combination thereof (my own unit included). And that doesn't even count the earthquake. We never really had a chance.

As late as 1030 hours this morning, no one knows exactly how many Mechs and tanks were lost yesterday. The lances got pretty spread out, and they are still regrouping and counting noses. We do know now why yesterday's attackers were in such a hurry; they were targeting our supply cache. We lost our ammo and POL depots completely. Whatever is left in our magazines are all the missiles and bullets we have in the entire system. We pray the same is true for their side.

Everyone knows one other fact for certain: if this attack was part of a general offensive to seize control of this world, they will be back to finish off what's left of us. By all appearances, we'll still be here.

7 Feb 3045 (Afternoon)

I never thought I would live to see a lance of new, spotless Atlases sweeping majestically across a battlefield, firing and systematically destroying everything within range. Now I realize I will live to see them, but I also realize that will be the last thing I will ever live to see. Major Grizok has ordered us to stand fast, and we will obey; there shall be no retreat. . . and no survivors from the Second Phoenician Irregulars.

Trapped squarely between that lance of assault Mechs and the other Mechs returning from yesterday's attack leaves much to be desired. Yet with so much death so near at hand, for some peculiar reason, all I can remember is a snatch of doggerel, very old:

> **"I've never seen an Atlas and I've never seen a Lord;**
> **But with Atlases, I know at least, I never would be bored."**

You should know I fought well, Mother, or at least as well as I could. My only regret is not knowing on which planet I gave my life.

And for what it's worth, it was true: I was *never* bored.

Caught in the Mech Flush
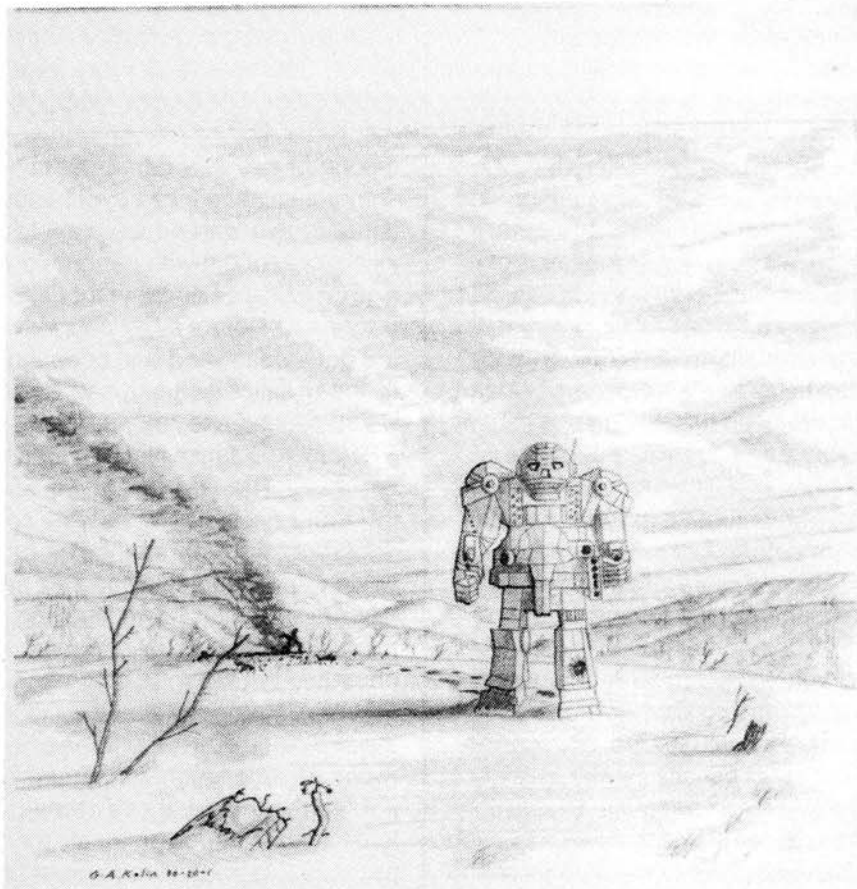
This is a personal narrative by Sub Commander Clarson Kelly of the Pursuit Lance, Miller's Company, Tenth Chesterton Reserves of the Capellan Confederation; a participant in the engagement and subsequent pursuit of the irregular bandit forces which raided Carver V a year before the Fourth Succession War. Our correspondents in that area have assured us that corroborating evidence indicates that this story is a true representation of what occured during the raid, and not just a bar room tale. While we at BattleTechnology are sceptical, we'll let our readers decide for themselves. This is Sub Commander Kelly's first contribution to BattleTechnology.

Dimeo Kitakami is a freelance journalist who covers the border regions of the Federated Suns and House Liao. We hope to have more first hand material from Mr Kitakami in future issues of BattleTechnology.

They say that if you survive to keep up this MechWarrior business to a ripe old age, you will have seen everything there is to see under a thousand different suns. After my last operation I can finally believe it .

The bandit raid on Carver V was a real minor affair. For us, it amounted to no more than an additional training exercise. Those bandits were a real sorry lot. They must have been at the end of their rope to have even attemped a quick resupply run into Carver V. They had to know we were there. I mean, the Chesterton Reserves have used this planet as a training base for years. These guys must have been berserkers or something.

We got a fix on their DropShip coming in from the zenith JumpPoint about four hours before they were to hit atmosphere. The Chesterton Reserves were always Aerospace fighter-poor, and what we had stationed with us on Carver V had recently been transferred to another unit to take part in a raid on Davion Space. So we had no orbital cover at all and didn't really know what was dropping down on us. It could have been a crack regiment of Davion Guards. But soon evidence would point away from that possibility. Far away.

The bandits dropped in off their rust heap of a DropShip at about 20,000 feet. No AeroSpace fighters were deployed with them so I guess we lucked out. They were only coming in with seven or eight 'Mechs so we had them outnumbered

about six to one planetwide. The only problem with that was our units were spread all over the main continent protecting what we thought were th most likely targets for a raid. As usual, there were a lot more targets than there were units to guard them. The Bandit 'Mechs followed their ship down to a bumpy landing near Desmond, a small hamlet that was used as one of our emergency supply points. At least they knew something about the layout around here. Desmond contained a two warehouse complex with maybe a platoon of locals covering it with hand-held weapons and one Strident Anti-Air Missile Launcher that had seen better days. It got off three shots before a Phoenix Hawk targeted it and blew it off the defense tower it had been mounted on. I heard that one of the missiles actually damaged a Stinger's leg actuators which caused it to limp for the rest of the raid.

The local defense platoon fared better than the Strident and her crew. They only had two SRM launchers assigned to them and five plus 'Mechs were coming down on their heads. They bugged out as quick as they could in whatever they could. Hell, I would've done the same thing. The bandits just ignored them and started moving in on the warehouses after they landed. they were trying for a quick in, quick out operation but we were going to disappoint them.

Miller's Company was the closest unit to Desmond when the raid came down. Our area of responsibility encompassed two major and four minor targets and Captain Miller had dispersed the three Lances of the unit so that we could get at least some firepower to all the objectives as quickly as possible. Desmond was one of the minor targets closest to the coast. Only the Command Lance and my Pursuit Lance

were close enough to have a chance to get there in time. Commander Gunther had us on the run in no time and we met up with the Command Lance less than half an hour later. Captain Miller didn't try to get to the town in time to stop the Bandits from taking what they wanted. He had us on overdrive toward the path of retreat that the bandits would have to take. Our eight 'Mechs were jumping it to get in between them and their DropShip. It had landed on a grassy plain some fifteen klicks from the town instead of the rougher terrain close in to the town. They had taken the better odds that reinforcements couldn't get to them by the time they could travel the distance, rather than taking the more dangerous tactic of landing their one and only DropShip in hazardous terrain. I didn't blame them but in this instance it didn't work out.

We first caught sight of them travelling in a staggered line just at the approach to the Molito Reservoir. I'd never seem such a raggedy group of patched up 'Mechs in my life! Half of them limped or hobbled on uneven legs that had been taken from different 'Mech classes. One or two had to have parts from six or seven different 'Mechs attached to them. I could only recognise the 'Mech types of about half. They all carried or dragged the heavy stamped boxes that could be recognized everywhere in the Inner Sphere as crated 'Mech spare parts and equipment. I don't think that we had been spotted when the last four 'Mechs in their line turned toward the reservoir and entered its muddy waters. Before the four Bandits were completely submerged they nonchalantly dropped what they were carrying in the shallows. Only the three heavier 'Mechs in the lead kept on running toward their LZ, all encumbered with enough spares to fix up a company of damaged 'Mechs.

Pretty smart; it would have been a classic ambush tactic if we hadn't come up to see its implementation when we did. I'm sure we would have run right past the reservoir only to be hit from both the front and the rear shortly. It kind of lets you know what a split second can do for your situation on the battlefield.

"Pursuit Lance, break right," came the order from Captain Miller's Wolverine. "Enter the Molito and engage the bandits. Flush 'em out."

Commander Gunther acknowledged from his Trebuchet and ordered the rest of us to follow him into the water as the Command Lance ran past toward the other three bandit 'Mechs withdrawing toward their DropShip with an armful.

I never did like water combat. Sure, you get a big boost in your heat capacity and staying power. But this is balances out by the poor visibility slippery footing, difficulty in movement as well as the greater amount of ammo feed jams and clogged intakes. Besides — lake and river bottoms give me the creeps.

Molito Reservoir was no different. It was scummy, it was murky, and it sure wasn't the cleanest water I've ever seen.

I couldn't believe that anyone drank this stuff after a purification process or not. After we got through with it today, I was sure it would be in even worse shape. I couldn't have been more right.

"Higgins and Kelly, flank left," came the command from Gunther's Trebuchet. "Franklyn with me on the right. Line abreast. Let's find these buggers and drive 'em to drink!"

We all acknowledged and hit the water. My Javelin was knee deep on the fairly steep bank when I heard a shout and saw Higgins' Cicada lose its footing and slide underwater on its back. "Check on Higgins, Kelly. We don't need any damage entering the bloody water!"

Gunther's Trebuchet and Franklyn's Wasp kept moving deeper into the reservoir as I clumsily sidestepped across the bank to where Higgins had taken a dive. By then the water was roiling and breaking as he tried to regain his feet on the bottom. Communication would be difficult completely submerged but there was nothing else to do. Carefully, I maneuvered my Javelin under the waves, putting the 'Mechs's hands out as if I were walking through a darkened room.

Visibility couldn't have been more than sixty or seventy meters. What I finally saw was a rolling cloud of mud ahead of me marking Higgins' position. I closed in and tried the radio at low power.

"Higgins, what's your situation?" There was no answer. I repeated myself as the mud cloud began to envelop me, leaving the cockpit in total darkness. I could hear the amplified sounds of metal banging against metal from the outside of the Javelin, but couldn't make anything out of it. There was nothing to do but move ahead, groping as I did so.

The *crump crump* of underwater missile detonations took me completely by surprise. They were too far away for me to guess direction, but I also could pick up the bubbling hiss of submerged lasers being fired. And here I was in a cloud of mud totally blind. This was getting scary.

I was almost happy when I ran into something. My 'Mech's hands glanced off the back of another 'Mech that was almost bent fully over, its feet trying for a purchase on the treacherous bottom silt. And it wasn't a Cicada. Its huge left fist had been banging down on Higgins' hapless 'Mech as the Bandit had nearly sat its full weight on the Cicada trying to push it into the mud. I thought it was a Centurion, but I couldn't tell with all the replacement equipment it carried and the improvised jump jets on its back.

Before the enemy 'Mech could turn around I had stepped back and let loose with my two short range missile launchers. The explosions nearly lifted me off of the bottom, but when the bubbles cleared, I saw that it had been enough at least to spook the Bandit, if not to damage him severely. The Centurion was nowhere to be seen, but I could see Higgins' Cicada on its side in the mud. Bubbles were still shooting out of its hull where the pounding that the Centurion had given it had

ruptured the armor. Its Hartford J15 B Communications antennae were bent down to the top plate of the hull. I couldn't have gotten in touch with Higgins if I'd tried. Some of the internal equipment was damaged and blue sparks were arcing out of the hull rents in useless power discharges. I didn't know if Higgins was dead or alive but his 'Mech was certainly disabled. It would take at least another 'Mech to attempt to lift it out of the water. I had to find Commandert Gunther or Franklyn to help me with that. And there were still the Bandits to think about.

The firing towards where I assumed Gunther and Franklyn were to be found had subsided so that I was left with little idea of which direction to head for. I tried to recall the outline of the reservoir in my mind. It couldn't have been more than a square kilometer of water surface so all I had to do was to walk around long enough and I should run into somebody. The question was who that somebody would be.

The far side of the reservoir was an old artificial dike which you could tell would be impossible to climb. Molito Reservoir was one of the older water rentention systems on the planet. I guess it was designed a couple of centuries ago when the world government thought that the population would be growing in this direction toward the coast. I guess that that never happened so the reservoir had been allowed to go to pot.

It didn't take real long to hear missile detonations again and I began to wade through the murky waters toward the sounds. As my Javelin traversed the reservoir toward the dike I saw and heard laser bolts hissing in their brightness even before I could see their targets. Gunther's Trebuchet had been pinned near the far end of the dike by cross fire from a Bandit Stinger and a Panther. He was replying as best he could with his long range missiles and medium lasers but at this close range the missiles had little effect. I could tell that Gunther's Trebuchet was receiving more damage than he was giving

out. Franklyn's Wasp was nowhere to be seen.

I was just pressing the firing studs on my twin SRM six-packs when a smashing blow took my Javelin from behind. It staggered but I was able to regain control before I fell and became trapped in the muck. It was the Centurion. Medium laser bolts and a discharge of long range missiles shot out of its chest. The lasers scored gouges into my torso armor but most of the long range missiles arced over and hit the dike before exploding. I turned my Javelin to get a clear shot with my short ranges missiles but before I could, the Centurion had closed in and smashed my left shoulder housing with the remains of the autocannon that dangled from his left arm. I hoped that that was the damage my attack had done when he was pummeling Higgins' Cicada. But I was too busy now too think of Higgins.

Hand to hand 'Mech combat underwater usually resembles a slow motion comedy routine. The advantage is always with bank.The Whitworth kept firing, causing even more damage
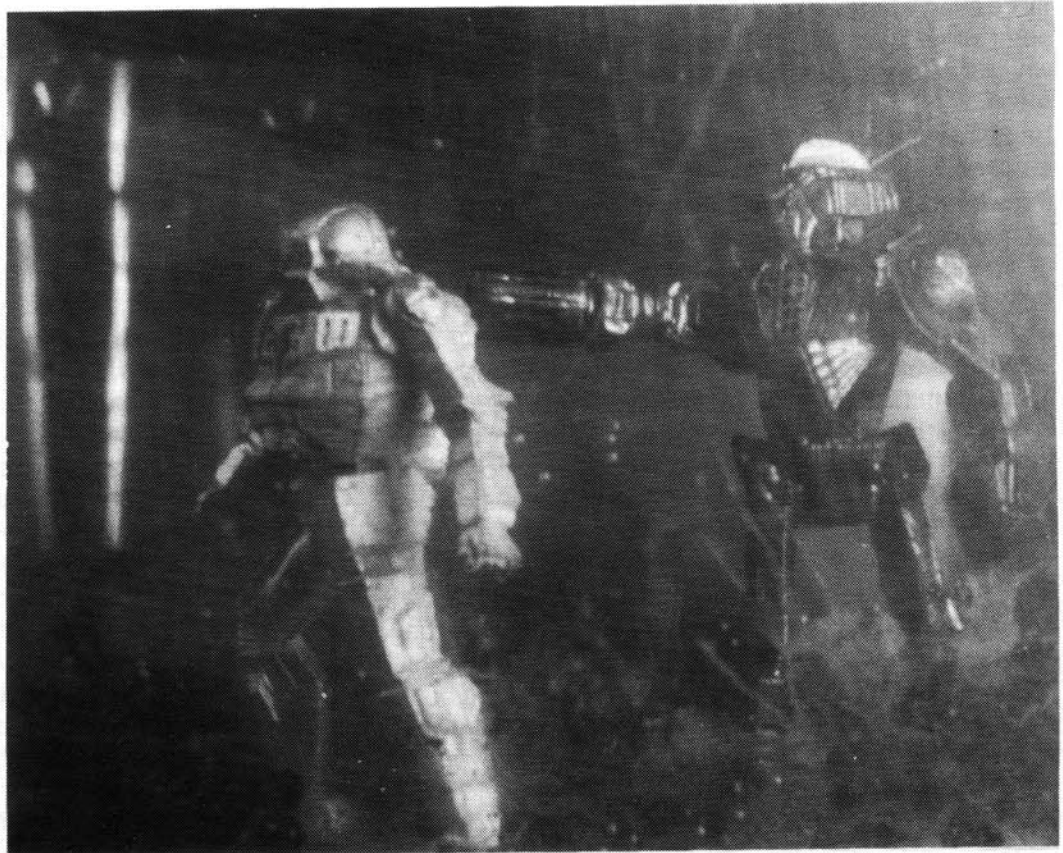
the heavier opponent, even more so than on land since the momentum built up underwater seems so much more powerful. I was outclassed by twenty tons more mass and it was beginning to tell as I began to be pushed and shoved away from the dike, firing whenever I could manage with my SRMs, but hitting only rarely. There was no use trying to call for help since my radio aerials had been the first things ripped off in the melee. It was certain that whoever slipped first was going to receive a head bashing that they would never recover from, and it looked like I just might be the candidate in this dance of death.

Franklyn's Wasp just came out of nowhere. Rather than popping off at the Centurion with his laser, he got smart and grabbed one of the bigger 'Mechs' legs. With my Javelin pushing and Franklyn's Wasp pulling, the Centurion finally lost balance and floated down to the mud, with legs and arms flailing and lasers firing every which way. I didn't even give the pilot time to orient himself before I started to kick and pound at the Centurion's head section. Soon Franklyn was joining in and it was with a fair amount of mixed emotions that I felt a solid hit and was greeted by a mass of bubbles heading toward the surface.

It didn't take a Tech to see that the side of the Centurion's cockpit had buckled where I had kicked. If the blow hadn't killed the pilot outright, he certainly had drowned by now.

Gunther's Trebuchet was still trading shots with the Bandit Stinger and Panther, and losing. I motioned Franklyn to follow me only to find the fourth Bandit, something that once appeared to have been a Whitworth, blocking our path. I fired off another salvo of short range missiles and felt the slight push into my Javelin's hull that signalled a laser hit. Red lights began flashing on my damage board and the heat telltales were rising even in all this water. Things were beginning to look bad but I figured they could be worse.

They got worse very fast. I triggered another salvo of missiles at the Whitworth only to hear a dull *crump*. The water pressure building up in my launch tube had caused a misfire. That SRM launcher was curled up now, useless. Franklyn's laser kept popping away but the Whitworth began to move towards me, ignoring him. The Whitworth was out for a fistfight. We could either oblige or leave the Commandert at their mercy. There was really no decision.

I approached the Whitworth cautiously but suddenly stopped. Something definitely was not right . My Javelin was leaning into the current at about ten degrees. I could see debris and tiny fish whirling past my cockpit towards the dike. I though maybe a storm had come up quickly on the surface, but that didn't sound right. The current seemed to be getting stronger.

The current? There wasn't supposed to be a current! Even in my confusion I knew I had to get away. Motioning with my hands to Franklyn to fall back, I began to fight the current with all the power my 'Mech had left, trying to get closer to the far bank. The roar, when it arrived, drowned out all other sound. Soon my 'Mech was down on its knees and scrabbling for something to hold on to. I latched onto what appeared to be the wreck of a road vehicle so old I didn't recognize the type. It had been in the reservoir so long it seemed to be fused to the bottom with suction and undergrowth. It probably saved my life.

I could see the Whitworth behind me. It had lost its footing and was rolling towards the break in the dike. Its MechWarrior must have panicked or the cockpit controls malfunctioned because the Whitworth's head blossomed out from the detonation of explosive bolts and the pilot's couch shot sideways out into the water. It didn't travel far before it too was caught in the surge of water towards the broken dike. It went flipping along the bottom. I could only hope that the seat ejection had broken the pilot's neck before he realized he was going to drown.

I held on for what had to be fifteen minutes before the current seemed to lessen. Shortly after that the water cleared my Javelin's head and I was in daylight once again. It took me three tries to get up from the bottom.

