

# INTRODUCTION

INCOMING  
MESSAGE

SEND

SAVE

CANCEL

DELETE

David,

I can now say with some certainty that we have been able to complete our preliminary survey of the industrial and technological capabilities of the local Clan militaries. I have also been able to confirm that the recent disruptions in the Clan Homeworlds—whatever their nature was—have indeed severed all communications and trade between the worlds of the Pentagon and Kerensky Cluster, and the eight Inner Sphere Clans (including the Exiled Wolves and Nova Cats in that count). We are still awaiting word from the most distant operatives that we dispatched to the Deep Periphery, but I am confident that their findings will further reinforce what we are seeing on this end of things: the Homeworlds have indeed ousted their invader brothers for reasons we can only guess at.

That said, it appears that the local Clans have turned toward upgrading and expanding their local infrastructure, now that they have been cut off from the more secure caches and production facilities of their original enclaves, and the pace is close to frantic. Whether fearing predations by one another, or retribution from the Homeworlds—or perhaps even from the nations of the Inner Sphere—our Clan “neighbors” are struggling to bring a number of heretofore experimental technologies and designs into production to strengthen their war-battered toumans. This has forced them to look to many facilities in their territories that were only partially brought up to Clan specs (if at all).

Attached are thirteen noteworthy experimental and prototype designs the various Clans have been working on most recently. Most are actually in battlefield-ready form—testament to a mentality that universally believes in doing nothing halfway—but have yet to enter mainstream production due to strained supply lines, process refinements, or various other disruptions. You should find many of these enlightening with respect to what weapons and concepts the Clans are most actively exploring. I know I certainly have!

A more extensive analysis should be on your desk by next week. Until then, David, take care!

Sincerely,

—General Albrecht Hoff, RAF/DMI, 16 November 3081

# INTRODUCTION

INCOMING  
MESSAGE

SEND

SAVE

CANCEL

DELETE

## HOW TO USE THIS BOOK

The 'Mechs, combat vehicles, ProtoMechs, fighters, and battle armor described in *Experimental Technical Readout: Clans* provide players with a sampling of the various custom designs that have arisen in the technical divisions of the military manufacturers among the Inner Sphere Clans. The designs featured in this book reflect limited-run prototypes and "one-offs" that have yet to reach full factory production—and perhaps never will.

The rules for using these units in *BattleTech* game play can be found in *Total Warfare*, while the rules for their construction can be found in *TechManual*. However, the experimental nature of these designs also draws upon the Experimental-level rules presented in *Tactical Operations*. Thus, none of the units featured in this volume are considered tournament legal, and their use in introductory games is discouraged. Furthermore, the extreme rarity of these machines is such that none of them should occur in a *BattleTech* campaign as a chance encounter, but the capture or destruction of any one of these prototypes could be potential objective for *BattleTech* scenarios, tracks and role-playing adventures.

## CREDITS

### Project Development

Herbert A. Beas II

### Development Assistance

Randall N. Bills

### BattleTech Line Developer

Herbert A. Beas II

### Assistant Line Developer

Ben H. Rome

### Primary Writing

Herbert A. Beas II

### Art Direction

Brent Evans

### Production Staff

Cover Design and Layout

Ray Arrastia

### Illustrations

Doug Chaffee

Chris Lewis

Matthew Plog

David White

### Record Sheets

Joel Bancroft-Connors

"BV Smasha!" Sebastian Brocks

Christopher "Chunga" Smith

"Techno Wizard" Jason Tighe

### BattleTech Logo Design

Shane Hartley, Steve Walker

and Matt Heerd

### Factchecking/Playtesting:

Joel Bancroft-Connors, Rich Cenarik, Joshua "NCKestrel" Franklin, William "Mad Capellan" Gauthier, Keith "Xoti" Hann, Johannes "jymset" Heidler, Glenn "Lobsterback" Hopkins, Daniel "DarkISI" Isberner, Chris "Alexander Knight" Marti, Mike Miller, Darrell "FlailingDeath" Myers, Luke "Jellico" Robertson, Andreas "Gaiiten" Rudolf, Chris Searls, Chris "Chunga" Smith, Peter Smith, Elliotte Want III, Chris Wheeler, Patrick Wynne.

**Special Thanks:** Herbert Beas would like to thank his family, friends, and colleagues—whose collective support keeps him trudging the fifty feet or so that separates his office from his bed every day. (And, of course, loving acknowledgements to Oscar, Annie, Blaze, Meggie, and Kurita—the feline overlords who make sure he never forgets his place in the cosmos.)



Under License From



©2011 The Topps Company, Inc. All Rights Reserved. *Experimental Technical Readout: The Clans*, *Classic BattleTech*, *BattleTech*, *BattleMech*, 'Mech and the Topps logo are registered trademarks and/or trademarks of The Topps Company, Inc., in the United States and/or other countries. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Productions, LLC.

CAT35XT009

STAR LEAGUE ERA



CLAN INVASION ERA



JIHAD ERA



SUCCESSION WARS ERA



CIVIL WAR ERA



DARK AGE ERA



# KRAKEN-XR

**Field Testing Summation:** Kraken Experimental Refit

**Producer/Site:** Olivetti Weaponry, Sudeten

**Supervising Technician:** Technician Immanuel

**Project Start Date:** 3073

**Non-Production Equipment Analysis:**

- Endo Composite Structure
- Laser Reflective Armor
- Laser Heat Sinks
- CASE II
- Rotary AC/2s
- Streak LRM 10s

**Overview**

Emerging from an adjunct wing of the Jade Falcons' Olivetti factories on Sudeten, the *Kraken-XR*, like the *Cougar-XR*, is an experimental refit based on a Clan standby. As with the other prototypes described in this volume, it remains to be seen if the Clans will begin fielding such advanced technologies in the near future, but if so, we might expect to see more like the *Cougar* and less like this hundred-ton monstrosity, which has apparently been built almost entirely from experimental components.

While based on the design specs of the *Kraken* (Clan name, *Bane*) BattleMech, the *Kraken-XR* uses an endo-composite internal structure that reduces its skeletal weight for half as much bulk as endo steel. This compromise structure protects a 300-rated extralight engine that gets the 'Mech up to a maximum land speed of fifty-four kph, but uses the Falcons' fancy laser heat sinks instead of the traditional freezers. Since these sinks were first observed in use on the *Night Gyr* OmniMech, we have not seen them used all that extensively, likely due to supply troubles or perhaps the Falcons considered them a technological dead end. After all, while they do seem to offset the catastrophic effects of overheating somewhat, they tend to make any 'Mech using this technology a glowing target on the battlefield. The use of these special sinks on this refit thus suggests that the Falcons may have found some odd use for them that we have overlooked.

If the laser sinks are intended to offset potential ammunition explosions, the *Kraken-XR* looks like a design that likes to take few chances there. Though the 'Mech does sport a typically high number of ammunition-fed weapons (including experimental Clan-tech rotary autocannons and Streak LRM launchers), our analysis shows that this machine could not even spike its heat if it fired a full volley from all of its weapons combined while moving at a run. Between the lock-to-fire efficiency of the Streak launchers, and the low heat curve of the RACs, even adding in the extended-range large laser housed in the *Kraken-XR's* right torso would accomplish little more than to raise the 'Mech's cockpit temperature a couple of degrees for ten seconds, thanks to its sixteen laser sinks.

Indeed, even if the *Kraken-XR* were to suffer a breach to its maximized shell of reflective armor, every ammunition bin it carries is protected by the improved CASE II system. As a result, this 'Mech becomes a virtual battlefield zombie, unlikely to fall to a flash ammunition explosion or overheating, and more likely to perish from massed fire as it holds its ground to rain destruction on enemies from over 600 meters away.

The sheer volume of experimental tech placed in this chassis suggests a high resource cost for its design and to date, we believe the Falcons have constructed no more than three *Kraken-XRs*. It is therefore rather unlikely that we will be seeing this machine in full production any time soon. Ultimately, the *Kraken-XRs* may be little more than what they appear to be: field test chasses, built only to determine the viability of as many new items as the Clan can squeeze on them.

Type: **Kraken-XR**

Technology Base: Clan (Experimental)