There was no more reservoir, just a mud hole. The continuous shock waves from all the underwater firing must have shaken up the old dike enough for it to collapse, emptying the water it had contained in a catastrophic fashion. Franklyn's Wasp was just getting up from his holding position also; up by the bank I could see that Higgins' Cicada had not been dislodged from where the Centurion had hammered it. As I watched, Higgins himself popped the hatch and gratefully slid down the side of his 'Mech into knee deep mud. He looked a little stunned, but alive.

I walked my 'Mech over to where the water still trickled out of the remnants of the dike. There stretched before me were some very wet lowlands. It's a good thing that this area had been sparsely settled or more damage would have occurred.

The Bandit Centurion had been pinned between two boulders some thousand meters from the dike. The Panther, Stinger, and pilotless Whitworth were spread out along the floodplain below, nearly covered in mud and silt. There was movement only from the Stinger as its pilot cracked the hatch and waved a dirty white t-shirt out of the opening. He had had enough. I couldn't blame him. So had I.

Commander Gunther's Trebuchet was right below me. It had fallen the fifteen meters or so to where the dike had once stood. It was face down in the muck. There was no movement. We finally got the Lieutenant out of his 'Mech about three hours later. He was unconscious and had a skull fracture. They say he'll be back with the Lance in about a month if there isn't any brain damage. The Bandit pilot in the Panther wasn't so lucky. The cockpit seams on his 'Mech popped while he was being dragged toward the dike and it

filled up with water before the Panther broke the surface. And what about the other three Bandit 'Mechs trying to get away? They did, but not before they were forced to drop all the stuff they had come so far to collect. They didn't need so much anyway, now that they had four less 'Mechs to worry about.

They made me Acting Lance Commander until the Lieutenant gets back, and they gave us all a ten-day furlough in Dalensport, and you know what? No one would believe the story! I tell you, its all in the official record for anybody with clearance to see it. But who cares? The Lieutenant, Higgins, Franklyn and I know it happened. You believe what you want

WHAT ARE THEY ALL

SCREAMING ABOUT?

WARP-3
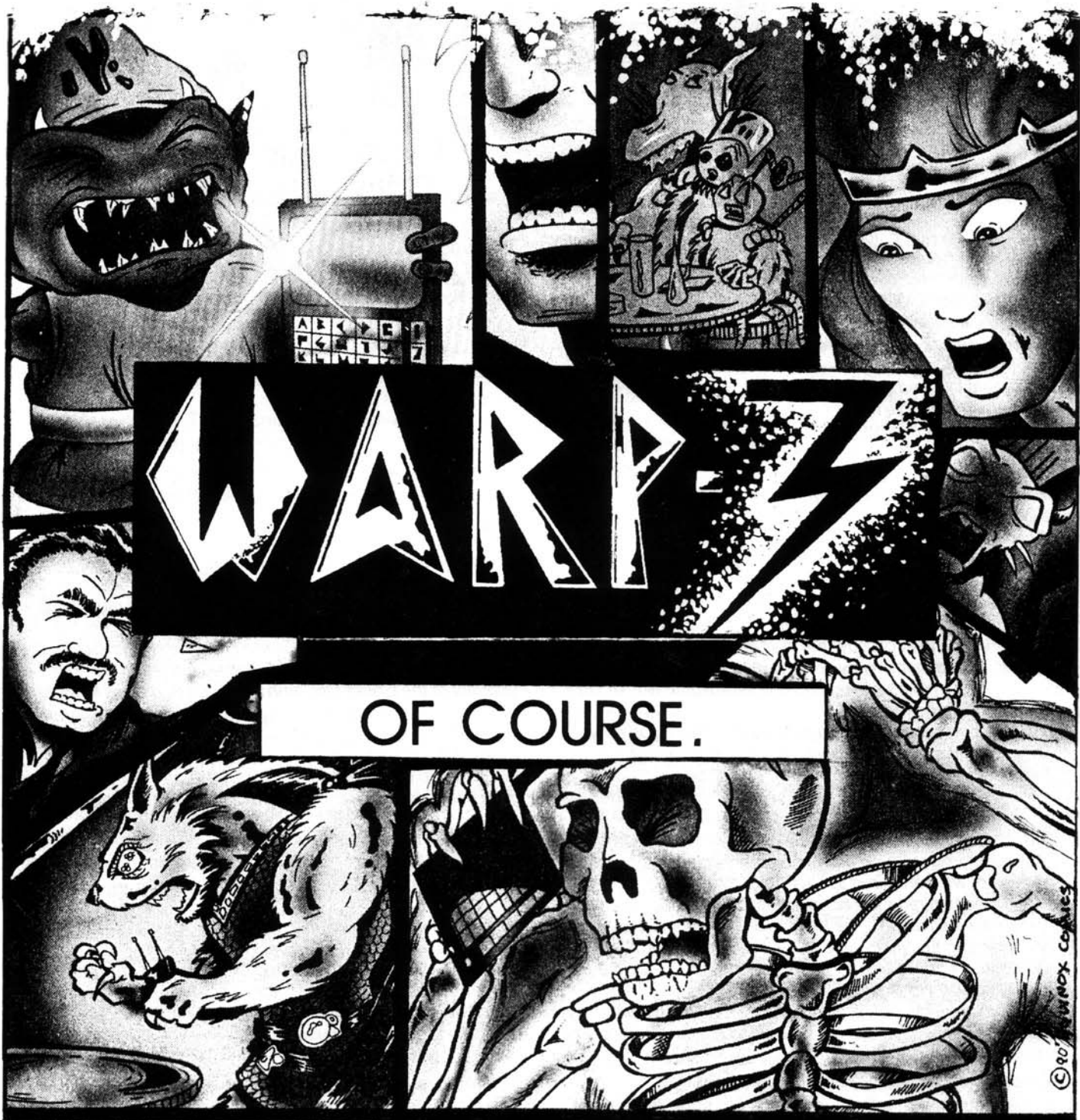
OF COURSE.

MONTHLY FROM EQUINOX COMICS

Inside Job
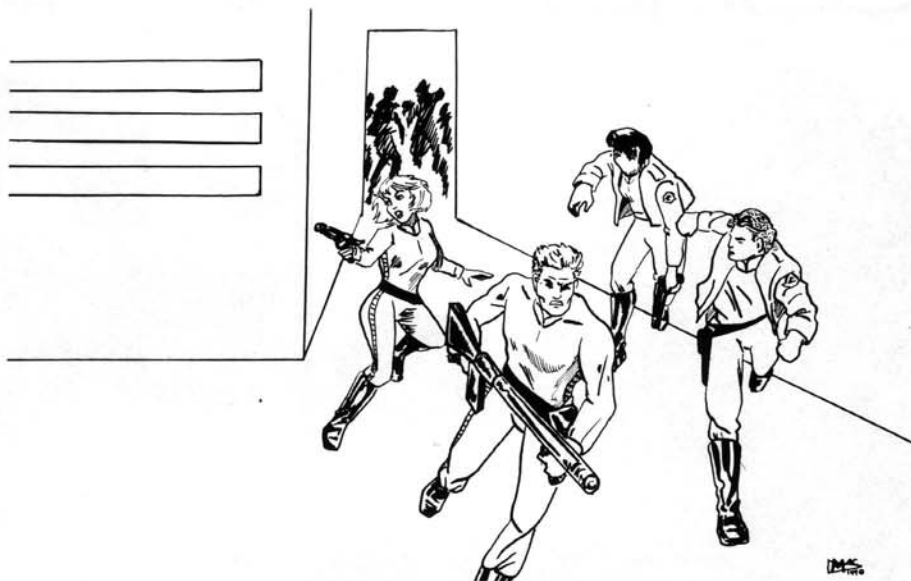
Marshal Riffenburg looked up at Sunrise Mesa, impressive even twenty miles away, and then over at Captain d'Ypres: "I bet 1000 C-bills that you guys don't even get inside."

D'Ypres calmly asked: "Are you good for that kind of money?"

Riffenburg laughed. "I have to hand it to you mercenaries; I've never met one yet that couldn't talk a good fight."

"Of course. Cuts down on ammunition costs."

"Ha! I'll appreciate your bravado a lot more after you've captured the Mesa so my regiment takes Jones' Point without being shot to Swiss cheese."

"That's what Davion hired us to do", d'Ypres replied, rubbing his forehead as though he had a headache.

"You act as though all you need to do is ask politely and the Dracs will hand over the keys to the place to you. Look at it. I've seen entire cities which were easier to crack."

D'Ypres had to agree with the marshal. Sunrise Mesa was the gateway and guardian of the only easy way through mountains which surrounded the vital city of Jones' Point. The Mesa could be by-passed or battered into rubble, but that took time, a lot of it, more than Hanse Davion was willing to accept if there was another way. That's why he had contacted the Knights of Storm and Sword even before the war had started, asking them if they could devise a way to take the fortress in only a few hours. The Knights sent d'Ypres and his team to back up their claim. If d'Ypres succeeded, not only would House Davion's conquest of the planet McComb be assured, but the Knights would receive a lucrative bonus.

Now the only problem was in actually getting the job done.

"Why do you suppose it's going to so difficult to take?" d'Ypres inquired of the marshal,.

Riffenburg responded with a frown. "Don't be coy. Not only is the place on top on a five hundred foot mesa and protected by meters of concrete, but it has enough Long Toms and other, assorted playthings to blow a battalion of 'mechs back into orbit. I hope that I'm not telling you anything new?"

"We've been briefed."

"And lobotomized if you think you have a chance."

"As I said, we were hired to capture Sunrise Mesa-"

"You've been hired as cannon-fodder."

"-and we will succeed. The Knights do have some experience in this sort of thing", d'Ypres said, with a hint of pride,"We have a knack for accomplishing the impossible." The marshal sighed heavily. The man did have courage, or at least foolhardiness.

"All right", he finally said. "I'll give you and your people their chance. But, if you bungle it, I'll pound the mesa into dust and not worry about whether you survive."

"Marshal, marshal", d'Ypres answered, shaking his head," you should read your Sun-Tzu. It's the unimaginative leader who resorts to force." He reached into his backpack and pulled out the shirt of a Tai-i in the army of the Draconis Combine.

"The best leaders use guile."

When *Sho-ko* Evans observed two light hovercraft speeding toward the fortress and then up the wide ramp to the front gates, he thought it of a Davion attack. He soon decided that the arrivals must be friendly. One, the hovercraft had Combine markings; two, Davions aren't known for suicide attacks against fortified positions; and, three, the Davion forces surrounding

the mesa were doing their best to reduce the vehicles to scrap metal.

"The messengers we've been waiting for are approaching with the enemy hot on their heels", Evans yelled through the intercom. "Open up the gates!" The two hovercraft came to a screeching stop just inside the fortress, within feet of the rapidly closed gates. Evans rushed down to greet the newcomers.

There were four of them, three men and a woman. All looked as though they hadn't slept for days. One of the men, brown haired and in his thirties, stepped forward toward Evans.

"Tai-i Gregory d'Ypres", he introduced himself, speaking in perfect Japanese.

"Sho-ko Evans. I am honored. You have obviously endured much."

"As is to be expected when one is in the service of the Dragon."

"Of course", Evans responded tentatively, not wishing to be trapped by a possible double meaning in the *Tai-i's* statement.

"I am here to see *Tai-sa* Shima", the *Tai-i* continued on. "I bring him an urgent message."

"Is help on its way?" Evans blurted out, immediately chiding himself for asking such an improper question. It was not his place to ask about such things.

The *Tai-i* did not seem to notice. "Take me to the *Tai-sa*."

The fortress atop Sunrise Mesa had been built decades before, when McComb was still a part of the Federated Suns. Ownership of the site changed hands when the Draconis Combine captured the planet in the Fourth Succession War, but Davion had retained copies of the citadel's ground plan. For the past two weeks, Gregory d'Ypres had studied these maps, memorizing every hallway and room, hoping all the while that the Kuritans hadn't made extensive renovations. Now, actually walking through the labyrinth of the Mesa, he was relieved to discover that few changes had been made. The previous mess hall was now a recreation room, old Davion English titles and designation had been replaced by Kurita Japanese, but the general structure of the installation had remained the same. Good, d'Ypres thought, *it will make things easier. Now is not the time for surprises.*

After a journey through long winding corridors, the group arrived at the command bunker (which the Feds had used for the same purpose, d'Ypres observed secretly) and were led in. The escorting guards stopped short at the door, heading back the way they had come. The room nearly overflowed with machinery and equipment, attended by hard-working personnel. In the center stood two men scrutinizing a blanket of maps laid out on a table. d'Ypres recognized the rank of the man to the left.

"*Tai-sa* Shima?"

The older of the two men turned to d'Ypres. "Yes?"

"I am *Tai-i* d'Ypres. I bring an urgent message from the *Tai-sho*."

"It's about time. What is it?"

"It is a written message." d'Ypres reached into his shirt pocket and pulled out a folded piece of paper. "Your eyes only, sir." The *Tai-sa* took the message from d'Ypres hands, carefully unwrapping it. The room came to an eerie silence as it was read, as all waited to hear their fate. Shima studied the paper for long seconds, his expression turning strained over time, before he finally looked up.

"By order of the *Tai-sho*", he announced, "we are to surrender to the Davion commander within one hour." The room exploded into a hail of outraged voices. Most present were dismayed at the prospect of giving up the mesa intact and without a fight, but d'Ypres noted with some satisfaction that some seemed relieved. They weren't being asked to die.

"This is impossible!" The man to Shima's right declared. "How could we be asked to shame ourselves in such a fashion?" The *Sho-sa*, turned angrily to d'Ypres. "This is some Davion trick and this man is a spy or a traitor!"

Shima refolded the paper and put it in his own pocket. "A *verigraph* cannot be forged", he explained. "The orders are genuine."

"Let me see the paper."

"*Sho-sa* Krennin, our commander has given us an order and it is our duty to carry it out. Don't you agree, *Sho-sa*?" Krennin's red face made it evident that he did not, but he couldn't question a superior.

"I wish all troops to be notified immediately", Shima continued. "If we must surrender, I won't stand for some disgruntled idiot going off and attacking the enemy on his own. We will all survive and hopefully live to someday serve the Dragon once again. We have our orders. Now go and notify B-section of what is coming." The *Sho-sa*, still furious, but without another alternative, left the bunker. "The rest of you have to shut down your operations and inform the other parts of the Mesa of our orders", Shima instructed. "*Tai-i* d'Ypres,"- He pointed to a door behind him — " I would like to talk to you in private. Your men shall remain here."

Once inside the room, Shima made a quick visual search and carefully closed the door.

"We can talk freely here", he stated. "I've checked this room a dozen times for bugs just this morning. All have been neutralized."

"I'll have to trust your skill", d'Ypres said taking a seat. "I'm glad that you recognized me and my men for what we truly are. Otherwise, House Kurita would have had four more prisoners of war."

"Were you afraid that I would back out at the last moment and turn you in?"

D'Ypres debated his answer for a second. "It crossed my mind."

"You needn't have worried", Shima explained, "If I stay here I'll be just as dead as if I am caught and executed as a traitor. You're my only way out." The man obviously was in serious, and deadly, trouble, Gregory thought. He didn't ask of what sort. That was unnecessary. All he needed was the *Tai-sa*'s aid for the coming hour.

"Everything is set", d'Ypres told Shima, relieving some of the man's anxiousness. "The Prince was very responsive to your offer."

"I knew that war between the Combine and the Federated Suns was coming and that McComb would be a primary target. It took all the influence I had, but I got command of Sunrise Mesa. Only three weeks ago, in fact. I almost missed my chance."

D'Ypres leaned forward in his chair. "We're not through with this yet. Kurita still owns Sunrise Mesa and Davion is still outside. Will your troops obey your order?"

"They should", Shima answered after musing over the question for a moment. "A lot of them are from local militias and not up to dying needlessly. The only man I worry about is *Sho-sa* Krennin. I've only met him a month ago, but I've never liked him."

"Could he radio Jones' Point for verification of our bogus order?"

The *Tai-sa* shook his head. "Too much Davion interference."

Outside in the common room of the command bunker, the rest of d'Ypres' group waited, trying to not look too nervous. If everything went smoothly, it would be done within an hour and they would be back on their way home. If not, then they would have to fall back on plan B, a situation that was by its very nature unpleasant as it meant something had gone wrong. All the group could do was take precautions. Corporal Eddings stood watch over those already in the common room, just in case one of them saw through d'Ypres' charade. Corporal Myers guarded the door to the Tai-sa's private room and second-in-command Lieutenant Janet Granger watched the main entrance to the bunker. All they could do now is wait.

When d'Ypres had approached Janet Granger about going with him on this assignment, she had answered yes almost without thinking, as had Myers and Eddings. All of them had worked with d'Ypres on other assignments and all respected the captain. They knew that he would never ask them to take on an impossible task. Something *almost* impossible, however, was another matter entirely. *What is it that Greg is always saying to me?* Granger thought to herself in encouragement. *'Don't worry, the Knights have a knack for getting away with just about anything'. Well, I've always*

worried about that 'just about' part.

Granger stepped past the plain of the bunker's entrance way to look down the hall and nearly ran into *Sho-sa* Krennin. A detachment of guards trailed behind him.

Granger quickly bowed. "Greetings, *Sho-sa.*"

"You arrived with the messenger, didn't you?" he asked coldly.

"Yes I did, sir."

"Then you are under arrest!"

"Sir, I must protest", Granger shot back, trying to keep her voice within a single octave. "Both myself and the *Tai-i* went through quite a lot to get here and deliver that message from the *Tai-sho* himself."

"And I am acting on the *Tai-sho*'s orders. He never did trust Shima."

Granger smiled weakly.

"GET DOWN!"

The order was shouted by Myers; Janet obeyed instantly. A second later sub-machinegun rounds were whizzing above her head and she could hear Krennin and his men diving for cover. Crawling most of the way, she reached the Corporal within five seconds. At the same time Eddings fired his rifle above the heads of the staff still in the room, who quickly found a back exit. The door to the private room opened and d'Ypres stepped out, blasting away at the main entrance.

"Everyone in here. NOW!" Granger, Eddings, and Myers all dived in, while their captain provided covering fire. He caught two guards when they rushed toward him, but the mass of fire from their remaining compatriots forced him to duck behind the wall.

"I'll hold them for a moment", d'Ypres said. "Shima, get everyone out the other door."

Eddings looked out into a hall; another group of soldiers turned the corner at the far end and opened fire. Eddings dived back in.

"Sorry, but that won't work", Eddings informed ruefully. "We're trapped."

Granger grimaced. "We can't stay here, not with this much firepower aimed at us. Of course, that's also the reason why we can't leave."

"I could order my men to stop", Shima offered. "They don't know that I am a traitor."

"But Krennin does", d'Ypres pointed out. "I wouldn't be surprised if he's actually ISF. " d'Ypres turned to Granger. "Lieutenant, I believe that we're going to have to pull the big surprise."

"What's that?" Shima asked suspiciously. Granger smiled broadly and pulled out a small box from a pocket, extending an antenna which came out of the top.

"This is Plan B, the whole reason why we made sure to park our hovers next to the main gates", she explained. "Care to make a wish?"

Ten miles away, Marshal Riffenburg, suffering from a sour stomach, stood quietly cursing to himself. He gazed up at Sunrise Mesa through his binoculars and discovered that the fortress had not changed since the last time he had looked, thirty seconds previously.

Where are they? We should have received a surrender by now. Have those mercenaries screwed up? I have a regiment rusting away out here while d'Ypres takes his time. Come on! A sudden, bright flash burst from the area of the Mesa's front gates, forcing Riffenburg to turn away momentary. When his gaze returned, he saw a column of smoke billowing out from the jagged remains of the fortress' front walls. A few seconds afterwards, the deafening thunderclap of an explosion reached his ears. Shaking his head in resignation, Riffenburg turned to his aide.

"Mount up the troops", he instructed. "It seems that we've changed to Plan B. We go through the front door and hit the Dracs fast and hard."

The shockwaves of the explosion reached even to the well-insulated command bunker. Now d'Ypres and his group made their move. Unloading with everything they had, d'Ypres and Myers rushed out of the secret door and down the hall toward the Draconian soldiers. The rest of the group followed close behind. Their enemy, shaken by the blast, attempted to return fire, but the audacity and desperation of the charge was too much for them. d'Ypres brought himself to a stop and finally allowed himself to start breathing once again. *Custer, eat your heart out!* He turned around to check to condition of the rest of the group. Only Granger turned out to be wounded, having caught a Combine slug in her left shoulder.

"How is it, Janet?"

The Lieutenant smiled. "Just adding to my collection. I can still walk."

"Good. We have to get out of this hallway. Krennin will be here any second." Eddings pulled Granger's arm across his shoulder, giving her some needed support.

"*Tai-i,.....*" Shima began.

"Just captain now. No more pretending."

"Fine, captain. What are we going to do now?"

D'Ypres took a large breath. "Since we failed to get this place to surrender, we have to make sure that the Davion troops outside will have as little trouble as possible taking the Mesa forcibly."

"Your explosion destroyed the main gates. The Mesa is wide open."

"True, but some of the gun emplacements will still be functional. We have to cut their power. *Tai-sa* Shima, I need you to take me to this installation's fusion generator."

The flight through the shadowed and chaotic passageways of Sunrise Mesa was the stuff of nightmares, though it passed without incident. The halls were filled with armed Combine soldiers, but, as d'Ypres thankfully reminded himself, they were all oblivious to what had occurred back in the command bunker. As far as most were concerned, *Tai-sa* Shima was still their loyal and trusted leader. The only things which slowed d'Ypres' group were the numerous salutes which the soldiers stopped to give their *Tai-sa*. However, there was the ever present danger of running into Krennin or, more likely, one of his guards out searching for Shima. Every corner or doorway held the possibility of an ambush, the ever present danger of running into Krennin or one of his guards out searching for Shima.

As casually as possible given the situation, Eddings looked around the corner. He immediately pulled himself back.

"Krennin!"

D'Ypres scowled in frustration. "What's he doing down here? I would think he'd be topside leading his troops."

"Perhaps finding and executing T*ai-sa* Shima here is more important to him?" Granger offered. She gave Shima a disarming smile. "Nothing personal."

Eddings peeked back down the hall, looking for Krennin. "There he goes", he told, much to everyone's relief. "Man, he's in a hurry."

"Did he have any guards with him?" d'Ypres asked.

"Yes. About four, but none of them seemed interested in looking for us."

d'Ypres frowned. "This is not good. What's he doing." The captain turned to Shima for a possible answer and discovered the T*ai-sa* wide-eyed with realization. "What?"

"That's the way to the power room."

Heartbeats went by without a sound.

"Hell", Myers cursed. "He's going to blow this place up!"

d'Ypres shook his head is doubt. "He can't. Fusion reactors simply can't be used that way."

"Sorry Captain, but that's only true in normal circumstances", Granger corrected. "If the proper equipment is installed, you can turn any Fusion generator into an A-1 Thermo-nuclear Roman Candle."

"How long does the build-up to detonation take?"

"If the equipment is first rate, about ten minutes."

"Is Krennin fanatical to do such a thing? It would be a total violattion of the Ares Conventions. His own side would turn against him. Everyone in sight would drop the war to hunt him down!"

Shima nodded. "Unfortunately, yes, he is. You're correct about the consequences, but we'd be dead before that happened."

D'Ypres allowed everyone a moment to weigh their options before saying: "Well, I say that we stop the pyromaniac. Any other suggestions?"

"Ha!" Eddings tone was full of sarcasm. "We don't have a hope of getting away in time and, if the idiot succeeds, not only will we be radioactive ash, but so will an entire Davion regiment. We have no choice."

"Good", d'Ypres said, a grin of satisfaction on his face. He started down the hall. "I thought for a second there that I might be in danger of losing my bet."

Five minutes later, the group reached the hallway outside the entrance to the power room. Halfway down stood the group of four soldiers, ready to beat off any intruders. About twenty feet past them, and about fifty feet from the corner where d'Ypres was hiding, was the doorway itself, yawning open. Good, *we have a chance.*

D'Ypres glanced back at Granger. "Have those smoke grenades ready?"

"Yes, but we don't have an extra pair of IR goggles. Without them, Shima will be blind."

"Oh, well", Shima said, throwing up his hands in mock sorrow. "I'll have to stay here."

"Actually, you should stay here", d'Ypres agreed. "You're too valuable to lose."

"I wish we had the time to do something a bit more subtle", Granger grumbled. "If we're unlucky, that's it." She made a chopping motion with her hand.

"I know, but we don't have time. The smoke will mean that they'll be shooting blind, but, with our goggles, we won't. Just remember that our first priority is getting inside that power room. Ready?"

The grenades filled the hallway with smoke. D'Ypres bolted down the hall. He picked out the heat signatures of the soldiers and fired at the nearest, all the while trying not to be blinded by the miniature explosions from the end of his own gun. One guard went down, but the remaining soldiers opened fire, forcing d'Ypres to dive. From behind him he heard more machinegun fire. *Come on guys! Hit these Dracs and be careful enough not to be hit yourselves.* He looked up at the generator room's door. The IR emanations from the equipment inside nearly blinded him. *The door's still open and I'm only forty feet away.* D'Ypres' relief changed to horror when he noticed that the square of the doorway was getting smaller. Something was eclipsing the room's heat signature. The door was closing! Having no other choice, he pulled himself up into a low crouch and ran.

He pulled off his goggles and threw them away, no longer needed. The door was a fourth closed.

Only thirty feet to go.

The gunfire behind grew to a new intensity. It was impossible to tell to the shots were aimed in his direction. The door was half closed.

Only twenty feet to go.

D'Ypres' body was now stretched out to its full height, straining to close the distance between him and his goal. Personal protection was no longer a concern. The door was three-fourths closed.

Ten feet!

He jumped.

D'Ypres twisted himself sideways, barely fitting within the thin rectangle of space which remained. His feet caught the edge of the door frame, sending him spinning. The world dissolved into a blur of images until d'Ypres finally crashed into a row of machinery. Krennin was on him in seconds.

Krennin lifted d'Ypres to his feet and then laughed at the captain's stunned expression.

"Now I avenge my honor", the *sho-sa* proclaimed, slamming his fist into d'Ypres stomach. The air knocked out of him, d'Ypres instinctively reached for his sidearm. He had clasped the gun's handle before Krennin saw and likewise reached for the weapon. D'Ypres struggled to raise the

muzzle toward Krennin, but the *sho-sa's* fresh strength prevailed and forced it instead at d'Ypres. If the trigger was pulled.......

Imminent death snapped d'Ypres out of his daze, giving him the strength to hammer down with his left arm on Krennin's right. The *sho-sa* let go, but this merely sent the gun flying away, out of reach. D'Ypres kicked up hard, but the practiced hand of Krennin caught the leg and pushed it away, sending his foe sprawling. D'Ypres got back up just in time to move out of the way of a kick himself. The two stood five feet away from each other, circling.

"I only have to hold you for another five minutes", Krennin said, smiling in pride. He expected d'Ypres to be surprised.

D'Ypres wasn't. "I know."

"Ah! You deduced my plan. Wonderful! A worthy opponent is always the best one."

D'Ypres shook his head. "I prefer my opponents defeated." He jumped forward and tackled Krennin. The Sho-sa attempted to spin out of the way, but d'Ypres held on tenaciously, trying to land a punch. His efforts were rewarded by a duo of blows to the head, but neither slowed Krennin down. The Combine soldier grabbed d'Ypres third blow, pulled him down, and placed a head-butt squarely in d'Ypres' face. Krennin twisted and scrambled away. Again, there was a stalemate.

No more than three minutes to go, d'Ypres thought, a*nd my people are still outside, subject to attack. I'm out of options.* He scanned around for his weapons. His pistol was nowhere to be seen, but the sub-machinegun, was lying on the ground near the door and behind Krennin. *I need that gun. All right, you predictable tin-soldier, act the way you were taught for this one last time.* d'Ypres lunged clumsily at Krennin. The S*ho-sa,* a well practiced *Karate-ka,* threw d'Ypres over his shoulder hard into the concrete. D'Ypres braced himself for the landing, twisting free from Krennin's grasp, launching himself toward the machinegun. Krennin, realizing his mistake, ran after the mercenary. D'Ypres, whose reach was short of the gun's stock, took hold of the gun's mussel and swung up. The stock caught Krennin on the chin, crushing bone. Krennin flopped unconscious onto the floor.

Not stopping for even a breath, d'Ypres rushed over to the door and pushed the "open" button. The door slid away to reveal the squad and Shima, who were obviously waiting.

Granger spat. "A few more moments and you needn't have bothered."

D'Ypres' heart sank when he saw the condition of his personnel. All were haggard and Granger was no longer the only one with a wound. *My f*i*ght with Krennin was sheer joy compared to what they went through.* He frowned. *Such recriminations will have to wait, but I won't forget.* "All right Lieutenant, how do we shut down the reactor? We haven't

more than a minute."

Granger gave an impatient look. "No problem." She raised her gun and opened fire on the nearest control console. D'Ypres, surprised and shocked, nonetheless waited twenty seconds before stopping her with a question."Is that how you turn it off?"

Granger smiled. "Of course. The Federated Suns installed this reactor and each of their designs has a fail-safe procedure which shuts down the reactor if its control consoles are damaged extensively. Everything should be shut off" — the room went dark — "including the lights."

"Ah, how do we get out now?" Shima asked.

"Well, we can't open the door without power, so we just sit tight until Marshal Riffenburg gets some people down here to let us out", d'Ypres answered. "It shouldn't take more than four or five hours."

"What do we do until then?"

Granger giggled. "Anyone know any good campfire songs?"

D'Ypres ignored her. *"Tai-sa* Shima, I have one last request of you. Could I have the 'message' I delivered back?"

Shima reach into his breast pocket and pulled out the paper. "Of course, but why?"

The captain grinned knowingly. "I'll be needing it again."

"Hey, what's on that paper?" Granger asked.

D'Ypres handed her the note. "What do you think?" The lieutenant opened up the paper. On it was the image of a lightning bolt and sword crossed in an X overlaid by a plain, rounded V shield: The crest of the Knights of Storm and Sword.

Marshal Riffenburg's Davion Light Guards RCT captured Sunrise Mesa within two hours and rescued d'Ypres and his people five hours later. Within two days, Davion had complete control of Jones' Point, solidifying its hold on the planet McComb.

Captain Gregory d'Ypres is still with the mercenary group Knights of Storm and Sword, as is Lieutenant Janet Granger and Corporal (now Sergeant) Eddings. Corporal Myers was killed during an unsuccessful raid on the planet Marduk later in the war. Former Tai-sa Shima was resettled on New Avalon and is now an advisor on the Draconis Combine for the Federated Commonwealth. To date, he has survived one assassination attempt.

The high-powered explosive packed in the two hovercraft was not of an impact-sensitive type. It can only be set off by an electric charge.

Star
Vengeance!

Let's be clear. Star Vengeance!™ is one of the best vid dramas I've ever seen. The special effects are good enough to fool not only me, but my body guards, all of whom have seen action within the past year. Every living person I know lusts just a little after one or another of the heroes. And we all like the fight scenes. The climactic aerospace battle that closes the vid keeps us on the edge of our seats. I'm not the only one in the theater who forgot to breathe during it. In the Federated Sun's Luxury Lottery for this year, the first 100 copies of the private-viewing tapes are hot prizes in the pre-Christmas lottery; that month has twice as many subscribers as any other. It's a hit equal to the 28th Century **Blood and Sand** series.

But it isn't real. In this, the 31st Century, you will never see these Mechs (Thank whatever Deity you please); these ships will never rend the air of Known Sphere planets. There are no Intelligent Avian Invaders. It has captured the imagination of tens of millions of people, but —

IT IS NOT REAL! AND BATTLETECHNOLOGY DOES NOT WANT YOU TO THINK WE THINK IT IS!

But if they did exist...if they did exist, what would they look like? We asked the special-effects holovid wizards at Megalo Vids Inc (a corporation registered in Oriente Province, Free Worlds League), the real stars of the Vid. Megalo Vids has given BattleTechnology permission to reprint their design criteria. The use of these three ships is copyright by Megalo Vids.

For those of us who have dreamed of StarLeague technology and an unlimited budget, here are the Falconhurst and the Shrike, the ships that nearly ended the careers of David Korzinski, Mech Ace, and his sweetheart Anna Mae Halas, Aerospace Adventuress, in the year's hottest drama...

SRK-Class Shrike Aerodyne
This is the ship that drops Avian Mechs on the unsuspecting pastoral planet of Lucerne early in the vid. One of these is taken over by Anna Mae and the 3rd Black Onyx Fighter Squadron at the climax of the film.

Type:	Aerodyne
Tonnage:	2670

Dimensions:

Length:	150 meters
Height:	20 meters
Width:	75 meters
Crew:	9 crew, 6 aerospace pilots
Cargo Complement:	125 tons
Small Craft Complement:	21
Armor:	Alderban StarStrike-equivalent
Armament:	2 Particle Projection Cannons
	4 20-shot LRM Missile Systems
	5 Large Lasers
	12 Medium Lasers
	8 tons LRM Ammo
Drive System:	Special
Communication System:	?
Targeting/Tracking System:	?
First Released-er-Introduced:	June 15, 3045
Frequency of Sighting :	Unique

Type:	Shrike	Tons
Tonnage:		2670
Engine:		1150
Thrust:	4	
Overthrust:	6	
Structural Integrity	7	

Fuel (4 thrust points per ton)   315
    Consumption: 1.84 tons/ burn day
Small Craft Cubicles: 21   210
Small Craft Bay Doors: 7   0
Bridge: 50
Heat Sinks :   100   100
Armor Factor :   16 pts/ton   40
        Location   Armor Value
        Nose   132
        Right Side   122
        Left Side   122
        Fuselage   172
        Engine   92

Weapons
Type   Location
PPC   Nose
LRM 20   Nose
Large Laser   Nose
3 Medium Lasers Nose
Large Laser   Rt Side Ft
2 Medium Lasers Rt Side Ft
LRM 20   Rt Side Ft
Large Laser   Lt Side Ft
2 Medium Lasers Lt Side Ft
LRM 20   Lt Side Ft
Large Laser   Rt Side Rear
2 Medium Lasers Rt Side Rear
Large Laser   Lt Side Rear
2 Medium Lasers Lt Side Rear
PPC   Rear
LRM 20   Rear
Medium Laser   Rear

FST-Falconhurst Armed JumpShip
This is the mother ship whose appearance causes the destruction of the
Marik Fleet in *Star Vengeance!*™ , until the Big White Ships of the Com
Guards reinforce the Free Worlds League and Anna Mae's squadron saves
the Inner Sphere from annihilation.

Tonnage: 811,000 tons
Crew: 205
Kearny-Fuchida Drive System:
Interplanetary Engines: 2
Hull: Kalleran Defense Type 9
    Length: 792 meters
Sail Span: 1,352 meters
DropShip Capacity: 4
AeroSpace Fighter Capacity 18
Small Craft Complement: 9
Armor: Alderban StarStrike-equivalent
Armament: 22 Autocannons Type 20
        5 Barracuda Missile Tubes
        4 White Shark Missile Tubes
        10 Star Devil Naval Lasers
        9 Guardian Naval Autocannons Class 30
        4 Nova Naval Particle Projection Cannons
Manufacturer: Jesselan Shipyards

Communication System: Comm Center Type 3
Targeting/Tracking System: Ultra Scan 5
First Released, er, Introduced: June 15, 3045
Frequency of Sighting :   Unique

Type: Falconhurst
Tonnage: 811,000
Engine: Amer/Kerensky Star Drive
    Thrust: 3
    Overthrust: 5
K-F Drive Integrity: 20
Energy Collector Sail Integrity: 5
Structural Integrity: 80
Docking Hard points: 4
Fuel   1 thrust points per 2 tons   650 tons
    Consumption: 39.52 tons/ burn day
Small Craft Cubicles: 21
Small Craft Bay Doors: 7
Grav Deck   2
Armor Factor :   10 pts/ton
Location   Armor Value
Command Section
    Nose   1000
    Right Side   800
    Left Side   800
Middle Section
    Right Side   800
    Left Side   800
Engine Section
    Right Side   800
    Left Side   800
    Aft (Engine)   720
Weapons:
Nose:
    2 Naval AC/20s
    1 White Shark Missile
    2 N L/4S
    1 N AC/30
    1 Medium Naval PPC
Right Side:
    2 NAC/20s
    1 Barracuda Missile
    1 NL/4S
    1 Medium Naval PPC
Left Side:
    2 NAC/20s
    1 Barracuda Missile
    1 NL/4S
    1 Medium Naval PPC

*For a free color poster of the climactic battle which saves
the day in Star Vengeance, See Next Page*

The Heart of A Mech

BattleMech Engine Efficiency

by Jack Freeman, MechTech PE

There's a natural tendency to think of a BattleMech in human terms. Not that they *are* human, exactly; it's just that most have a roughly humanoid appearance, and often they remind us of, well, oversized robots. More than 'just' a weapon of war, a Mech is the mechwarrior's most intimate friend, combat partner, salvation, and often ultimately, the method of his own destruction.

Even though we know that BattleMechs aren't really 'alive', a number of the terms used to describe them do help to foster this impression. Mechs have 'skeletons', 'bones', and 'muscles'. They have a torso, arms, legs, and a head; many even have fists. (Okay, so chairs have arms and legs too...but they can't punch or kick!) It seems that most anything man works (and regularly dies) with, man identifies with — and BattleMechs are no exception. As a result, mechwarriors almost invariably name their vehicles, much as frontier colonists name their beasts of burden, and other men-at-arms name their tanks, planes, or ships.

Once we accept the notion that a Mech is alive, at least alive enough to identify with, then the analogy can be carried one step further. The fusion power plant, the engine, must certainly be the Mech's 'heart', the vital source of energy that keeps the entire vehicle (and its mechwarrior-occupant) 'alive and well'. Are all engines equally efficient? Do some engines perform their job better than others? Is there a way to evaluate the efficiency of a Mech engine? If so, what might it be? This technical essay examines these questions and the relative efficiency of all 79 of the standard BattleMech power plants.

How Big, How Fast?

According to the BattleMech Design section on page 37 of BattleTech *Rules of Warfare*, a particular BattleMech engine is selected based solely on the tonnage of that Mech multiplied by the desired 'walking' movement rate — generally described in increments of about ten kilometers per standard hour (or one hex per turn, in simulator terms). Thus, if someone designs a 70-ton Mech to travel at four hexes per turn, a VOX 280 engine will be needed.

When attempting to figure out engine efficiency, problems do arise. Are some models of Mech fusion engines Thirty First Century 'gas guzzlers'? The simulator rules don't say, seeming to imply that there is no significant difference. Apparently, kilometers per microgram of fusion-generated plasma is not used an an indication of the engine's ability to function efficiently. What about size? All engines seem to occupy the same six locations on the critical hits table, regardless of model. And as far as the mechwarrior is concerned, that's all that matters.

Engine reliability? Again, nothing much is said. Published accounts appearing in various BattleTech Technical Readout manuals and in BattleTechnology's own 'Technical Readout' feature often give off-the-cuff reports on the suitability of a specific engine in a particular Mech or vehicle. However, two descriptions of the same engine used in two different vehicles will often appear contradictory, as these reports probably only apply to their respective vehicles. In short, there is insufficient data. That only leaves us with one other unique identifying factor for determining efficiency: engine tonnage.

Most BattleMech engines weigh different amounts; the greater the rating, the heavier the engine. Some, like the

Table #1 Maximum BattleMech Movement			
10-ton	11 MP	55-ton	6 MP
15-ton	13 MP	60-ton	6 MP
20-ton	13 MP	65-ton	6 MP
25-ton	11 MP	70-ton	5 MP
30-ton	10 MP	75-ton	5 MP
35-ton	9 MP	80-ton	5 MP
40-ton	8 MP	85-ton	4 MP
45-ton	8 MP	90-ton	4 MP
50-ton	7 MP	95-ton	4 MP
		100-ton	4 MP

Omni 10, are very light (0.5 tons), while the mammoth LTV 400 weighs more than many Mechs (52.5 tons). Although a Pitban 20 does weigh exactly the same as an Omni 10, it is worth noting that a VOX 280 doesn't weigh exactly the same, or even twice, what a Hermes 140 weighs; it actually weighs almost three times as much! The scale is clearly not a simple rating-to-engine tonnage proportion. If it were, then by this standard all engines would be identically efficient, and there would be no question.

But the weight of the engine isn't the only thing to take into consideration. Engines also require a gyro, and the gyro's tonnage is based, in turn, on the rating of the engine. This must be figured in, remembering that every ton of capacity taken up by the engine and its accompanying gyro is one fewer tons available for other things, such as weapons and heat sinks and armor. In fact, the engine is the single largest removable system carried aboard a Mech. That's why, when trying to enhance the firepower of a Mech design, the easiest single system to downrate is the engine (and gyro, if appropriate). For example, decreasing the movement by one — from 40 kph to 30 kph (more or less) — will give a 100-ton BattleMech an 'extra' 34.5 tons of room for other hardware.