Tonnage: 100

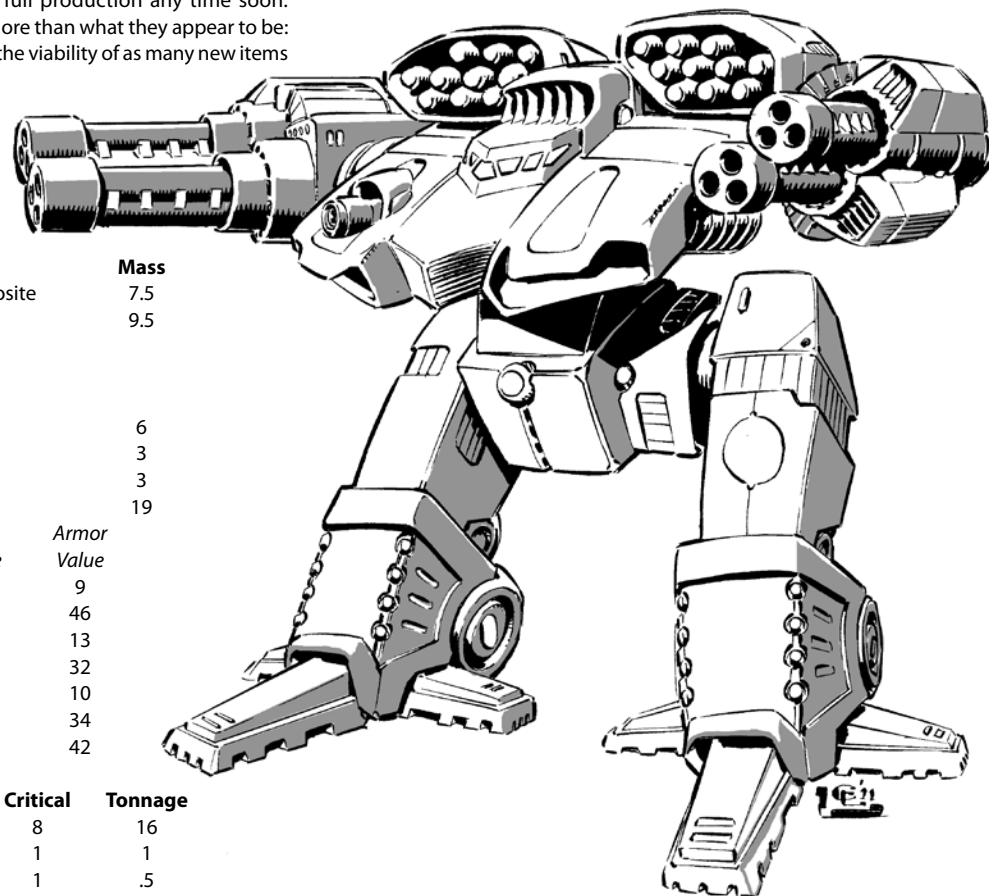
Battle Value: 3,055

**Equipment**

Internal Structure:	Endo Composite	7.5
Engine:	300 XL	9.5
Walking MP:	3	
Running MP:	5	
Jumping MP:	0	
Heat Sinks (Laser):	16 [32]	6
Gyro:		3
Cockpit:		3
Armor Factor (Reflective):	304	19
	<i>Internal Structure</i>	<i>Armor Value</i>
Head	3	9
Center Torso	31	46
Center Torso (rear)		13
R/L Torso	21	32
R/L Torso (rear)		10
R/L Arm	17	34
R/L Leg	21	42

**Weapons and Ammo**

	Location	Critical	Tonnage
2 Rotary AC/2	RA	8	16
Ammo (RAC) 45	RA	1	1
CASE II	RA	1	.5
Streak LRM 10	RT	2	5
Ammo (Streak) 12	RT	1	1
ER Large Laser	RT	1	4
CASE II	RT	1	.5
Streak LRM 10	LT	2	5
Ammo (Streak) 12	LT	1	1
CASE II	LT	1	.5
2 Rotary AC/2	LA	8	16
Ammo (RAC) 45	LA	1	1
CASE II	LA	1	.5



**Note:** Features the following Design Quirks: Difficult to Maintain, Poor Performance, Prototype, Extended Torso Twist, Protected Actuators

# MINOTAUR-XP

**Field Testing Summation:** Minotaur Experimental Prototype

**Producer/Site:** Niles Industriplex Alpha

**Supervising Technician:** Master Tech Earid

**Project Start Date:** 3078

**Non-Production Equipment Analysis:**

Improved Heavy Small Lasers

## Overview

With only a handful of Clans still known to field ProtoMechs, there have been few reports of experimental technologies being employed on such units. The Hell's Horses—as one of the few Clans we know of who have embraced the ProtoMech concept—have thus become a front-runner in exploring these miniature 'Mechs, but this only truly became evident during their recent move into the Inner Sphere.

The *Minotaur-XP*, our operatives have learned, originated from one of the last Hell's Horses crash programs launched at the Niles Industriplex site in the Clan Homeworlds. In this refit, a basic weapon swap, the removal of jump jets, and the addition of a main gun mount were performed on a Star's worth of *Minotaur* ProtoMechs the Clan had yet to deploy. Seeking to improve the overall lethality of these designs, these prototypes swapped out the standard *Minotaur's* shoulder-mounted extended-range medium lasers for improved heavy small lasers. Although the resulting firepower was slightly weaker than that of the medium lasers, and suffered from a vastly reduced range, they saved a great deal of tonnage in terms of heat sinks and overall weapon weight.