It is true that — since Mechs of a certain size designed to travel at a certain speed absolutely require the use of a certain engine, it doesn't matter what that engine's efficiency is, if the Mech designer has no choice. Still, in the never-ending pursuit for THE ultimate BattleMech, it may be nice to know if one particular combination is unusually wasteful of overall tonnage.

BattleMech Top Speeds

To find out exactly how many BattleMech-engine combinations were possible, it was necessary to find out the maximum speeds for each weight of Mech. This was done by calculating the largest engine-and-gyro system that would fit into each size of Mech. Certain components, such as internal structure and cockpit, are mandatory on all Mechs, regardless of speed, and so their weight was subtracted first. A minimum of 0.5 tons of armor was assumed for each Mech, though no weapon systems were figured in. After making all necessary calculations, the following maximum movement limits were determined (see Table # 1). Few lightly-armored, unarmed BattleMechs will ever be designed for the sole purpose of travelling at their speed limits, though it is theoretically possible that a very rare unarmored Mech design or two may actually exceed the limit stated here for its tonnage.

Rating the Engines

After calculating the size of every engine that could fit into every tonnage of Mech, ranging from minimum to maximum movement, it was time to create an 'Engine Efficiency Rating'. Only the tonnage-efficiency of the engine is being judged. A lightweight engine that produces as much power as its heavier counterpart will thus receive a higher rating. The

Table # 2
BattleMech Engine Options and Data

Engine	Mech	Weight	MP		Rating
Omni 10		0.5 ton + 1 ton gyro		Rating:	26.6
	10-ton Mech		1 MP		
GM 15		0.5 ton + 1 ton gyro		Rating:	40.0
	15-ton Mech		1 MP		
Pitban 20		0.5 ton + 1 ton gyro		Rating:	53.3
	10-ton Mech		2 MP		
	20-ton Mech		1 MP		
Omni 25		0.5 ton + 1 ton gyro		Rating:	66.6
	25-ton Mech		1 MP		
Nissan 30		1.0 ton + 1 ton gyro		Rating:	60.0
	10-ton Mech		3 MP		
	20-ton Mech		2 MP		
	30-ton Mech		1 MP		
VOX 35		1.0 ton + 1 ton gyro		Rating:	70.0
	35-ton Mech		1 MP		
GM 40		1.0 ton + 1 ton gyro		Rating:	80.0
	10-ton Mech		4 MP		
	20-ton Mech		2 MP		
	30-ton Mech		1 MP		
GM 45		1.0 ton + 1 ton gyro		Rating:	90.0
	15-ton Mech		3 MP		
	45-ton Mech		1 MP		
DAV 50		1.5 tons + 1 ton gyro		Rating:	80.0
	10-ton Mech		5 MP		
	25-ton Mech		2 MP		
	50-ton Mech		1 MP		
VOX		1.5 tons + 1 ton gyro		Rating:	88.0
	55-ton Mech		1 MP		
Leenex 60		1.5 tons + 1 ton gyro		Rating:	96.0
	10-ton Mech		6 MP		
	15-ton Mech		4 MP		
	20-ton Mech		3 MP		
	30-ton Mech		2 MP		
	60-ton Mech		1 MP		
Nissan 65		2.0 tons + 1 ton gyro		Rating:	86.6
	65-ton Mech		1 MP		
Omni 70		2.0 tons + 1 ton gyro		Rating:	93.3
	10-ton Mech		7 MP		
	35-ton Mech		2 MP		
	70-ton Mech		1 MP		
GM 75		2.0 tons + 1 ton gyro		Rating:	100.0
	10-ton Mech		5 MP		
	35-ton Mech		3 MP		
	70-ton Mech		1 MP		
VOX 80		2.5 tons + 1 ton gyro		Rating:	91.4
	10-ton Mech		8 MP		
	20-ton Mech		4 MP		
	40-ton Mech		2 MP		
	80-ton Mech		1 MP		
DAV 85		2.5 tons + 1 ton gyro		Rating:	97.1
	85-ton Mech		1 MP		
DAV 90		3.0 tons + 1 ton gyro		Rating:	90.0
	10-ton Mech		9 MP		
	15-ton Mech		6 MP		
	20-ton Mech		3 MP		
	45-ton Mech		2 MP		
	90-ton Mech		1 MP		
Nissan 95		3.0 tons + 1 ton gyro		Rating:	95.0
	95-ton Mech		1 MP		

Table # 2 continued

Engine	Weight		Rating	
Hermes 100	3.0 tons + 1 ton gyro		Rating:	100.0
	10-ton Mech	10 MP		
	20-ton Mech	5 MP		
	25-ton Mech	4 MP		
	50-ton Mech	2 MP		
	100-ton Mech	1 MP		
DAV 105	3.5 tons + 2 ton gyro		Rating:	76.3
	15-ton Mech	11 MP		
	35-ton Mech	2 MP		
GM 110	3.5 tons + 2 ton gyro		Rating:	80.0
	15-ton Mech	11 MP		
	35-ton Mech	2 MP		
GM 115	4.0 tons + 2 ton gyro		Rating:	76.6
	no Mech uses			
GM 120	4.0 tons + 2 ton gyro		Rating:	80.0
	15-ton Mech	8 MP		
	20-ton Mech	6 MP		
	30-ton Mech	4 MP		
	40-ton Mech	3 MP		
	60-ton Mech	2 MP		
Nissan 125	4.0 tons + 2 ton gyro		Rating:	83.3
	25-ton Mech	5 MP		
Viar 130	4.5 tons + 2 ton gyro		Rating:	80.0
	85-ton Mech	2 MP		
Magna 135	4.5 tons + 2 ton gyro		Rating:	83.0
	15-ton Mech	9 MP		
	45-ton Mech	3 MP		
Hermes 140	5.0 tons + 2 ton gyro		Rating:	80.0
	20-ton Mech	7 MP		
	35-ton Mech	4 MP		
	70-ton Mech	2 MP		
Leenex 145	5.0 tons + 2 ton gyro		Rating:	82.8
	no Mech uses			
Omni 150	5.0 tons + 2 ton gyro		Rating:	80.0
	15-ton Mech	10 MP		
	20-ton Mech	6 MP		
	30-ton Mech	5 MP		
	50-ton Mech	3 MP		
	75-ton Mech	2 MP		
Nissan 155	5.0 tons + 2 ton gyro		Rating:	82.6
	no Mech uses			
LTV 160	6.0 tons + 2 ton gyro		Rating:	80.0
	20-ton Mech	8 MP		
	40-ton Mech	4 MP		
	80-ton Mech	2 MP		
VOX 165	6.0 tons + 2 ton gyro		Rating:	82.5
	15-ton Mech	11 MP		
	55-ton Mech	3 MP		
DAV 170	6.0 tons + 2 ton gyro		Rating:	85.0
	85-ton Mech	2 MP		
Omni 165	7.0 tons + 2 ton gyro		Rating:	77.7
	25-ton Mech	7 MP		
	35-ton Mech	3 MP		
GM 180	7.0 tons + 2 ton gyro		Rating:	80.0
	15-ton Mech	12 MP		
	20-ton Mech	9 MP		
	30-ton Mech	6 MP		
	45-ton Mech	4 MP		
	60-ton Mech	3 MP		
	90-ton Mech	2 MP		
GM 180	7.5 tons + 2 ton gyro		Rating:	77.8
	no Mech uses			
DAV 190	7.5 tons + 2 ton gyro		Rating:	80.0
	95-ton Mech	2 MP		

rating itself was calculated by adding the sum of the tonnage of each engine and necessary gyro, dividing the engine's rating by that sum, then multiplying the result by 4, rounding down to the nearest tenth. By coincidence, this gave the most efficient engines a rating of 100, with all other engines receiving proportionately lower values.

I do *not* mean to imply that any engine with a rating of 100 has 100% efficiency. (It seems doubtful that engineers will *ever* develop the 100% efficient engine; this quest for the ultimate machine still exists, even in the 31st century.) Instead, the engine rating is a yardstick by which engines of different sizes can be objectively compared. An engine with an 80 rating *is* twice as tonnage-efficient as an engine with a 40 rating, even though the engines may not be interchangeable between their respective Mech models.

Table # 2 contains a list of every BattleMech fusion engine, its weight, the weight of its gyro, the size of Mech that it can be fitted into, the movement that it will give such a Mech, and the engine's efficiency rating. This efficiency rating remains the same no matter what Mech the engine is installed in.

In some cases, there will be a notation in the table "no Mech uses". It means exactly that — there is no combination of Mech tonnage and movement allowance that would permit such an engine to be used, ever. (If anyone can find a genuinely good use for these misfit engine sizes, they ought to consider writing an article about it, and sending it to a technical journal such as this.)

The Best of the Bunch

For the sake of convenience, the fifteen most efficient engines (by rating) appear in Table # 3. Only engines that actually can be used by some model of Mech are included in this table. (Who cares about efficiency if the engine doesn't fit anything?) Even so, BattleMech designers should not let these findings drastically alter their own design philosophies. Individual models of Battle-Mech will require certain rates of movement based on their primary missions, and no 'efficiency rating' can alter that fundamental reality. Nevertheless, the numbers may be a helpful guideline; and if nothin else, it is now

Table # 3
15 Most Efficient Engines in Use

	Model	Rating
1.	GM 75	100.00
1.(tie)	Hermes 100	100.00
3.	DAV 85	97.1
4.	Leenex 60	96.0
5.	Nissan 95	96.0
6.	Omni 70	93.3
7.	VOX 80	91.4
8.	GM 45	90.0
8.(tie)	DAV 90	90.0
10.	VOX 55	88.0
11.	Nissan 65	86.6
12.	DAV 170	85.0
13.	Nissan 125	83.3
14.	Magna 135	83.0
15.	VOX 165	82.5

clear that the larger the engine, the less efficient it becomes.

If the idea of a 400-rating engine seems on the awesome side, just think for a moment (but not too seriously) about a 450-rating engine — and the 150-ton BattleMech required to carry it! My best estimate is that such an engine would weigh between 95 and 100 tons, hardly worth having from an efficiency standpoint.

There is one other possible factor to keep in mind: the actual cost of the engine. But then, that too may be a suitable topic for a future article!

Table #2 Continued

Engine	Weight	MP	Rating
Nissan 195	8.0 tons + 2 ton gyro		78.0
15-ton Mech		13 MP	
65-ton Mech		3 MP	
Nissan 200	8.5 tons + 2 ton gyro		76.1
20-ton Mech		10 MP	
25-ton Mech		8 MP	
40-ton Mech		5 MP	
50-ton Mech		4 MP	
100-ton Mech		2 MP	
Vlar 205	8.5 tons + 3 ton gyro		71.3
no Mech uses			
GM 210	9.0 tons + 3 ton gyro		70.0
30-ton Mech		7 MP	
35-ton Mech		6 MP	
70-ton Mech		3 MP	
CoreTek 215	9.5 tons + 3 ton gyro		68.8
no Mech uses			
DAV 220	10.0 tons + 3 ton gyro		67.6
20-ton Mech		11 MP	
55-ton Mech		4 MP	
VOX 225	10.0 tons + 3 ton gyro		69.2
25-ton Mech		9 MP	
45-ton Mech		5 MP	
75-ton Mech		3 MP	
Leenex 230	10.5 tons + 3 ton gyro		68.1
no Mech uses			
GM 235	11.0 tons + 3 ton gyro		67.1
no Mech uses			
Pitban 240	11.5 tons + 3 ton gyro		66.2
20-ton Mech		12 MP	
30-ton Mech		8 MP	
40-ton Mech		6 MP	
60-ton Mech		4 MP	
80-ton Mech		3 MP	
Magna 245	12.0 tons + 3 ton gyro		65.3
35-ton Mech		7 MP	
Magna 250	12.5 tons + 3 ton gyro		64.5
25-ton Mech		10 MP	
50-ton Mech		5 MP	
Strand 255	13.0 tons + 3 ton gyro		63.7
85-ton Mech		3 MP	
Magna 260	13.5 tons + 3 ton gyro		63.0
65-ton Mech		4 MP	
Vlar 265	14.0 tons + 3 ton gyro		62.3
no Mech uses			
GM 270	14.5 tons + 3 ton gyro		61.7
30-ton Mech		9 MP	
45-ton Mech		6 MP	
90-ton Mech		3 MP	

Engine	Weight	MP	Rating
CoreTek 275	15.5 tons + 3 ton gyro		Rating: 59.4
25-ton Mech		11 MP	
55-ton Mech		5 MP	
VOX 280	16.0 tons + 3 ton gyro		58.9
35-ton Mech		8 MP	
40-ton Mech		7 MP	
70-ton Mech		4 MP	
Pitban 285	16.5 tons + 3 ton gyro		58.4
95-ton Mech		3 MP	
Omni 290	17.5 tons + 3 ton gyro		56.5
no Mech uses			
GM 295	18.0 tons + 3 ton gyro		56.1
no Mech uses			
Vlar 300	19.0 tons + 3 ton gyro		54.5
30-ton Mech		10 MP	
50-ton Mech		6 MP	
60-ton Mech		5 MP	
75-ton Mech		4 MP	
100-ton Mech		3 MP	
GM 305	19.5 tons + 4 ton gyro		51.9
no Mech uses			
Magna 310	20.5 tons + 4 ton gyro		50.6
no Mech uses			
GM 315	21.5 tons + 4 ton gyro		49.4
35-ton Mech		9 MP	
45-ton Mech		7 MP	
Pitban 320	22.5 tons + 4 ton gyro		48.3
40-ton Mech		8 MP	
80-ton Mech		4 MP	
VOX 325	23.5 tons + 4 ton gyro		47.2
65-ton Mech		5 MP	
VOX 330	24.5 tons + 4 ton gyro		46.3
55-ton Mech		6 MP	
Leenex 335	25.5 tons + 4 ton gyro		45.4
no Mech uses			
VOX 340	27.0 tons + 4 ton gyro		43.8
85-ton Mech		4 MP	
Vlar 345	28.5 tons + 4 ton gyro		42.4
no Mech uses			
Magna 350	29.5 tons + 4 ton gyro		41.7
50-ton Mech		7 MP	
70-ton Mech		5 MP	
LTV 355	31.5 tons + 4 ton gyro		40.0
no Mech uses			
Hermes 360	33.0 tons + 4 ton gyro		38.9
45-ton Mech		8 MP	
60-ton Mech		6 MP	
90-ton Mech		4 MP	
Hermes 365	34.5 tons + 4 ton gyro		37.9
no Mech uses			
Magna 370	36.5 tons + 4 ton gyro		36.5
no Mech uses			
GM 375	38.5 tons + 4 ton gyro		35.2
75-ton Mech		5 MP	
GM 380	41.0 tons + 4 ton gyro		33.7
95-ton Mech		4 MP	
LTV 385	43.5 tons + 4 ton gyro		32.4
no Mech uses			
Magna 390	48.0 tons + 4 ton gyro		31.2
65-ton Mech		6 MP	
Hermes 395	49.0 tons + 4 ton gyro		29.8
no Mech uses			
LTV 400	52.5 tons + 4 ton gyro		28.3
80-ton Mech		5 MP	
100-ton Mech		4 MP	

Technical Readout

STC-13 Striga Conventional Fighter

Overview:

A fascinating conventional fighter which has recently become popular is the Striga. It has been designed to keep AeroSpace fighters busy, and to provide air support for garrison forces. It can also be effective against BattleMechs. The offensive capabilities of this fighter are surprising. Most people believe that a conventional fighter cannot take on an Aerospace fighter of equal tonnage. The designer of the Striga must not have known that.

The fuel capacity is one of its other surprises. It can stay in the battlefield for over twice as long as its competitors, especially on full burn (maximum thrust). Like all its brethren, its armor is weak, an inherent problem with conventional fighters.

This new design appeared in 3030. It is produced by Hammerdown Industries, a company which specializes in designing aircraft and VTOLs. This particular design has caught the eye of many people who need defensive firepower, but cannot afford to buy the Mechs to take care of it. Close to 7,000 have been produced so far. The Striga can be found in all of the Successor House defense forces, and in some parts of the Periphery too.

The firepower on this fighter is astounding. The wing-mounted Longbow LRM-10s provide the necessary long range cover fire that is called for in this type of fighter. The five Strongarm SRM-4s guarantee the devastation of almost any target they hit. The designers decided to install a Laranger Machine Gun just in case the attackers had sent infantry along with the more powerful forces. With this much firepower, you'd think that the targeting system would be one of the most advanced in the Inner Sphere. Actually, the Ghost Tracker is relatively simple. It works on a headup display which informs the pilot how far the target is; when there is a lock-on, an audible beeping sound begins. There is also a safety feature that tells the pilot when he has someone behind him who may have a possible lock on *him*. This loud buzzing sound informs him that such a target is in range of his rear SRM-4.

The engine is a basic GM-150 turbine which is designed for optimum fuel consumption. Take this together with its oversized fuel tanks and you will see that the Striga has excellent staying power in the dog fighting arena of the skies. The plane unfortunately sacrifices speed for this extended time in the air, but many pilots *do* chose range over speed.

Battle History:

In the last fifteen years, the Striga has been in many different fights. In all of them, it has performed exceptionally well. One of the most interesting battles that this plane has been in took place on the planet Enif in 3042.

A group of mercenaries had bought a dozen of these fighters to aid in the defense of their vase located in the Valley of the Winds. The Kuritans had decide that this independent world would make an excellent training base for their new mechwarriors. The Outworlds Alliance made a punitive raid at the same time, thinking to insure that this new group of mercenaries would not think of making water raids against them. So the battle began.

The Striga wing started by striking at two columns of Mechs coming from the south. Ten of the fighters were assigned to this harassment duty. As the invading forces came closer, the Striga pilots went to alternative landing sites to refuel and to reload their weapons. The Kuritans and the OWA sent strike teams out to destroy these refueling bases. At one base, all three groups met, and a three-corned fight began. The two Striga fighters had taken off; they attacked until they were out of ammunition. Then the pilots sacrificed themselves to make sure that non of the attackers survived. One pilot ran his Striga right into the fuel tank, which was two thirds full. He blew it to kingdom come, along with several of the enemy. The other pilot dived right into the commander of the Kuritan force, destroying the commander and himself. Their actions broke the Kuritan assault. The remaining Draconian troops offered to help the mercenaries eliminate the Outworld Alliance forces. The offer was accepted; together they destroyed the Outworld Alliance Assault Forces.

Variants:

There are two interesting variants of the Striga design. The first one involves removing the wing-mounted SRM 4-packs. This is a common variant in Marik space. Another fascinating variant involves the elimination of all of the wing-mounted weaponry and ammunition. They are replaced with

four medium lasers, along with the appropriate heat sink system to keep the plane cool. This particular variant is popular with Draconis Combine pilots even though it does decrease long range firepower severely.

Notable Pilots:

Lt Horace Calin

This pilot had been aiding in the defense of Fomalhault with his fighter 'The Lady', which he has been flying for the past seven years. He handles it with as much care as if it were a small child. In combat the claws come out and this 'child' resembles a demon from hell.

Sgt Shekla Zapotec

This pilot lost her Shilone Aerospace fighter during the Enif raid; she was reassigned to a foot infantry company for the rest of that campaign. Her company was able to capture one of the Striga fighters which had not been able to refuel and reload. Shekla is a skilled pilot; she got into the cockpit and flew the plane at once. This confused the defenders long enough for her to drop a sizable bomb on the main complex. She was awarded the plane, and has been flying it ever since.