With the tonnage saved by this weapon trade and the removal of the *Minotaur's* jump jets, the Horses were able to add a twelve-shot, five-tube SRM launcher in an attached main gun pod, and maximized the armor protecting the nine-ton machine. As a result, the *Minotaur-XP's* became tougher, and could deliver more effective damage than the base models—albeit with less mobility and a much reduced strike range.

The *Minotaur-XP's* changes naturally mandate a very different strategy and target selection from those of the standard *Minotaurs*. Rather than trying to snipe at armored targets such as BattleMechs and vehicles, using jump jets to leap in and out of cover while firing away at range, these prototypes are best deployed against vehicles and armored infantry, and often strike best when deployed in advance, as part of an ambush. Indeed, reports reached us that two Points of *Minotaur-XP's* were used as part of a defense against a recent Jade Falcon raid into the Horses' new Occupation Zone. In the ensuing battle, the *Minotaur-XP's*, using the ruins of an abandoned city for cover, ambushed a mixed Star consisting of two Elemental Points and three Jade Falcon heavy 'Mechs. The firefight cost the Horses an entire Point of XPs before they could dispatch reinforcements—but not before they destroyed all of the Falcon Elementals and crippled a *Cougar* OmniMech.

Only about ten *Minotaur-XP's* remain in operation at this time, and the Horses have apparently recalled them to their regional capital on Csesztreg. As much of the Horses' Inner Sphere manufacturing seems centered on that world, we can readily presume that additional ProtoMechs may soon enter production as the Clan stabilizes its supply lines. If this happens, the battle proven *Minotaur-XP's* may yet become a new mainstream variant in the Clan's touman.

Type: **Minotaur-XP**

Technology Base: Clan (Experimental)

Tonnage: 9

Battle Value: 294

## Equipment

Internal Structure:

Engine: 45

Walking MP: 3

Running MP: 5

Jumping MP: 0

Heat Sinks: 6

Cockpit: 45

Armor Factor: 45

Internal Structure	Armor Value
Head	2
Torso	9
R/L Arm	2/2
Legs	5
Main Gun	1

Head 2

Torso 9

R/L Arm 2/2

Legs 5

Main Gun 1

## Weapons and Ammo

Improved Heavy Small Laser T

Improved Heavy Small Laser T

SRM 5 M

Ammo (SRM) 12 M

## Mass

900 kg

1,000 kg

0

1,500 kg

500 kg

2,250 kg

Armor Value

6

18

4/4

10

3

## Mass

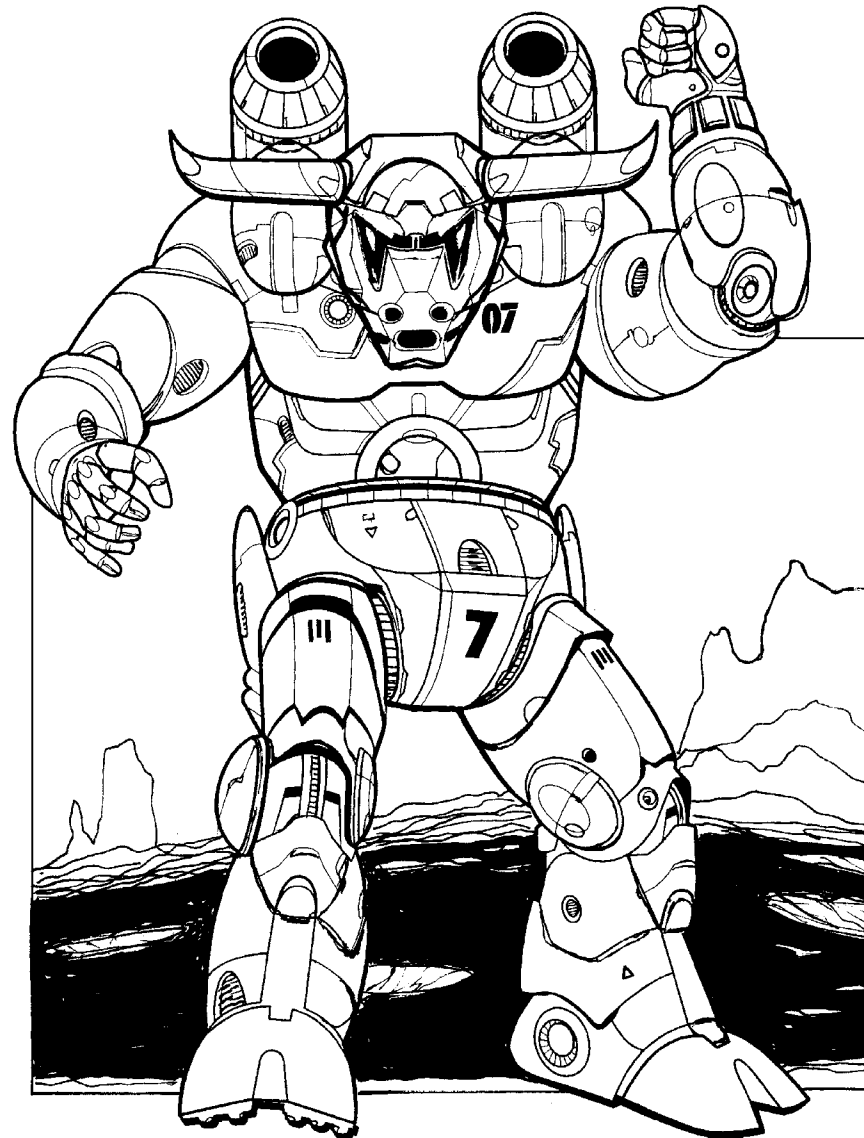
500 kg

500 kg

1,250 kg

600 kg

**Notes:** Features the following Design Quirks: Prototype, Distracting



EXPERIMENTAL

# AMMON-XR

**Field Testing Summation:** Ammon Experimental Refit  
**Producer/Site:** Clan Diamond Shark (Facility Unknown)  
**Supervising Technician:** Unknown  
**Project Start Date:** 3076

**Non-Production Equipment Analysis:**

- Improved Heavy Large Lasers
- Streak LRM 15s
- Laser Anti-Missile System

**Overview**

The origins and development history of the *Ammon-XR* aerospace fighter is largely unknown to us, but to date only a half dozen of these craft have been seen, all of them attached to the Diamond Sharks' naval fleet. Though it is possible these fighters are a refit performed in the field, a careful analysis of their capabilities—cross-referenced with known specs on the Clans' latest weapon designs—has convinced our people that the refit is rather extensive in nature.

Based on the second-line *Ammon* aerospace fighter that first entered service in 3065, the *Ammon-XR* clearly takes great pains to hide its upgrades. It shares the same performance profile and silhouette, topping out at the same four-point-five Gs of maximum acceleration, with an identical armor layout. Its flight endurance and heat control systems likewise appear to be unchanged, indicating the same fuel reserves and number of heat sinks.

In combat, the changes become instantly more apparent. Though the weapon layout is visually similar, only the closest inspections can discern that the *Ammon-XR's* missile launcher are slightly larger and have more launch tubes than the standard *Ammon*, or that there is one fewer weapon muzzle in the fighter's nosecone. Of course, for the enemy unfortunate enough to get close enough to realize this, it may be too late. Mounted in the *Ammon-XR's* nose are two improved heavy large lasers. Though they lack the range advantage of the original *Ammon's* trio of extended-range large lasers, the combined hitting power of these two weapons actually exceeds their predecessors' potential damage for less waste heat. The wing-mounted launchers are the second big surprise, upgrading from six-tube Streak SRMs to far-reaching Streak LRM 15s. Combined, these missiles and lasers can ravage enemy fighters, and just two Points of *Ammon-XRs* could easily pose a serious threat to many combat DropShips.

Even the tail-mounted laser of the original *Ammon* has been swapped out, replaced by a laser anti-missile system to defend against incoming fire. This change is slightly more dubious than the others only because it leaves the *Ammon-XR* without a weapon to truly deter pursuing fighters, and forces the pilot to present his weaker tail section to incoming missile fire for any sort of protection.