Striga Fighter

Mass: 50 tons
Movement Type: Conventional aircraft
Frame: Draco Type Five
Power Plant: GM 150 Air Turbine
Armament: 2 Longbow 10-shot LRM Missile Systems
5 Strongarm 2-Shot SRM Missile Systems
1 Laranger Machine Gun
Manufacturer: Hammerdown Industries
Communication System: Duoteck 50
Targeting/Tracking System: Ghost Tracker

Type:	Striga Fighter		Tons
Tonnage:	50 tons		50
Engine:	**Rating:** 150		11
	Type: Turbine		
Thrust:	5		
Overthrust:	7		
Thrust points:		180	
Heat Sinks :	0		0
Control Components:			5
Fuel:			6
Armor:			3

Location:	Armor Value
Nose:	10
Cockpit:	8
Rt/Lt Wing:	6/6
Fuselage:	10
Engine	8

Weapons and Ammo:

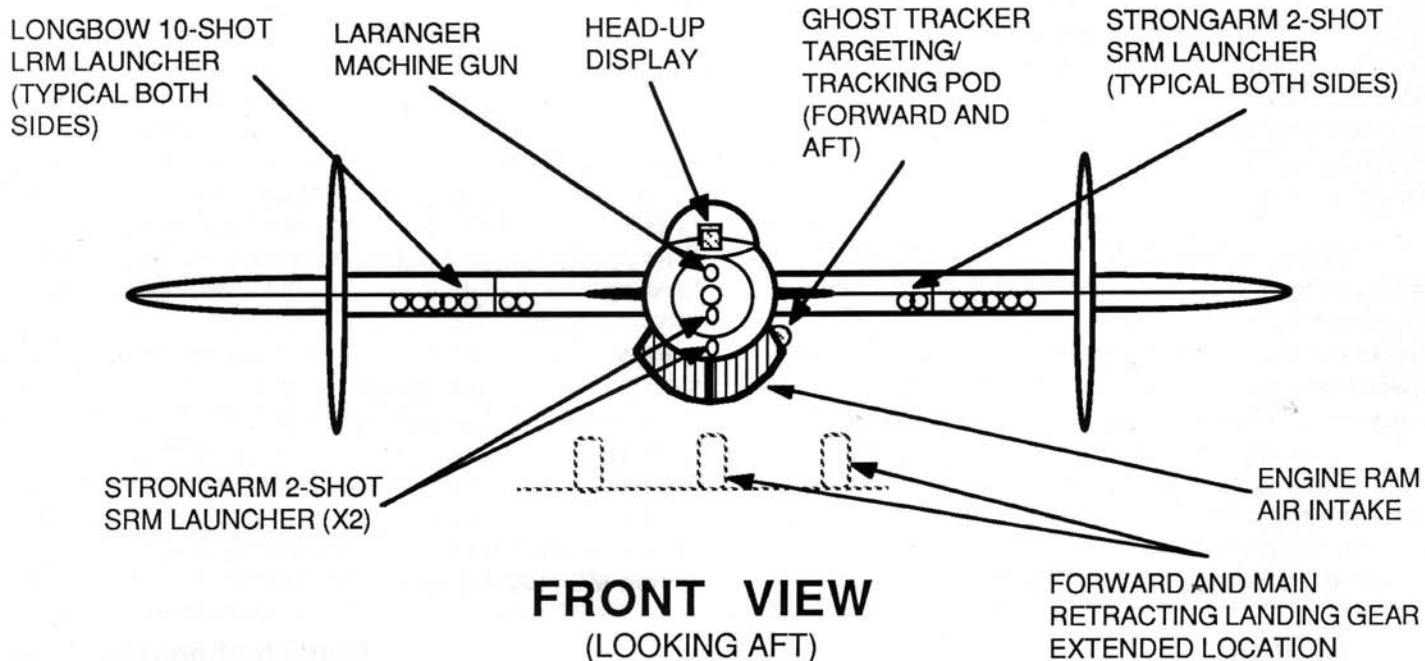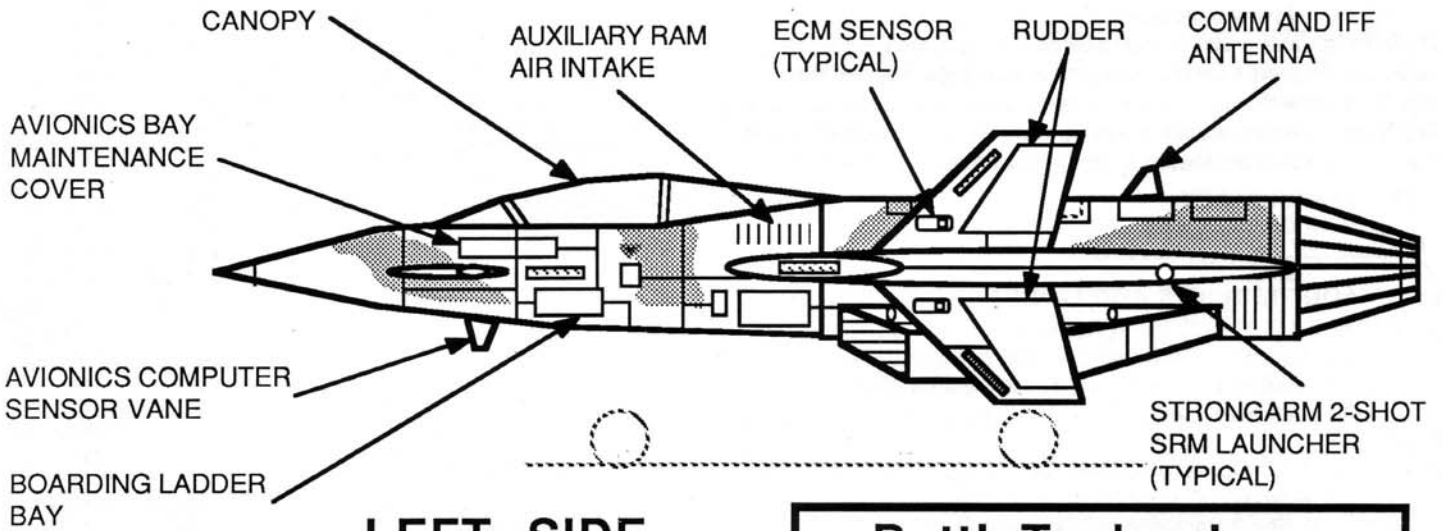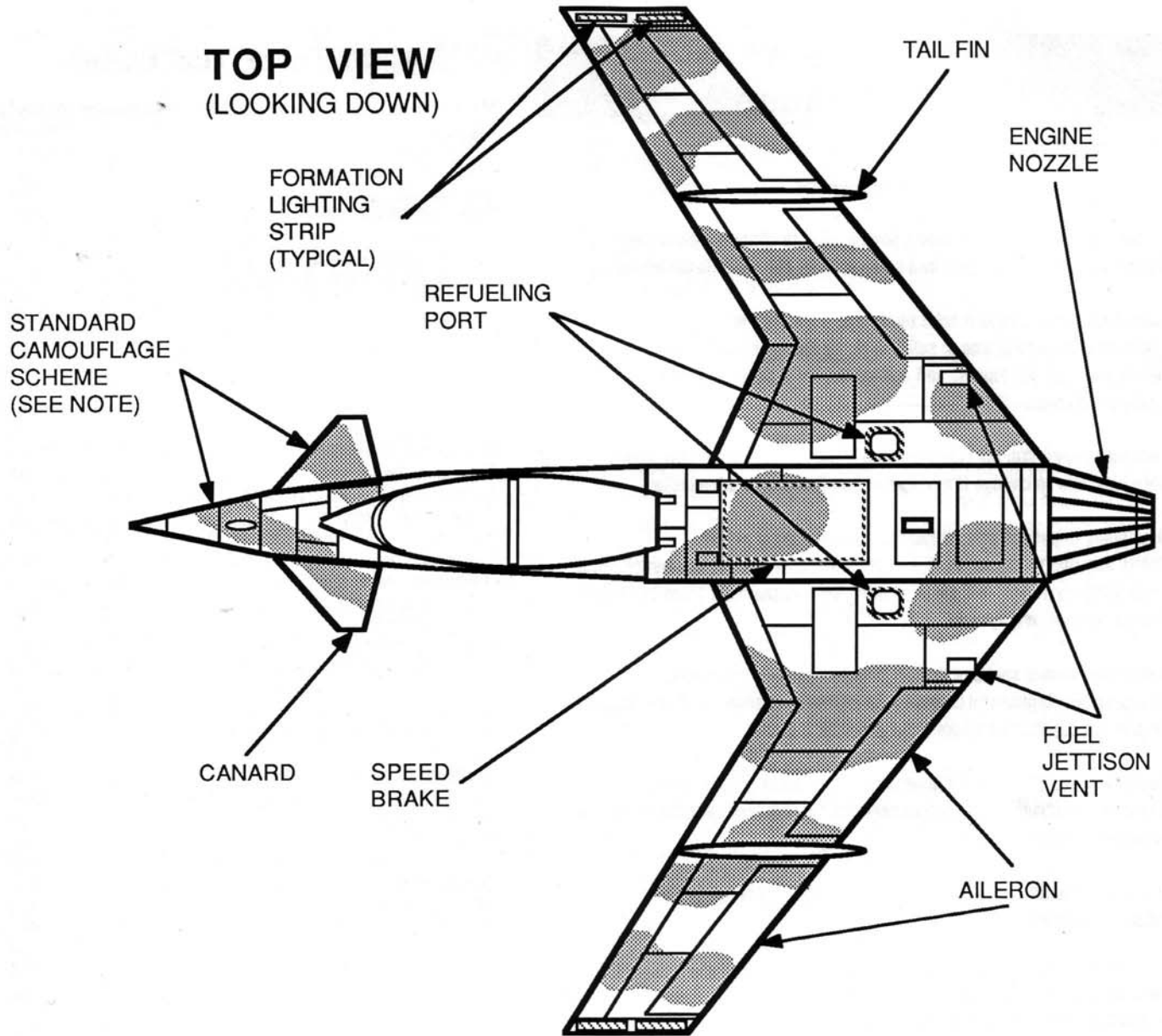| Type	Facing	Tons
LRM 10	Left Wing	5
LRM Ammo 12	Left Wing	1
LRM 10	Right WIng	5
LRM Ammo 12	Right WIng	1
SRM 4	Left Wing	2
SRM 4	Right Wing	2
SRM Ammo 50	Fuselage	2
SRM 4	Nose	2
SRM 4	Nose	2
SRM 4	Engine	2
Machine Gun	Nose	0.5
Ammo MG (100)	Nose	0.5

STRIGA 50 TON FIGHTER AIRCRAFT
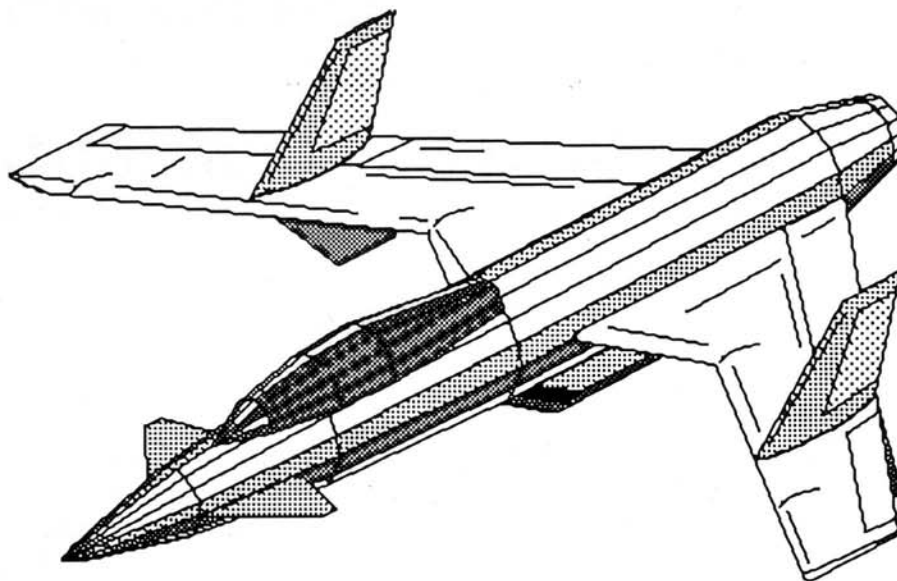
NOTE
COMMONLY USED COLORS FOR CAMOUFLAGE PAINT SCHEME (FIRST COLOR LISTED IS FOR SHADED AREAS ON AIRCRAFT)

#1. MID GREY AND LIGHT GREY
(USED FOR MOST HIGH ALTITUDE MISSIONS)
#2. OLIVE DRAB AND DARK GREY
(USED FOR LOW ALTITUDE MISSIONS WITH HEAVY FOLIAGE)
#3. MID BROWN AND TAN
(USED FOR LOW ALTITUDE MISSIONS WITH LIGHT FOLIAGE)

LONGBOW 10-SHOT LRM LAUNCHER (TYPICAL BOTH SIDES)

LARANGER MACHINE GUN

HEAD-UP DISPLAY

GHOST TRACKER TARGETING/ TRACKING POD (FORWARD AND AFT)

STRONGARM 2-SHOT SRM LAUNCHER (TYPICAL BOTH SIDES)

STRONGARM 2-SHOT SRM LAUNCHER (X2)

ENGINE RAM AIR INTAKE

FRONT VIEW
(LOOKING AFT)

FORWARD AND MAIN RETRACTING LANDING GEAR EXTENDED LOCATION

TOP VIEW
(LOOKING DOWN)

FORMATION
LIGHTING
STRIP
(TYPICAL)

TAIL FIN

ENGINE
NOZZLE

REFUELING
PORT

STANDARD
CAMOUFLAGE
SCHEME
(SEE NOTE)

CANARD

SPEED
BRAKE

FUEL
JETTISON
VENT

AILERON

CANOPY

AUXILIARY RAM
AIR INTAKE

ECM SENSOR
(TYPICAL)

RUDDER

COMM AND IFF
ANTENNA

AVIONICS BAY
MAINTENANCE
COVER

AVIONICS COMPUTER
SENSOR VANE

BOARDING LADDER
BAY

STRONGARM 2-SHOT
SRM LAUNCHER
(TYPICAL)

LEFT SIDE
(RIGHT SIDE TYPICAL)

BattleTechnology
The Magazine of Combat in the 31st Century
Illustrated by Gary A. Kalin

But Does it Want to Change?

How many Combine troopers does it take to change a glow strip?
Seventeen: one to change it and sixteen to fill out the requisition forms.

How many Lyrans does it take to change a glow strip?
Five: one to change it, one to sell it at three times its market value, two to film it and sell the rights, and one to design a new, official glow strip changer uniform.

How many Free Worlds Leaguers doe it take to change a glow strip?
Only two: one to change it and one to ask ComStar's permission.

How many Capellans does it take to change a glow strip?
Thirty Six: one to change it, five to propagandize against the rumors of a glow strip shortage, and an elite thirty-man commando team to steal it from a neighboring system.

How many Davion soldiers does it take to change a glow strip?
One: plus two Regimental Combat Teams! One to change it and two RCTs to invade the Capellan Confederation and take it back.

How many ComStar Adepts does it take to change a glow strip?
Three: one to change it and two to perform the required sanctifying rituals to assure proper operation.

How many Bandit Lords does it take to change a glow strip?
What's a glow strip?

These were recorded on Solaris in the Cobalt Coil during an evening billed as "Bad Joke Night". BattleTechnology Magazine did not record the names of those who told these and many other, far less printable jokes. Any readers who find them objectionable are free to discuss the issue with the management of the Cobalt Coil.

For those of you who are unfamiliar with them, a Glow Strip is a temporary, disposable light source used by Techs working in cramped spaces where electrical lights might prove hazardous. Each strip is a one meter long, one millimeter thick flexible strip that produces light by chemical luminescence when activated. To activate, the strip is 'snipped'; it then will glow with a greenish-yellow light for approximately ten hours. One side of each strip is adhesive, allowing it to be set in place. Usual cost is 1.5 Cbs.

Tournaments and Conventions Noted

Mech Force Top Players

MechWarrior Name	House or Unit	MechForce Ranking
Leutnant-Colonel Michael D Martin	LC	3433
Leftenant-Colonel Gunther Harold Bellows	FS	3354
Leftenant-Colonel Sheila Marie Bellows	FS	2998
Leftenant-Colonel Edward Markle	FS	2582
Leftenant-Colonel John G Froelich	FS	2247
Leutnant-Colonel Ronald C Kehir	LC	2376
Leftenant-Colonel Westly Patrick	FS	2215
Chu-Sa William C Gushue	DC	2063
Leftenant-Colonel Michael Blouin	FS	2027
Major Gavin Mc Clements	FS	2014
First Leutnant Kristopher Miller	LC	1943
Major Brian L Neldner	FS	1930
Kommandant Justin Thomas Claypool	LC	1901
Major Bobby Howell		1898
Sho-sa Jon Freedland	DC	1892
Tai-i John Gladden	DC	1838
Kommandant Francois Trudelle	LC	1737
Captain John Petrone	FS	1685
Hauptmann Steve Farber	LC	1667
Captain Ed Savoir	FS	1621
Hauptmann Warren B Dettman	LC	1620
Tai-i Tim Hutchison	DC	1611
Chu-i Don Gilmore	DC	1592
Chu-i Alex Zehnder	DC	1584
First Leutnant Eric Martel	LC	1573
Leftenent Brian Lee Kendall	FS	1567
First Leutnant Douglas M Smith	LC	1553
First Leutnant David M Arrowood	LC	1535
Leutnant Scott A Kreiser	LC	1524
Leutnant Larry Pryor	LC	1524
Lieutenant David Heatherley		1516
Chu-i Rhonda Stocking	DC	1508
Staff Sergeant John Mason		1480
Leutnant Robert A Gross Jr	LC	1478
Sergeant-Major Francois Gousse	FS	1460
Leutnant Michael T Keogh	LC	1454
Leutnant James Kehir	LC	1448
Leutnant Robert Bost	LC	1434
Sergeant-Major Robert Whidbey	DC	1402
Brevet-Commander Mike Palmer	CC	1398
Sergeant-Major Louis Carrion	FS	1389
Sergeant Major Daniel Clark	FS	1381
Sergeant Major Alex Zehnder	DC	1380
Staff Sergeant Chuck Burhanna	FWL	1375
Sergeant-Major Robert F Hendricks Jr	FS	1368
Sergeant-Major Robert Zickgraf	DC	1359
Sergeant-Major David 'Mad Dwarf' Munter	FS	1350
Leutnant Hans Jonker	LC	1342
Sergeant Major Mike Wilson	FS	1338
Leutnant C Malcolm Cushman	LC	1337
Sergeant-Major David E Parsons	FS	1330
Sergeant-Major Tony Rabiola	FS	1300
Sergeant-Major Paul 'Chip' Trace Jr	FS	1296
Sergeant-Major Fred Best	FS	1296
Staff Sergeant David Shorey		1292
Staff Sergeant William A Ransdale	FWL	1291
Leutnant Jerry A Estal	LC	1290
Leutnant Timothy D Van Westrienen	LC	1270
Staff Sergeant Robert Blouin	FWL	1261
Staff Sergeant Edward O Royce		1254
Sergeant-Major Stephen R Watts	DC	1252
Leutnant Don Jenkins		1248
Staff Sergeant Steve Chenevey	FWL	1246
Staff Sergeant William Tugman	FWL	1245
Leutnant Tony Liddle		1245

Rules Variants

Underwater Combat

One of the most fascinating scenario idea potentials is the underwater environment for BattleTech or MechWarrior. This arena can be devastating to the BattleMech or its pilot. The first portion of this article will deal with the BattleMech and its pilot in an underwater environment. The second part will deal with the use of infantry underwater. The last section deals with the special equipment and troop types in this situation. As usual, all of these, when they depart from the *Rules of Warfare,* should be considered as optional rules variants.

The underwater environment adds an interesting limiting factor to all BattleMechs in slowing down their movement rates, cutting down on energy weapons, and lessening damage factors for various physical attacks. First let us look at movement in this arena. At the 0 level, a Mech is standing in the shallows of the area; it is not hampered in any way, nor does it have to make piloting rolls. In Level 1 water, it is around six meters deep. It is slightly more difficult to maneuver; the simulation rules require 2 MP per hex because of the effects of water pushing on the Mech's surface at a greater concentration than air does when a Mech is out of water. A piloting roll at -1 is required to remain standing when a Mech first enters this level of water. If the pilot moves out of Level 1 and in again, he or she will be required to roll again. At Level 2 and greater, 12 meters and on, it costs the Mech 4 MP to move one hex. As the level changes, the pilot will be required to make piloting rolls. At Level 2, there is no modifier. At deeper levels the roll is made at a +1. This can be noted on chart # 4, later in this article.

Now the next thing to be looked at is ranged weapons, energy weapons in particular. Because of the light-diffusing qualities of water, the range of energy weapons is shortened considerably. Chart #1 combines the BattleTech standard weapons with the newly-rediscovered Star League weapons chart.

A weapon source mentioned in the BattleTech Rules of Warfare, but not fully developed there, is the torpedo. These are simply underwater missile packs which have been designed to function only in the underwater environment. Down below, they are probably the most advantageous weapon. Chart # 3 covers these torpedos in detail so they may be added to a campaign. The last item that should be covered is the rule that does not allow any non-energy weapon or flamer to be used underwater. Since this rules does limit the Mechs in choices to be used underwater, I would like to propose an OPTIONAL RULE whereby any non-energy weapon may be fired, BUT it must make a fallability roll before it is fired. This roll, in this particular environment, is a 9+ on 2D6 for the weapon to work. It the roll is below this minimum number, the barrel explodes, causing the loss of one critical space as mandatory; it is then useless for the rest of the scenario either in or out of the water.

The next part to be dealt with is physical attacks, either Mech vs Mech or naval vessels and submarines. The to-hit procedure is as per standard rules, but damage is handled differently. Punches do 1 point of damage for every 20 tons the attacking Mech weighs; kicks do 1 point of damage for every 10 tons of weight, while charges do 2 points for every 20 tons of weight times the number of hexes charged to the defender. (The charging attacker suffers 1 point for every 20 tons the defender weighs). Clubs do 1 point of damage for each 10 tons of attacker's weight. Death From Above does 1 point of damage to the target for every 20 tons attacker weight times 3, and 1 point of damage to the attacker for each 20 tons

Chart # 1 Underwater Weapons Ranges

Weapon Type	Minimum	short	medium	long
Small Laser	0	1	2	N/A
Medium Laser	0	1-2	3-4	5-6
Large Laser	0	1-3	4-6	7-9
ER Large Laser	0	1-3	4-7	8-10
PPC	3	1-4	5-7	8-10
ER PPC	0	1-3	4-7	8-12
Small Pulse Laser	0	1	2	N/A
Medium Pulse Laser	0	1	2	3
Large Pulse Laser	0	1	2-3	4-5

of his own weight. These damages are resolved as is standard physical combat in the BattleTech *Rules of Warfare*.

Hull integrity must also be considered. To quote the *Rules of Warfare* again, "Whenever a unit that is underwater takes a hit, roll 2D6 to see if the unit's hull has been breached. If the result is 10 or greater, the damaged section has lost integrity and fills with water. For game purposes, treat that section as destroyed, Damage is *not* transferred from a flooded section until that sections Internal Structure is destroyed. If all a section's armor is destroyed, that section is automatically considered flooded."

So the rules governing Mech combat underwater have been covered. But there is a source of combat that can add another, completely new, dimension to the underwater environment. This source is the rules governing infantry, what they can and cannot do in this environment. Let us consider infantry, both in the BattleTech technique and from the MechWarrior/BattleTroops viewpoint.

If infantry is to be used in an underwater scenario, certain requirements must be met. The troops must be of veteran or elite status, and have had training in underwater combat. (Because of this specialized training they are three times as expensive as others of their ilk.) Only about one in twenty platoons are trained for this style of combat, always either Laser or SRT troops. (SRTs are described in the New Weapons section.) See chart # 2 for ranges and to-hit numbers for these troops. Damage is done as per standard infantry rules. Infantry does not have the same penalty to movement as the BattleMech. They move as per the standard movement rate listed for each type of infantry platoon. The foot infantry can be considered to be similar to the classic frogman or scuba diver; the motorized infantry used a type of sea sled to move them from point to point, and the jump infantry use an underwater propulsion pack which can for all practical purposes be treated as giving the same advantages underwater as a jump pack does on land. So much for infantry in BattleTech terms.

Let's take a look at the MechWarrior and BattleTroops version of underwater combat. This follow the same format of movement, ranged combat, and personal combat. Movement is simple. Swimming is done at 8 MP for standard movement, with one additional MP for every 2 levels of swimming. One feature that must be added in this kind of scenario is current. To determine which direction a current is going, simply roll 1D6, and that will tell you which hex side the current is coming from. When swimming fully *with* the current, a character moves 2 hexes for each movement point he spends, while when he swims completely against the current, it will cost him 2 MP per hex. Moving crosswise to the current takes 1 MP per hex.

In tidal waters, you must consider if the tide is incoming or outgoing. This tidal movement is only important to a mechwarrior if it's moving quickly or changes terrain, say from water to slick weeds equivalent to rough terrain. Assuming one moon and a standard planetary rotation of 24 local hours, roll 2D6. On a roll of 2-6, tide is outgoing; 7-11, tide is coming in; 12 is full tide.

The next thing to look at is the underwater terrain. There are innumerable types of terrain to be found in this environment. One of these is depth changes. If a soldier/character is in Level/Depth 4 water he has a choice which the much larger BattleMech does not have. He or she may be at any level/depth between 1 and 4, may be anywhere, vertically, in that three-dimensional space of water. This gives maneuverability, and adds to realism in that environment. It is suggested that a counter or small piece of paper with the appropriate level number on it be placed next to the soldier/character, for quick reference and ease of bookeeping. Since only trained troops are being discussed here, DEX rolls must only be made in cases of "running" movement from depth to depth.

The bottom level of any underwater area should be considered as rough terrain if any of the soldier/characters decide to walk rather than to swim. Other features that may be included are coral, seaweed, reeds, small underwater dunes, sinkholes, (consider all these as partial cover for line of sight and rubble/furniture for to-hit modifiers). In a rocky area underwater caves are also a possibility. Consider these as full cover. In addition to these factors, coral has a possible 'tearing factor'. Make a 2D6 roll when going through it *at the level where it is actually present*. If a 2 is rolled, the water suit/light environment suit will take damage. Roll for location on the appropriate damage table. A good oceanography text can be of much assistance in imaginative creation of terrain hazards.

What ranged weapons that are usable in an underwater scenario? The weapons available range from crossbow/speargun to man-portable torpedo tubes. Chart # 5 has a listing of the ranged weapons available to the character/soldier in terms of both BattleTroops and MechWarrior in range and damage. The ranges are effectively halved because of the diffusion of light in the case of laser weapons, and because of the drag potential of water on the other weapons (except for the specialized torpedos discussed in the next section). Damage has not changed on any of the weapons.

Grenades are not shown on the chart; they must be discussed separately here. If players wish to use grenades, there is a simple way to do it. For MechWarrior: halve your normal throwing range when throwing the grenade. Once it hits, even a miss-explosion, every character and NPC within 4 hexes must make a BODY saving roll at +4 to remain conscious, because of concussion effects through the water. Any character/NPC 5-7 hexes from the effect must make a

Chart # 2 Infantry Weapon Underwater To-Hit

Weapon Type	0	1	2	3	4	5	6
Rifle	Illegal Weapon						
Machine Gun	Illegal Weapon						
Flamer	Illegal Weapon						
Laser	2	5	7	-	-	-	-
SMT Launcher	3	4	4	6	6	8	8

Chart # 4 Terrain Effects Chart

Water Level	Cost per hex
Depth 0	1 MP
Depth 1	2 MP
Depth 2+	4 MP

A piloting skill roll is required each time a Mech changes depth level underwater: At Depth Level 1 it is at -1, at Level 2, no modifier, at Depth 3+ at +1.

Chart # 3 Torpedo Weapon Table

Weapon	Heat	Damage	Minimum	Short	Medium	Long	Tons	Shots/Ton
Long Range Torpedoes 1 pt								
5-pack	2	per	6	1-7	8-14	15-21	2	24
10-pack	4	torpedo	6	1-7	8-14	15-21	5	12
15-pack	5	hit	6	1-7	8-14	15-21	7	8
20-pack	6		6	1-7	8-14	15-21	10	6
Short Range Torpedoes 2 pts								
2-pack	2	per	-	1-3	4-6	7-9	1	50
4-pack	3	torpedo	-	1-3	4-6	7-9	2	25
6-pack	4	hit	-	1-3	4-6	7-9	3	15

Chart # 5 Underwater Weapons For MechWarrior and BattleTroops

Weapon	Ranges		Damage	
	BattleTroops	Mechwarrior	BattleTroops	Mechwarrior
Light Spear Gun	2/7	1/2/5	1L	1D6
Heavy Spear Gun	4/9	2/4/7	2L	1D6 +2
Tranq Gun	2/6	1/2/3	special (see 3025 equipment guide)	
Laser Pistol	4/8	2/3/6	4L	4D6
Laser Rifle	8/36	4/11/24	5L	4D6 +2
Blazer	8/36	4/11/24	10L	8D6 +4
SRT Pack	20/90	10/36/54	8,4,2 L	5D6 + 6
Man Pack PPC	14/45	8/17/28	8L	5D6 + 9
Semi Portable PPC	30/80	15/35/50	12L	10D6 +6
Semi Portable Laser	20/80	10/30/60	11L	7D6 + 12
Semi Portable Heavy Laser	30/100	15/40/70	14L	10D6 +12
LAW-T	6/24	3/9/20	7,3,1L	4D6 +6
VLAW-T	4/44	2/6/13	3/2/1L	2D6 +3
Heavy SRT-Pack	26/80	13/40/48	12,6,3,1L	10D6 +6

Chart # 6 Hand-to-Hand Weapons Underwater

Weapon	Range	Damage	
		BattleTroops	MechWarrior
Dagger	close	1L	21D6-3 (min of 1)
Sword	close	2L	1D6 +1
Vibrodagger	close	2L	2D6
Vibroblade	close	3L	3D6
Stunstick	close	1L	1D6 -2
Bang Stick	close	4L	3D6 +2

(bang stick may only be used onceper melee)

BattleTech Rules in Underwater Combat

Punch Damage = 1 point for every 20 tons attacker weight
Kick Damage = 1 point for every 10 tons attacker weight
Charge Damage = Defender takes 1 point for every 20 tons attacker weight X hexes moved. Attacker takes 1 point for every 20 tons defender weight.
Death From Above Damage = Defender takes1 point of damge for every 20 tons attacker weight X 3. Attacker takes 1 point for every 20 tons he weighs.

MechWarrior

Swimming MP = 8
for every 2 levels, a +1 to the MPs.

Grenades used underwater (halve throwing range), rolls for consciousness:

    1-4 hexes Body Roll at +4 to remain conscious
    5-7 hexes Body Roll at +2 to remain conscious
    8-10 hexes Body Roll to remain conscious.

BattleTroops

Grenades used underwater (halve throwing range), rolls for consciousness:

1-8 dots	6 points of bruising
9-14 dots	4 points of bruising
15-20 dots	2 points of bruising

GU-2P Guppy Scout/Submarine

Tonnage:	2	
Engine Rating: Pitban 20	.75	
Cruise: 25		
Flank: 38		
Control Components:	.1	
Internal Structure:	.2	
Diving Equipment:	.2	
Armor Factor: 8	.5	
Front: 2		
L/R: 2/2		
Rear: 2		
Weapons & Ammo:		
2 person cargo space	.35	

MNO-5W Minnow Submarine

Tonnage:	5	
Engine Rating: Omni 25	.75	
Cruise: 11		
Flank: 17		
Internal Structure:	.5	
Control Components:	.25	
Diving Equipment:	.5	
Armor: 16	1	
Front: 4		
L/R: 4/4		
Rear: 4		

Weapons & Ammo:

Minnow Type A			Minnow Type C		
Medium Laser s Front 1			Small Laser	L	.5
Medium Laser Front 1			Small Laser	R	.5
			Medium Laser	F	1
Minnow Type B					
SRT-2 Front 1			Minnow Type D		
Ammo SRT-2 (50) Rear 1			2 ton Cargo Pod L/R		2

THEY ARE COMING.

NOTHING WE HAVE CAN STOP THEM.

MICHAEL A. STACKPOLE

LETHAL HERITAGE

BLOOD OF KERENSKY • VOLUME ONE

A BATTLETECH NOVEL
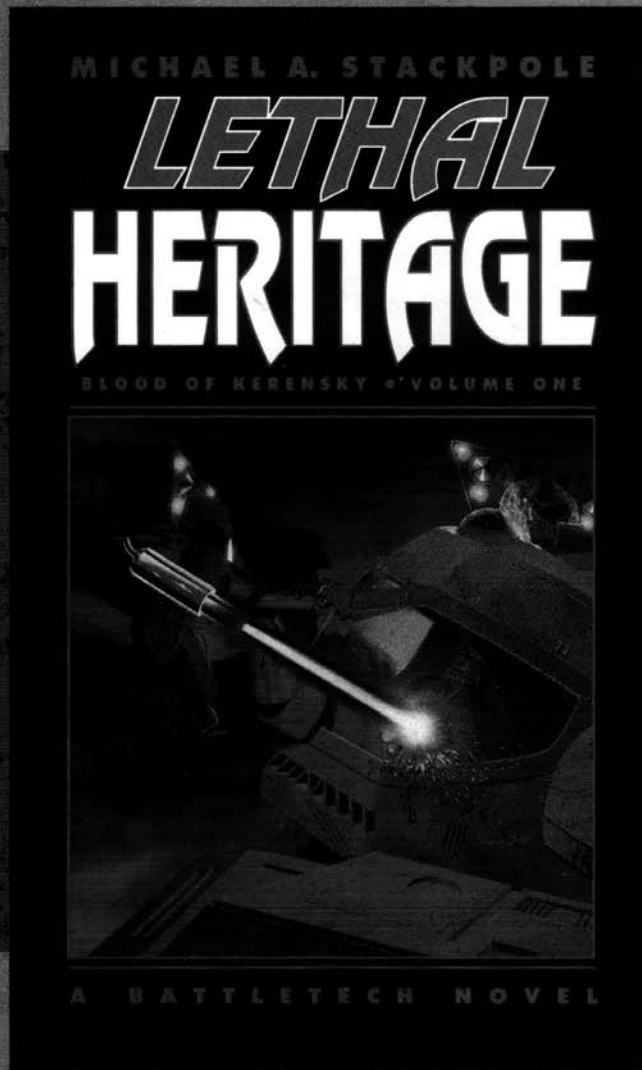
From beyond the Periphery comes a threat. A threat whose power, speed, and ferocity are unparalleled. A juggernaut whose sole reason for being is battle.

THE CLANS.

Humanity's only hope is for Davion and Kurita to stand side by side.

Lethal Heritage is the first of a new trilogy by Michael A. Stackpole, author of the *Warrior* Series. Look for *Lethal Heritage* in July where you buy games.

Valley of the Winds

A Combined Arms Scenario for three-way Combat

Background:

On July 13, 3042, Enif, a world on the Kurita Periphery which is technically an indepent, was raided by two enemies at the same time. Once was a a Kuritan Academy Training Force, culled from all parts of the Draconis Combine. It included all the different types of units found in a the present-day combined arms regiments. The other was a combined arms battalion from the Outworlds Alliance. On hearing that Enif had hired on a group of mercenaries known as the Guards of Uruk, the Alliance decided to stage a raid, both to test the Guards' strength and to warn them against raiding the OWA for water.

The scene of this particular battle is the area known as the Valley of the Winds. It is an area on one of the main continents which is roughly circular, surrounded by a high mountain range. It has a diameter of approximately 1,000 kilometers. The only ways to get in here with Mechs are to land them by DropShip or to come thorough the single mountain pass that lies on the southern mountain range. The place receives its name because of the completely unpredictable winds which crisscross the valley. These winds can be anything from a light breeze to gale forces capable of knocking down a 60-ton BattleMech. Within this valley, the Guards of Uruk have placed their main base, far from any inhabitants.

The actual battle site is one of the smaller bases set up by the mercenaries as a resupply dump for their flight elements. It is protected by a heavy Mech Lance, a Lance of Medium Armor, a platoon of air-mobile jump Infantry, and two Striga fighters.

Game Setup

This setup is a bit different from the normal. There are three sides played. The rules required are BattleTech, CityTech, and AeroTech. Two sets of boards will be required, the low altitude AeroTech board, and the standard BattleTech maps. Only one AeroTech board is necessary.

For the BattleTech portion of this scenario, place six boards so that they form a rectangle running from north to south. After all setup is done, roll for wind and direction as in the special rules section before you begin. Once the specified number of turns is finished, another wind level roll must be made. The wind level roll is made before any forces are moved or fired.

Defender Setup

Place the defenders anywhere within 3 hexes of the center hex, designating one side as north and the other as south. Place the base ammo dump somewhere in hex #1210 of the middle board. In hex # 1510 of the middle western board, place the fuel tank. Eight hard cover hexes may be placed randomly throughout the board. The defenders can be dug in anywhere around the base, including behind the hard cover areas.

Defending Forces:

Guards of Uruk

Heavy Lance

Captain Cyd Anderson, *Victor* Piloting: 2, Gunnery: 3
Ed Dixon, *Archer* Piloting: 3, Gunnery: 2
Ashley Holland, *Catapult* Piloting: 3, Gunnery: 3
Gabriel Finnegan, *Crusader* Piloting: 3, Gunnery: 4

Laser Jump Infantry Platoon

Medium Armor Lance:

Van Luckner	Driver:3, Gunner: 2
Van Luckner	Driver:3, Gunner: 2
Goblin	Driver: 4, Gunner: 2
Goblin	Driver:3, Gunner: 4

Air Lance

Lt Shawn Gobers, *Striga* Pilot: 4, Gunnery: 4
Lt Michelle Miller, *Striga* Pilot: 4, Gunnery: 4
for the Striga conventional fighter, see the Striga Technical Readout, this issue

Other Units

3 *Ferret VTOLs* Pilot: 4, Gunnery: 4

Fuel Bunker Stats:
Construction Factor: 25
Levels: 2 (1 above ground, one under)
Area Covered: 3 hexes
Internal Structure Tonnage: 15
Armor Tonnage: 8 tons (128 armor points)
    each wall has 16 points of armor

Outpost Bunker Stats:
Construction Factor: 50
Levels: 2
Area Covered: 3 hexes
Internal Structure Tonnage: 30
Armor: 8 tons (128 armor points)
    each wall has 16 points of armor
Weapons and Ammo:

Weapon	location	tons
SRM 4-pack	North	2
SRM 4-pack	South	2
SRM 4-pack	East	2
SRM 4-pack	West	2
Ammo SRM	Center	4

Draconis Combine Attacker

The Kuritan forces enter on the north edge of the board.

Mech Force
Chu-i Alphonse Mikhail,
        Dragon Piloting: 2, Gunnery: 2
Albert Basti, *Shadow Hawk* Piloting: 4, Gunnery: 5
Kimi Ohara, *Phoenix Hawk* Piloting: 4, Gunnery: 5
Fuhito McTeague, *Panther* Piloting: 5, Gunnery: 5
Nick van Rohrs, *Valkyrie* Piloting: 6, Gunnery: 6
Nelson Makharov, *Stinger* Piloting: 6, Gunnery: 5

Armor Lance

Pegasus	Driver: 4, Gunner: 5
Pegasus	Driver: 5, Gunner: 4
Hunter	Driver: 3, Gunner: 4
Hunter	Driver: 4, Gunner: 3

Laser Jump Infantry Platoon

Air Lance
    Mechbuster Pilot: 4, Gunnery: 4
    Mechbuster Pilot: 3, Gunnery: 4

Outworlds Alliance Attacker

The OWA forces enter anywhere on the southern edge of the board.

continues next page

Standard BattleTech maps which are to be placed and used for this scenario will fit within the six Aerotech hexes shown in the deep valley on the map below. As you can see, the valley walls are too steep to climb without lobster claws — and if your Mechs use lobster claws, they won't get there till the scenario is over!

AeroTech Map

On the map below, one hex = 1 standard BattleTech Map. This represents the narrowest and deepest portion of the Valley of the Winds. which opens out to either end of it.