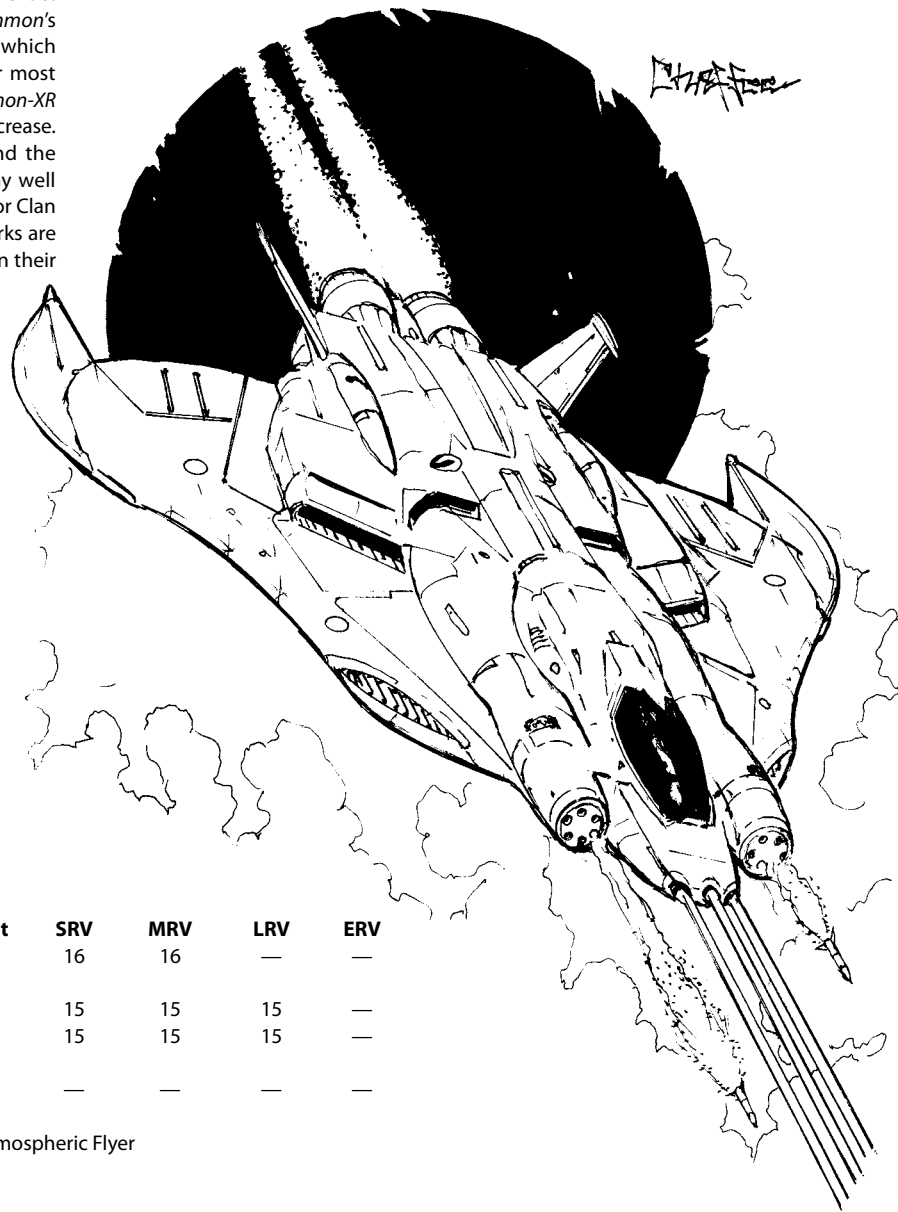
The weight of these advanced weapons gave away the fact that the Diamond Sharks had to trade in the original *Ammon's* standard engine for an extra-light version. This change, which can lead to a virtual ground-up reconstruction effort for most aerospace craft, may have made it possible to make the *Ammon-XR* a more effective fighter craft, but only at significant cost increase. Should this refit prove impressive enough to others, and the technologies used reach mainstream production, we may well see the *Ammon-XR* enter service as a new defense fighter for Clan DropShips and the like. Until then, it appears that the Sharks are content to retain their only samples as an elite squadron in their naval command Star.

Type: **Ammon-XR**  
 Technology Base: Clan (Experimental)  
 Tonnage: 65  
 Battle Value: 2,549

Equipment		Mass
Engine:	260 XL	7
Safe Thrust:	6	
Maximum Thrust:	9	
Structural Integrity:	6	
Heat Sinks:	20 [40]	10
Fuel: 400	5	
Cockpit:		3
Armor Factor:	224	14
	<i>Armor Value</i>	
	Nose	70
	Wings	60/60
	Aft	34

Weapons and Ammo	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
2 Improved Heavy Large Lasers	Nose	8	18	16	16	—	—
Streak LRM 15	RW	7	5	15	15	15	—
Streak LRM 15	LW	7	5	15	15	15	—
Ammo (Streak) 24	—	3					
Laser Anti-Missile System	Aft	1	5	—	—	—	—

**Notes:** Features the following Design Quirks: Prototype, Atmospheric Flyer



EXPERIMENTAL

# SYLPH-XR

**Field Testing Summation:** Sylph Experimental Refit  
**Producer/Site:** CSR Battle Armor Facility Alpha, Ramora  
**Supervising Technician:** Marco Arujo  
**Project Start Date:** 3077  
**Non-Production Equipment Analysis:**  
 Battle Armor Myomer Booster

## Overview

Among the various new technologies that have emerged recently, the Clans' battle armor myomer boosters seem to have become an early favorite. Offering greater mobility and damage potential in anti-Mech attacks, these enhanced myomers can push battlesuit technology beyond its normal design limits, but produces an infrared signature that makes its users impossible to conceal. Among many Clans, stealth is not a priority, so it comes as little surprise to see these experimental boosters used in spite of their limits, but this feature makes the traditional tactic of battle armor ambushes completely unfeasible.

Clan Snow Raven's Sylph-XR suit is a prime example. Eschewing its trademark VTOL systems and bomb racks, it uses a battle armor myomer booster to achieve a ground speed of more than fifty kilometers per hour, making it one of the fastest battlesuits in existence today. Though this Sylph is no longer able to take to the skies, its ground speed enables it to keep up with or overtake most infantry. This is particularly important because the Sylph-XR is clearly designed with infantry and insurgency combat in mind.

Armed with a pair of light machine guns and equipped with a searchlight for night operations, several Points of refit Sylphs have been observed combing the woodlands and urban centers on Ramora, searching for survivors of the Dante's Inferno terrorists they know to be colluding with the Word of Blake. Often working in concert with other, stealthier suits and conventional troops, the Sylph-XR troopers have acted more like hunting dogs, flushing out hidden insurgents by charging into their suspected strongholds with flashing searchlights and a burst of machine gun fire. As the terrorists scatter, the Sylph troopers and their comrades can either gun them down or capture them at leisure, knowing that none can escape the superior mobility and firepower of the Clan battlesuits.

The development of the Sylph-XR seems primed for full-scale production, but reports from Ramora have not been entirely rosy for the Ravens' factory sites there, and there is talk of relocation. At the same time, there have been complaints about serious discomfort and even burn injuries sustained from the simple operation of the Sylph-XR suits, likely due to poor insulation against the thermal effects of the myomer boosters. A few Raven Elementals have even been lost (though their suits were recovered intact) because they opened their visors to breathe in cooler air while in the field. This inadvertently exposed themselves to eagle-eyed Ommiss snipers, who prioritized the fearsome Sylphs over all other targets.

Other Sylph-XR troopers have also cited the lack of heavier weapons as a problem when facing opponents who have access to armored vehicles and the like. Noting that their enhanced strength to execute anti-vehicular attack is lessened by the lack of decent anti-vehicular weapons, these warriors may have a point. Given the fact that we have not spotted any more new Sylph-XRs in the field since the initial batch was deployed, the Raven leadership may actually be considering these complaints.