Depth 2 Valley

Depth 3 Valley

Surface

Depth 8 Valley
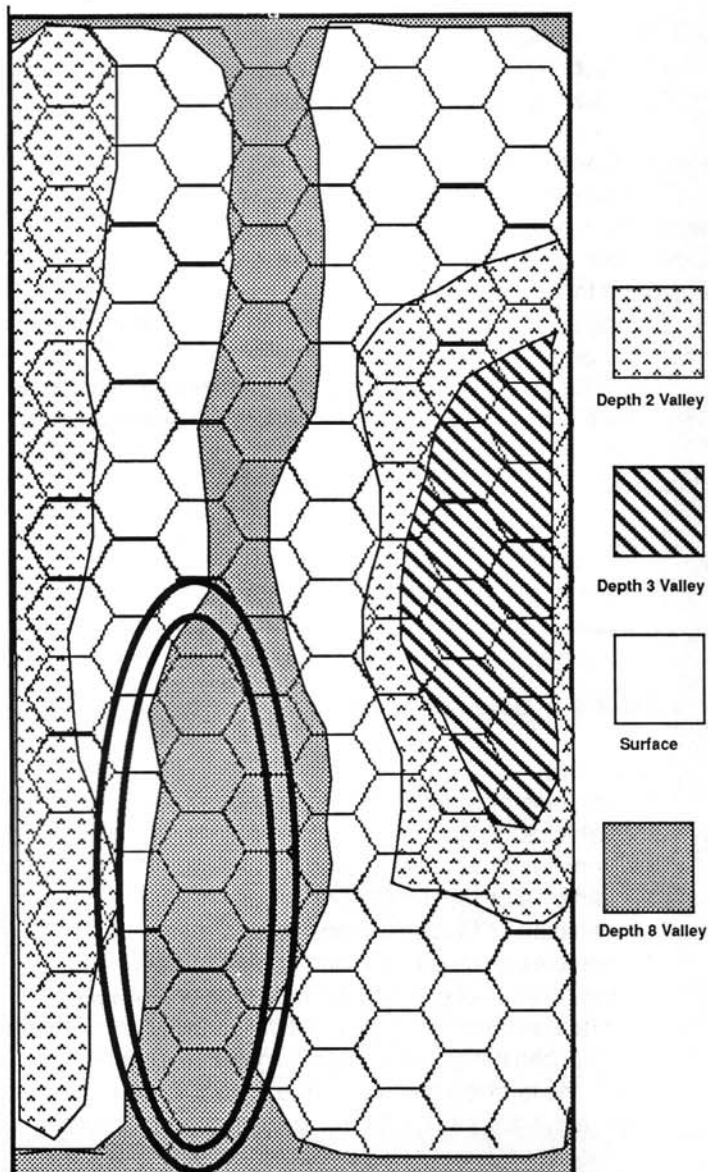
Mech Force — Outworlds Alliance

Alberto Boscali, *Phoenix Hawk* Piloting: 3, Gunnery: 4
Nilos Boblett, *Vulcan* Piloting: 4, Gunnery: 4
Lajos Nichols, *Panther* Piloting: 5, Gunnery: 4
Joel Connors, *Spider* Piloting: 4, Gunnery: 5
Siriwan Carlyle, *Jenner* Piloting: 5, Gunnery: 5
Mack Drummond, *Locust* Piloting: 5, Gunnery: 6

Armor Lance

Scorpion	Driver: 4, Gunner: 5
Scorpion	Driver: 5, Gunner: 4
Scimitar	Driver: 5, Gunner: 3
Scimitar	Driver: 3, Gunner: 5

Rifle Jump Infantry Platoon

Air Lance

Guardian fighter	Pilot: 5, Gunner: 5
Guardian fighter	Pilot: 4, Gunner: 5

Victory Conditions:

For the Kuritan or the Outworlds Alliance, the goal is the same. Capture this outpost without destroying the site. Each force wants to be able to resupply from the site, and to use it as a point to fall back on if the rest of the raid goes badly.

The defender's goal is to repulse and destroy both of the attacking forces.

If both buildings are blown up, the battle is considered a draw. If one side is in possession of one of the buildings, and it is intact at the end of the scenario, that side has a marginal victory. Any other result is a victory.

Special Rules:

Building Explosions: If any weapon fire penetrates either of the building, it is considered to trigger an explosion. Depending upon which building is hit, either the fuel or the ammo will explode. If the fuel dump explodes, everything within 15 hexes will take 85 points of damage, and all within that range will be on fire (see spreading fire rules). If the ammunition bunker is exploded, anything within 10 hexes will take 70 points of damage.

Charging: Any of the pilots of the various vehicles may decide to charge a BattleMech or a building. First, the pilot must make a piloting roll to see if he hits the Mech. If he is successful, he does damage according to the following formula: One point for every 10 tons the fighter weighs, multiplied by one times the number of hexes crossed. The fighter is destroyed when hitting the Mech or building

Wind Chart: The Valley of Winds can be devastating to the forces who fight in it. This chart shows at what point the players must roll to avoid falling or crashing because of the winds. Roll 2D6 for the wind level, then roll 1D6 for direction. Lastly, roll 1D6 for the length in BattleTech terms which the wind will last.

Table # 1 Wind Level

(roll 2 D6)
2-4 = Dead Calm
5-7 = Light Breeze
8-9 = Heavy Breeze
10 = Heavy Winds (Jump Packs won't function)
11 = Near-Gale Winds (Vehicles under 15 tons must make piloting roll or lose control)
12 = Gale-Force Winds (see table 2)

Table # 2 Gale Force Winds

(roll 1 D6)
1 = vehicles or Mechs 20 tons or less must make piloting roll or lose control
2 = vehicles or Mechs 30 tons or less must make piloting roll or lose control
3 = vehicles or Mechs 40 tons or less must make piloting roll or lose control
4 = vehicles or Mechs 50 tons or less must make piloting roll or lose control
5 = vehicles or Mechs 60 tons or less must make piloting roll or lose control
6 = vehicles or Mechs 70 tons or less must make piloting roll or lose control

and on a roll of 6, anything at 20 tons or less loses control and takes damage as it crashes into the nearest vertical surface (calculate damage as if the attacker had charged the surface, but roll a random damage location. Roll 1D6. On a roll of 1-2, the left side takes damage; on a roll of 3-4, the damage is rolled on front/back, on a roll or 5-6, the damage is done to the right side.)

"Happy Valley"
A Pair of Linked Scenarios

Dashing Through the Snow and *Dust to Dust, Ash to Ash* are a pair of linked scenarios which take place on a planet codenamed 'Nineveh', believed to be at the Tamar-Rasalhague border. For a fuller explanation of the events leading up to this scenario, see *Snow and Ashes*, page 10. These options constitute a rules variants. Like all of our rules variants, they are unofficial and optional; use judiciously so as not to unbalance an existing campaign. — BattleTechnology

Special Weather Conditions:

The temperature is well below freezing and the entire area shown on both maps is covered in 20 to 30 cm of dry, powdery snow. All Mechs may automatically dissipate two extra heat points per turn in addition to their heat sinks. Also, should any Mech "drop to ground" for any reason, and remain prone for the entire turn, that Mech may automatically dissipate six extra heat points. The snow has no other effect on movement, piloting, gunnery, or terrain.

Special Technology Options:

For reasons unknown, the Attacking forces have BattleMechs that are more technologically advanced than those normally seen within the Inner Sphere. The Attacker must secretly record one option for each attacking Mech Lance before play begins, and then implement that option among the appropriate Mechs. Though it may become obvious during the course of play which options were selected, the Attacker need only show the Defender the actual options chosen at the end of the *second* scenario **(Dust to Dust, Ash to Ash)**. Every Mech of the same Lance must use the same option, but the Attacker may choose different options for each of his Lances, if desired.

Option # 1: Double Heat Sinks. Every heat sink will dissipate two heat points per turn instead of one. (As in the Technical Readout 2750).

Option # 2: Improved tracking computer. All Gunnery skill rolls have a -2 bonus modifier. (Any Cockpit, Sensors, or Gyro critical hit will disable this computer and nullify the Gunnery benefits, in addition to any other critical effects.)

Option # 3: Heavy Missiles. Specially-designed large long-range missiles (LRMs only) that can cause two points of damage per hit, but which also weight twice as much, and thus reduce the salvoes-per-ton by 1/2. (LRM-5s have 12 shots/ton; LRM-10s have 6, LRM-15 have 4, and LRM-20s have 3, respectively.)

Game Set-up

This scenario uses Expert BattleTech and CityTech rules and two maps: the river-and-mountain (south) map, and the river-and-lake (north) map. Maps should be placed end to end, so that the xx17 hexrow of the upper (north) map is at the opposite end of the xx17 hexrow of the lower (south) map. (When correctly place, the large lake should appear in the upper map, connected by a river extending off the edge of the lower map, with the lower map's Level 5 peak on the river's west bank.) All terrain effects are as shown, except that all Water hexes are considered to be Elevation 0 Clear terrain.

The setting is the 'Happy Valley' region on a planet in the Periphery believed to be near Rasalhague space, known only by the codename of 'Nineveh'. The Attackers are a company of the ComGuard, a combat force of unknown size. The Defenders are the Second Phoenix Irregulars, a mixed mercenary force of BattleMechs and tanks. The Attacker's objective is to cross Happy Valley while destroying as many Defending units as possible in the process. The Defender's objective is to prevent the Attackers from meeting their objective. The Defenders set up first and move second.

Defender:

The Defender may set up his BattleMechs and tanks in passable terrain anywhere south of the xx05 hexrow (inclusive) of the map. (Of course, tanks may not be placed in, nor enter, Elevated or other impassible terrain. Lances may be freely deployed, but all units of a particular Lance must be initially grouped within six hexes of each other. They are not required to stay together or move together once the scenario begins.

2nd Phoenix Irregulars Lance #1 — Command (elements)
   1 *Phoenix Hawk* (Piloting: 5, Gunnery: 4)
Lance #2 — Fire
   4 *Dervishes* (Piloting:4, Gunnery: 4)
Lance # 3 — Recon
   1 *Locust* (Piloting: 3, Gunnery: 4)
   2 *Pegasus* Scout Tanks (Piloting:4, Gunnery: 4)
Lance #4 — Medium Tank (elements)
   1 *Vedette* Medium Tank (Piloting:6, Gunnery: 4)
   1 *Striker* Light Tank (Piloting: 5, Gunnery: 4)

Attacker:

As the Defender sets up, Attacker must secretly record his choice of **Special Technology Options**. After the Defender has placed his forces, the Attacker's BattleMechs must enter the upper Mapsheet along the north map edge, with all Mechs expending their maximum movement (beginning with the first map hex entered). All Attacking Mechs must enter on turn 1.

Com Guard Fire Lance
   1 *Victor* (Piloting: 2, Gunnery: 3)
   3 *Catapults* (Piloting: 3, Gunnery: 4)
Com Guard Assault Lance
   1 *Catapult* (Piloting: 4, Gunnery: 2)
   3 *Victors* (Piloting: 2, Gunnery: 2)

Victory Conditions:

The scenario ends with the completion of Turn 7. The Defender may retreat some or all of his vehicles off any map edge anytime during the scenario, but vehicles withdrawn in this manner may not return. The Attacker may

only exit his Mechs off the south map edge of the lower map, in compliance with his objective.

The Attacker receives 2 VP for each destroyed or incapacitated (rendered incapable of movement) Defending Mech, 1 VP for each destroyed or incapacitated Defending tank, and 2 VP for each Attacking Mech exited off the south map edge of the lower map.

The Defender receives 12 VP for each destroyed of incapacitated Attacking Mech, and 6 VP for each Attacking Mech (not incapacitated) which is still on the board at the end of Turn 7.

Special Rules:

At the beginning of every turn, starting with Turn 2, the Defending player must make a dice roll. On a roll of 1-2, there is a sharp, powerful ground tremblor (earthquake) that lasts for the entire duration of that ten-second turn. If no earthquake result occurs during Turns 2-6, there is an automatic earthquake result on Turn 7. (ONLY ONE EARTHQUAKE WILL OCCUR. CEASE ROLLING AFTER ONE RESULT HAS BEEN OBTAINED.)

During the earthquake turn, no affected vehicle may conduct normal movement or combat. Every (non-hovering, undestroyed) BattleMech must make a Piloting skill roll with a +3 penalty modifier. If the roll is unsuccessful, the Mech falls, with normal effect. Every undestroyed non-hover tank must also make a die roll:

on a 1, the crew is stunned for two turns

on a 2, the main weapon jams for one turn

on a 3, the engine is destroyed (no more movement)

on a 4, the crew is killed

on a 5, the turret is locked in position (if no turret, treat as 'crew stunned for two turns')

on a 6, a track is 'thrown' or a lift fan disabled (no more movement). Only hover tanks are unaffected and may conduct normal movement and/or combat during this turn. VEHICLES DESTROYED OR INCAPACITATED BY THE EARTHQUAKE DO NOT COUNT FOR VICTORY POINTS!

Attacker Strategic Victory: Twice the VP's of the Defender
Attacker Tactical Victory: More VP's than the Defender, but not twice the number of VP's
Defender Tactical Victory: Equal number or more VP's than the Attacker, but not twice the number of VP's
Defender Strategic Victory: Twice the VP's of the Attacker

After completing both scenarios, the results should be combined to determine the winner of the 'campaign'. For example, an Attacker strategic victory added to a Defender tactical victory result in an Attacker tactical victory; an Attacker tactical victory added to a Defender tactical victory result in a draw; and so on.

Dust to Dust, Ash to Ash

1400 Hours, 6 Feb 3045 Happy Valley, 'Nineveh'

Game Set-Up:

Essentially the same set-up as in *Dashing Through the Snow*. In this scenario, however, the Defenders' objective is to eliminate as many Attackers as possible before being eliminated. The Defenders set up first and move second.

Defender:

The Defender's forces consist of every BattleMech that was not destroyed or incapacitated in *Dashing Through the Snow* (if any); they appear here exactly (with the same damage effects and ammunition remaining) as they ended the previous scenario. In addition, the Defenders have the reinforcements listed below. The Defender may set up his BattleMechs and tanks in passable terrain anywhere on either map. As before, all units of each Lance must be grouped at start within six hexes of each other.

Lance # 1 — Command (elements)
  1 Orion (Piloting: 4, Gunnery: 2)
  1 UrbanMech (Piloting: 4, Gunnery: 3)
  1 Patton Heavy Tank (Piloting: 3, Gunnery: 4)
Lance # 4 — Medium Tank (elements)
  1 Vedette Medium Tank (Piloting: 4, Gunnery: 3)
  1 Striker Light Tank (Piloting:4, Gunnery: 4)
Lance #5 — Light Tank
  4 Scorpion Light Tanks (Piloting: 4, Gunnery: 3)

Attacker:

As the Defender sets up, the Attacker must secretly record his choice of Special Technology Option for the Command Lance. (The options for the Fire and Assault Lances must remain the same as those selected for *Dashing Through the Snow*.) The Attacker's forces consist of every BattleMech that was not destroyed or incapacitated in *Dashing Through the Snow* (if any); they appear here exactly (with the same damage effects and ammunition remaining) as they ended the previous scenario. In addition, the Attackers have the reinforcements listed below.

After the Defender has placed his forces, BattleMechs of the Attacker's Fire and Assault Lances must return by re-entering the lower Mapsheet along the south map edge (the same location where these Mechs exited in the previous scenario). Meanwhile, BattleMechs of the Attacker's Command Lance must enter the upper Mapsheet along the north map edge (the location where the Mechs entered in the previous scenario. All Attacking Mechs must enter on Turn 1 by expending their maximum movement (beginning with the first map hex entered).

Command Lance:
  1 Atlas (Piloting: 1, Gunnery: 1)
  3 Atlases (Piloting: 3, Gunnery: 4)

Victory Conditions:

The scenario ends when all Defending units have been destroyed or incapacitated. The Attacker may retreat some or all of his Mechs off any map edge anytime during the scenario, but Mechs so withdrawn may not return. The Defender may not retreat.

The Attacker receives 4 VP for each destroyed Defending Mech, 2 VP for each destroyed Defending tank or incapacitated Defending Mech, and 1 VP for each incapacitated Defending tank. The Defender receives 24VP for each destroyed Attacking 'Mech, 12 VP for each incapacitated Attacking Mech, and 6 VP for each Attacking Mech withdrawn before the scenario ends.

Strategic and tactical victories are won exactly as described in *Dashing Through the Snow*.

Technical Readout

OSP-15 Osprey

*Prepared by Professor Eion McLeary and Dr Kelly Ferguson,
NAIS Research Staff*

Overview:

In 2736 the Star League Quartermaster Corps called for a new BattleMech. They wanted a Mech of the medium class that concentrated more on fire power than on speed. Hollis Industries, creators of the Battlemaster and the Catapult, leapt to the challenge. They immediately began designing a Mech using all the latest Star League Technology. Unfortunately, Kallon Industries beat out all the competition by a full six months when it released the Lynx BattleMech. The LYN-5X Lynx used a Wolverine chassis with tried and true weapons systems to cut time and to beat their competitors.

Undaunted, Hollis continued research at a more leisurely pace. Two and a half years after Kallon released the Lynx, Hollis field-tested the OSP-15 Osprey in front of representatives of the League High Command. In a five minute battle the Osprey managed to outmaneuver and disable a Warhammer. The Quartermaster Corps immediately ordered 36 for 'testing purposes'. In all, 3000 were produced. Most are said to have left the Inner Sphere during Kerensky's Exodus. One Osprey, discovered in 3028, is the only known operating unit. Rumors have spread of similar discoveries since then, but they have not been confirmed.

Capabilities:

Once Hollis had been beaten out by Kallon Industries, the design staff was no longer pressured for time, and therefore they could take their time. Using the latest technology, Hollis designed the Osprey to hold its own against any previously built Mech. Its weapon array is comparable to that of even some of the heaviest Mechs. Mounted over the chassis is the M-11 Gauss Rifle. Using a smaller bore with a faster rate of fire, this gun is comparable to the M-7 Gauss Rifle that made the Highlander so deadly. A Holly LRM-10 rack and three Martell Medium Lasers round out the Osprey's impressive array of firepower. With two tons of ammunition for each projectile systems, the Osprey can stay in a fight for longer than most medium Mechs. In addition , the OSP-15 carries ten double heat sinks to ensure that it will rarely overheat. Mounting 11.5 tons of Duralex Ferro Fibrous Medium armor on an Endo Steel II skeleton, this Mech has staying power equal to that of a heavy BattleMech. With four Anderson 25 Jump Jets, the Osprey has the added manueverability to stay in the fight with faster and lighter Mechs.

Designed as an all-purpose support Mech, the OSP-15 filled its mission perfectly. Used time and again in the Periphery Wars, the Osprey was a feared Mech.

Notable Mechs and Mechwarriors:

Captain Kyoto Noguchi

Commander of the fourth Company Wyld Stallions LAG, he pilots the Osprey that his unit discovered in 3028. His first combat mission occurred during a recon raid on the city of Montoya on the Kurita planet of Kessel. Piloting the 'Bird of Prey', Noguchi was surprised by a Stalker. In a three minute battle, Captain Noguchi used his years of combat experience with Catapults to jump and outmaneuver his opponent. Then, in a stunt of sheer lunacy, he set his Osprey toe to toe with the Stalker and swapped salvo after salvo. Forty seconds later the Stalker lay in ruins and the 'Bird of Prey' retired for moderate repairs.

OSP-15 Osprey

Mass:	55 Tons
Chassis:	Hollis Mark V
Power Plant:	DAV 220 XL
Cruising Speed:	43.5 kph
Maximum Speed:	65.0 kph
Jump Jets:	Anderson Propulsion 25

Jump Capacity: 120 meters
Armor: Duralex Ferro Fibrous Medium with CASE Ammo

Armament:	1 M-11 Gauss Rifle
	1 Holly Long Range Missile Pack (10)
	3 Martell Medium Lasers

Main Manufacturer: Hollis Incorporated
Communication System:
Coventry Communications TransCom Alpha
Targeting/Tracking System: Starlight LX-2
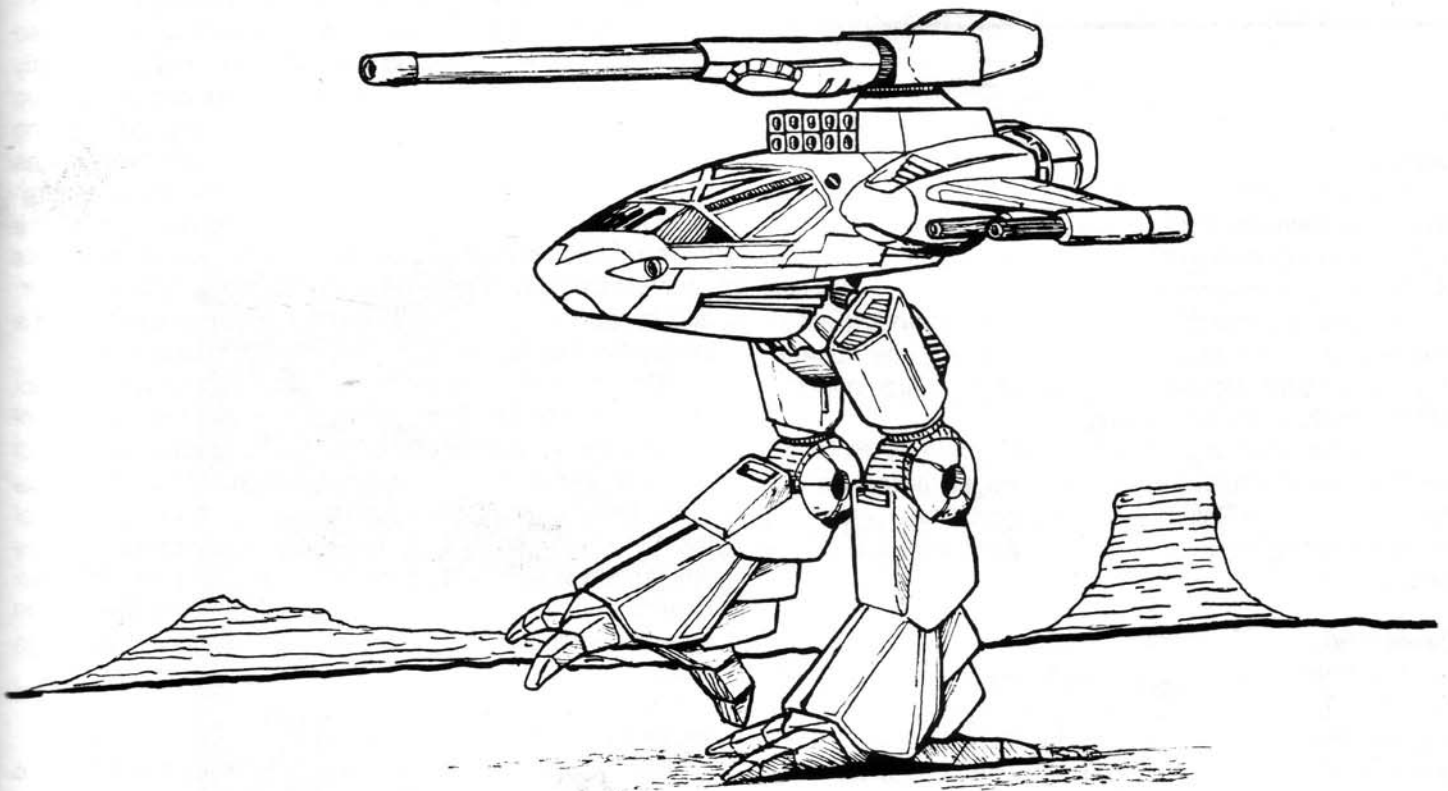
Type: OSP-15 Osprey

		Tons
Tonnage:	55 tons	55
Internal Structure:	EndoSteel II	2.75
Engine:	DAV 220 XL	5
Walking MPs:	4	
Running MPs:	6	
Jumping MPs:	4	
Heat Sinks :	20 (10 double)	0
Gyro:		3
Cockpit:		3
Armor Factor:	207	11.5

Location:	Int Structure:	Armor Value
Head	3	9
Center Torso:	18	40/10
Rt/Lt Torso:	13	30
Rt/Lt Torso (rear):		7
Rt/Lt Arm:	9	15
Rt/Lt Leg:	13	22

Weapons and Ammo:

Type	Location	Critical	Tons
Gauss Rifle	RT	7	15
GR Ammo (20)	LT	2	2
LRM 10	CT	2	5
LRM Ammo (24)	LT	2	2
CASE	LT	1	0.5
Medium Laser	LA	1	1
Medium Laser	LA	1	1
Medium Laser	RA	1	1
Jump Jets	RL	2	1
Jump Jets	LL	2	1

Technical Readout

RHN-10 Rhino

Overview:

The Rhino is a little known four-legged BattleMech created by Dr Harrison of the Brigadier Corporation. The design is an attempt to overcome the disadvantage a four-legged Mech suffers in close combat due to its lack of arms. This was accomplished by strengthening the Mech's internal structure and adding a ram plate. This, coupled with the superior stability of the quadropod footing makes the charge attack of a Rhino particularly devastating.

Although the design improvements made the Rhino an effective close assault Mech, the Star League military was not impressed, so few Rhinos were ever produced. Only a rare few operational Rhinos are scattered about the Inner Sphere today.

Capabilities:

The Rhino's internal structure has been reinforced, at a cost of ten percent of the Mech's total weight. The ram plate was mounted on the front allows the Rhino to deliver terrific punishment from a charge (1.5 time normal charge damage), while it remains unharmed. The arrangement also has the secondary benefits of allowing the Rhino to walk through buildings unscathed and giving it limited protection from physical attacks.

The only real disadvantage caused by the ram plate is that it prevents the mounting of forward firing weapons in any of the torsos. This forces weapons to be placed in the head and legs where there is only limited space available, thus keeping the Rhino from carrying heavy weapons. Dr Harrison tried to compensate for this by equipping the Rhino with five medium lasers; the theory being that while one medium laser does not do much damage, five together can seriously damage even a heavy Mech. The Rhino also has a medium laser firing into the rear arc to discourage attacks from behind.

Battle History:

The Rhino was never produced in great enough numbers to make any significant contribution to any major battle. It has, however, done remarkably well in single combat.

One notable victory for a Rhino occurred during a Marik raid on Ford. While defending the planet's main spaceport, a Lyran mechwarrior was surprised when a Rhino came crashing through a building and then onto his Zeus, knocking it to the ground. While the Lyran pilot tried desparately to stand his Zeus back up, the Rhino kicked and stomped on the downed BattleMech. After regaining his feet, the Lyran, obviously unfamiliar with the Rhino, made the mistake of trying to slug it out with his opponent. The two normally devastating punches of the Zeus did less damage than he'd expected as they thudded into the Rhino's ram plate. The Marik pilot responded by firing all of his lasers. Realizing his mistake, the Lyran resorted to his weapons, but it was too late. The Rhino's second laser salvo crippled the already badly battered Zeus, and forced the Lyran pilot to eject. The Rhino had bested a twenty-ton-heavier Mech, suffering only minor damage.

Despite such successes, military experts are still not impressed with the Rhino. They claim that the majority of Rhino victories can be attributed to the ignorance of most mechwarriors as to the capabilities of the Mech, due to its rarity. As an example, the case of Leftenant Kim Laurens of the AFFS is often cited. Leftenant Laurens, familiar with the design, destroyed a Kurita Rhino by using her Phoenix Hawk's superior mobility to keep the Combine Mech from closing the range while she slowly shot it apart with her large laser.
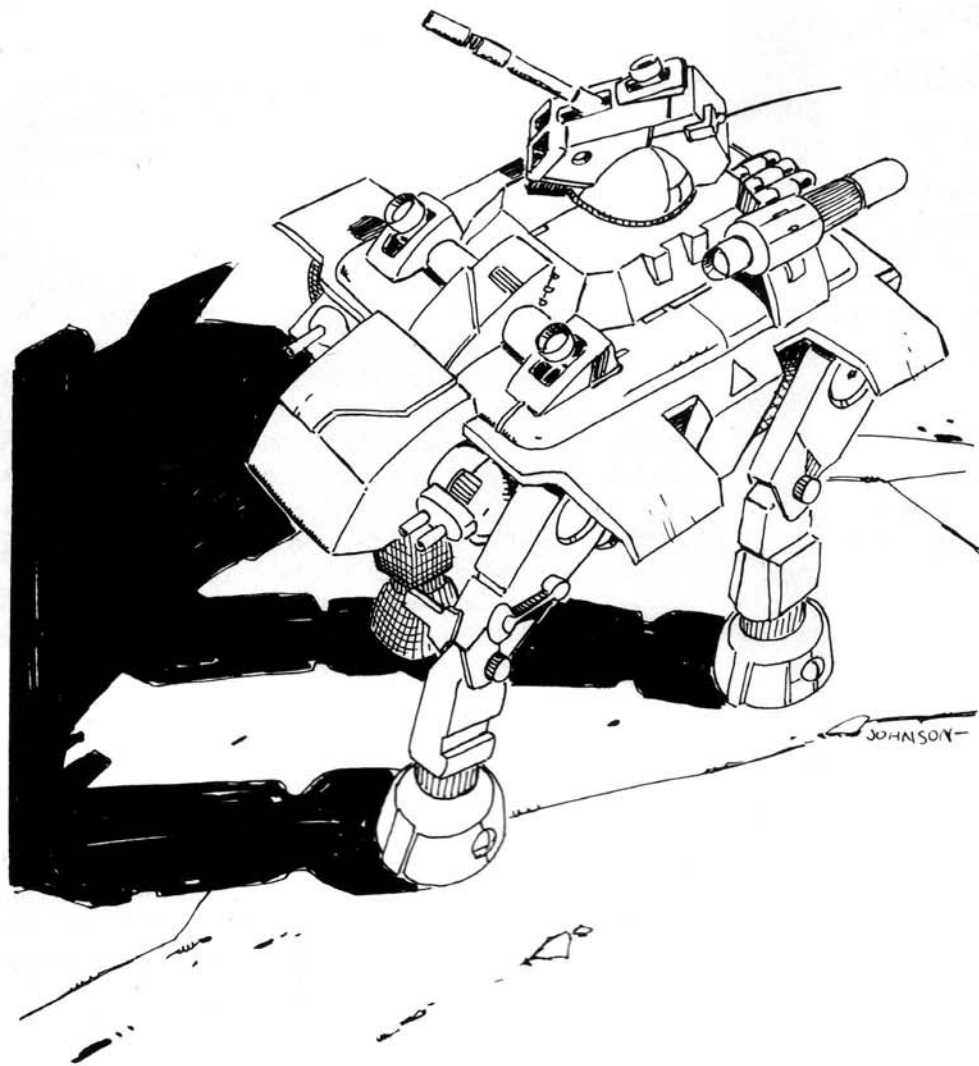
Variants:

Since so few Rhinos were ever built, it is often difficult to replace ram plates lost in combat. In such cases, some of the medium lasers are often removed and heavy weapons are mounted in the torsos. There is no standard variant and such modifications vary from Mech to Mech.

A Rhino without its ram plate does normal charge damage, but only *receives* half damage due to the reinforced internal structure. Damage from walking through buildings, punching, and clubbing is likewise reduced by fifty percent.

RHN-10 Rhino

Mass: 60 Tons
Chassis: Brigadier 900F
Power Plant: Pitban 240
Cruising Speed: 43.2 kph
Maximum Speed: 64.8 kph
Jump Jets: None
    Jump Capacity: None
Armor: Star Slab
Armament: 7 Martell Medium Lasers
Manufacturer: Brigadier Corporation
Communication System: Garret 600
Targeting/Tracking System: Garret GRNDTRK 15

JOHNSON

Location:	Int Structure:	Armor Value
Head	3	9
Center Torso:	20	27/10
Rt/Lt Torso:	14	25/8
Rt/Lt Arm:	10	18
Rt/Lt Leg:	15	18

Weapons and Ammo:

Type	Location	Critical	Tons
Ram Plate	CT	2	6
Medium Laser	RA	1	1
Medium Laser	RA	1	1
Medium Laser	LA	1	1
Medium Laser	LA	1	1
Medium Laser	H	1	1
Medium Laser	LT (rear)	1	1

Type:	RHN-10 Rhino	Tons
Tonnage:	60 tons	60
Internal Structure:		12
Engine: 240 Pitban		11.5
Walking MPs:	4	
Running MPs:	6	
Jumping MPs:	0	
Heat Sinks :	17	7
Gyro:		3
Cockpit:		3
Armor Factor:	184	11.5

Flush and Flood, Mud and Blood

"When we first got the order, I didn't think I'd heard the Captain right. 'Flush 'em out', he said. It didn't make sense to me. I mean, we were right on the tail of those lousy bandits heading for their grounded DropShip. It didn't seem to matter much if a few 'Mechs had slipped into a reservoir on the path of their withdrawal. But as our Lance approached the water, it began to make more sense. We couldn't leave any of the enemy 'Mechs a chance to escape on planet to disrupt Carver V any further. Add to that the possibility that the other bandit 'Mechs could reverse course at any time and attack the company. Caught between two lances we'd be easy pickings.

Boy, i f I had known what was going to happen you could have counted me out! As we entered the reservoir I just couldn't figure why the bandits had to pick this particular place. Deep water was no place to fight 'Mech combat. They should have picked a well-concealed ravine or a forest area. I guess they didn't plan on us spotting them entering the water. The Molito Reservoir has to be the oldest slimepit on the planet; the dike at the far end didn't look like it was supposed to hold back spit, let alone a klick-wide piece of water. But all we had to do was flush 'em out, right? Well, that's just what we did, but we flushed everything else out as well!" —

Subcommander August O' Higgins

Situation

The House Liao planet of Carver V has been raided by elements of a renegade bandit 'Mech unit known collectively as the 'MechPirates. With the arrival of Kleinholt's Battalion of the Liao Tenth Chesterton Reserves on training rotation, a supply raid by the bandit force was foiled and a substantial portion of the raiders were either destroyed or captured.

As the raiders fell back from ransacking 'Mech supplies in warehouses located in the hamlet of Denton, a skirmish developed between four 'Mechs of the 'MechPirate force and the Pursuit Lance of Miller's Company in the old Molito Reservoir. During the action, the underwater concussions caused by the opposing armaments weakened the containment wall of the dike located on the far side of the reservoir and it crumbled away. A torrent of water flooded into the streambed and the lowlands below the dike, taking some incautious 'Mechs with it. One bandit MechWarrior attempted to eject before he was caught, but his 'Mech's head was still five meters underwater and he apparently drowned in his ejection seat as it sank to the bottom. The flood so dazed another flushed-out raider that he surrendered his mud-covered machine to Liao forces on the spot.

The skirmish at Molito Reservoir has gone into the annals of 'Mech history as one of the most slippery and slimy ever. And it has added a new term to 'Mech folklore: the Mech Flush.

Game Set-up

Lay out two BattleTech game maps in the configuration shown and prepare the BattleMech record sheets for all of the 'Mechs represented in the scenario. The maps represent a major portion of the water area of the Molito Reservoir and its antiquated dike. This scenario uses the Expert BattleTech rules.

Defender

The defender is Recon Lance, "Backstabber", of the raiding bandit unit known only as the 'MechPirates. It has been specially trained in infiltration and ambush tactics. It is not aware that it was spotted entering the reservoir. (All bandit pilots are Piloting 5, Gunnery 4):

Centurion : pilot unknown, (rear medium laser out; AC/10 will only fire on a roll of 7+)
Whitworth : pilot unknown, (jump jets limited to half movement; head laser out)
Panther: pilot unknown, (PPC will fire only on a roll of 7+)
Stinger : pilot unknown, (no armor on right leg)

Defender is deployed anywhere on the northern part of the map in Level 3 water.

Attacker

The Attacker is the Pursuit Lance of Miller's Company, Kleinholt's Battalion, Tenth Chesterton Reserves, composed of the following:

Trebuchet: Commander Hans Gunther: Piloting 4, Gunnery 3
Javelin:: Subcommander Clarson Kelly: Piloting 4, Gunnery 4
Cicada : Subcommander August O. Higgins: Piloting 5, Gunnery 5
Wasp : Subcommander Philip T Franklyn: Piloting 4, Gunnery 5

Victory Conditions

The attacker must destroy all defending units or force them to leave the map. The defender must destroy the attacker underwater in order to launch the ambush on the Command Lance of Miller's Company as planned. In the event that the reservoir dike is destroyed, the side with the greater number of intact 'Mechs is considered to have won. (An "intact" 'Mech is one which is still able to move and to fight.) All other outcomes will be considered a draw.

Special Rules

Terrain: All terrain features except water are considered to be Level 3 water. The water hexes on the map show their actual level in the scenario so they are considered shallows in the middle of the reservoir. The entire eastern side of the map is the reservoir dike; it is unclimbable from the water.

Special Rules Continued:

Weapons: Combat can be conducted in all levels of water with the following restrictions: Ranges for all autocannons and lasers are halved underwater. Flamers and machine guns will not function. All other weapons operate normally.

The Dike: At the start of Turn Five a die is rolled. If a six comes up the dike has broken; the reservoir begins to drain at a catastrophic rate. All 'Mechs on the board must roll on Piloting Skill +3 to avoid falling. If the 'Mech falls it will be dragged at a rate of five hexes per turn toward the eastern side of the board by suction. Each turn a 'Mech is being dragged, the pilot may attempt to halt its progress by rolling Piloting Skill +5. If the 'Mech continues on past the dike it is considered to have taken a three level fall, taking double falling damage. All 'Mechs who are swept past the dike are considered out of action. Any 'Mech that did not fall on the initial turn of dike collapse must immediately use all movement to head for the south side of the map-board away from the dike. Any opposing 'Mechs left in the reservoir after the water has been drained may continue to battle it out using all normal rules. Movement is halved due to the 'Mech-ankle-deep mud. The die is rolled for dike collapse every turn after Turn Five until a six is rolled or the victory conditions are achieved.

The Power of Prophecy?

Hindsight is better than foresight — so much so that it's a cliche. Now that we've had seven years of perspective on the '39 War between Hanse Davion and Theodore Kurita, BattleTechnology is printing some warrior's predictions from our contest back in 3035, just after the Ronin Wars. We asked what would happen to the Inner Sphere if Davion and Kurita fought another war. Here are some of those predictions, with an editorial note as to the actual outcomes.

...First of all, Davion and Steiner would surely collaborate [on] a combined attack upon Kurita thus creating two fronts upon which Kurita must defend. The Kurita/Steiner conflict would be limited because of the Free Rasalhague Republic. Rasalhague at the present would have to remain neutral otherwise it would be squashed between the two giants. Let us not forget the other players: Marik and Liao. Liao would surely attack Davion because most of the Davion forces would be concentrated along the Kurita/Davion border thus leaving the Davion rear virtually open to Liao attack. The same holds true for Marik and Steiner. But let us not forget how cunning Prince Davion really is. Perhaps the Prince has made arrangements with other third parties. He may have made plans for the Duchy of Andurien to attack along with the Magistracy of Canopus and the Taurian Concordat against Liao and Marik thus keeping the two houses so busy they wouldn't be able to attack the Davion and Steiner rears. In conclusion I must say that if Davion has made the proper alliances he would surely win the war against Kurita. There is just no way that Kurita alone could stop both Davion and Steiner. But if he hasn't made those alliances he has probably made one of the greatest military blunders of all time.

<div align="right">

Lt Donald Russell
LAM Lance, Company #2
Goldsborough's Ghosts

</div>

What Prince Hanse did not anticipate was Theodore Kurita playing divide and conquer. Kurita's coup against the Steiner High Command, leaving the old fogies in charge during the Kurita counteroffensive turned the war in their favor. Romano Liao was consolidating her position and trying to wipe out St Ives. Quintus Allard's last real propaganda success was Romano's belief in the rumors which convinced her that the Federated Commonwealth had supported her sister's Duchy of St Ives with major weapons and personnel transfers. She seems to have believed that the reconstituted Wolf's Dragoons were to be set loose on the coreward borders. Jaime Wolf is reported to be amused by the propaganda power of his name. She has definitely declared war on the Kell Hounds; perhaps this dates to that time. The Taurian Concordat remains independent, indeed if they were to ally it would be with anyone against the Federated Suns. Thomas Marik isn't sure till whether to ally with Takashi or Theodore Kurita, and they weren't sure how much he was his own man, and how much he was ComStar's. Hmmm, Davion support for the recent Andurien independence movements? Now you mention it, we wouldn't bet against it.

Lt Col Edward W Markle
CO Co. C — 21Bn
472nd Merc RCT
Utah Base, Florida
Timbuctu Theatre

Sirs,

It would appear that you are asking the question on many lips. Not IF, but WHEN and WHO will be involved in the next war. Your time frame of five years would be accurate, though I would put it closer, say 3037 or 3038. As to who will be involved, it should be a forgone conclusion. The allies of the main combatants will be noticeable quiet. Aside from covert aid, all will stay outside of the fray.

Kurita and the Federated Commonwealth will be the forces at war. I say the FC because they are combining at a rapid rate, regardless of what is seen on the holovids. But I do feel it will be limited to the 'Davion' borders.

The outcome will be inconclusive, though I daresay it will cause much reflection and study. I get the gut feeling that all is not as it seems. Whether it is the influence that the technology the NAIS will resurrect, or another hidden type of technology, I can't say at this time.

Worlds will change hands. People will die. Friends will be lost. Of those things we can be certain.

Well...it wasn't quite limited to the Federated Suns borders, and Lt Col Markle didn't take the Lyran peace party quite seriously enough, but otherwise this writer called the shots rather well, especially in the last paragraphs.

So — have we 'learned our lesson'? Is the Inner Sphere to see no more war? Let's put it this way — I haven't quit my job to start a dove farm yet! — Editor

Voyage with us

Far into

...the realm of the barely possible
...the future of the human & other races
...new worlds of imagination

&

Away from

...Known Space
...Known limits
...Our own time & place...

FAR AWAY

THE MAGAZINE OF SPECULATIVE GAMING

No. 1 $5.00 US