**Type:** Sylph-XR  
**Manufacturer:** CSR Battle Armor Facility Alpha  
**Primary Factory:** Ramora

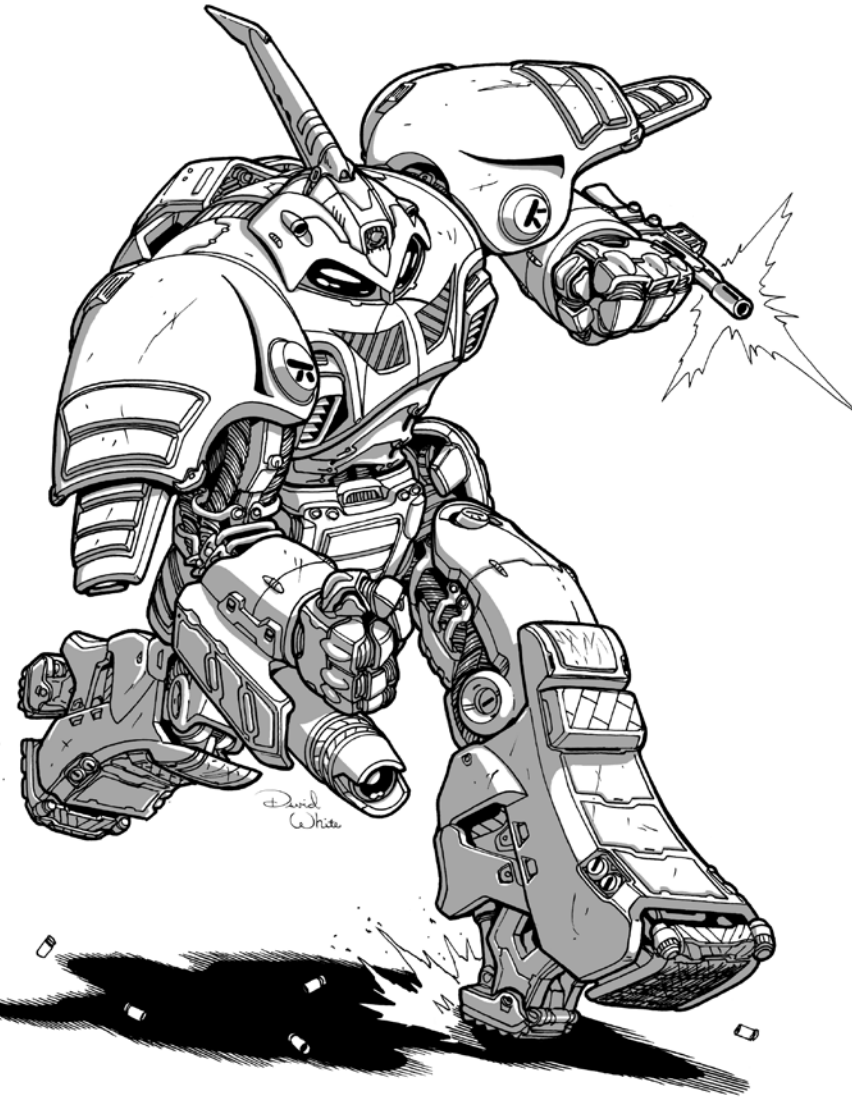
**Tech Base:** Clan (Experimental)  
**Chassis Type:** Humanoid  
**Weight Class:** Light  
**Maximum Weight:** 750 kg  
**Battle Value:** 42

**Swarm/Leg Attack/Mechanized/AP:** Yes/Yes/Yes/No

**Notes:** \*Ground MP includes effects of Battle Armor Myomer Booster. This Booster also increases damage inflicted by Swarm/Leg Attacks by 2 points per trooper, and makes it impossible to use Hidden Units rules; Features the following Design Quirks: Hard to Pilot, Prototype

Equipment	Slots	Mass
Chassis:		150 kg
Motive System:		
Ground MP:	5*	60 kg
Jump MP:	0	0 kg
Manipulators:		
Right Arm:	Basic Manipulator	0 kg
Left Arm:	Basic Manipulator	0 kg
Armor:	Standard	125 kg
Armor Value:	5 + 1 (Trooper)	

Weapons and Equipment	Location	Slots (Capacity)	Mass
Light Machine Gun (100 shots)	RA	1	80 kg
Light Machine Gun (100 shots)	LA	1	80 kg
Battle Armor Myomer Booster	Body	3	250 kg
Searchlight	Body	1	5 kg



EXPERIMENTAL

# BATTLETECH

## 'MECH RECORD SHEET

### 'MECH DATA

Type: Kraken XR

Movement Points:  
 Walking: 3  
 Running: 5  
 Jumping: 0

Tonnage: 100  
 Tech Base: Clan  
 (Experimental)  
 Era: Jihad

### Weapons & Equipment Inventory (hexes)

Qty	Type	Loc	Ht	Dmg	Min	Sht	Med	Lng
1	Streak LRM 10	RT 4	1/Msl	—	7	14	21	
			[M,C,S]					
1	ER Large Laser	LT 12	10[DE]	—	8	15	25	
1	Streak LRM 10	LT 4	1/Msl	—	7	14	21	
			[M,C,S]					
2	Rotary AC/2	RA 1	2/Sht	—	8	17	25	
			[DB,R,C]					
2	Rotary AC/2	LA 1	2/Sht	—	8	17	25	
			[DB,R,C]					

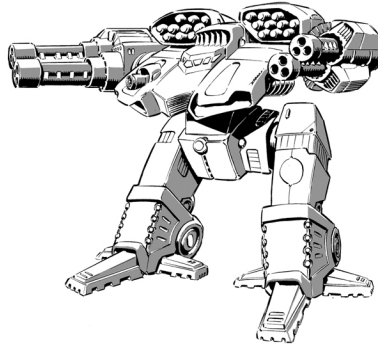
Cost: BV: 3,055

### WARRIOR DATA

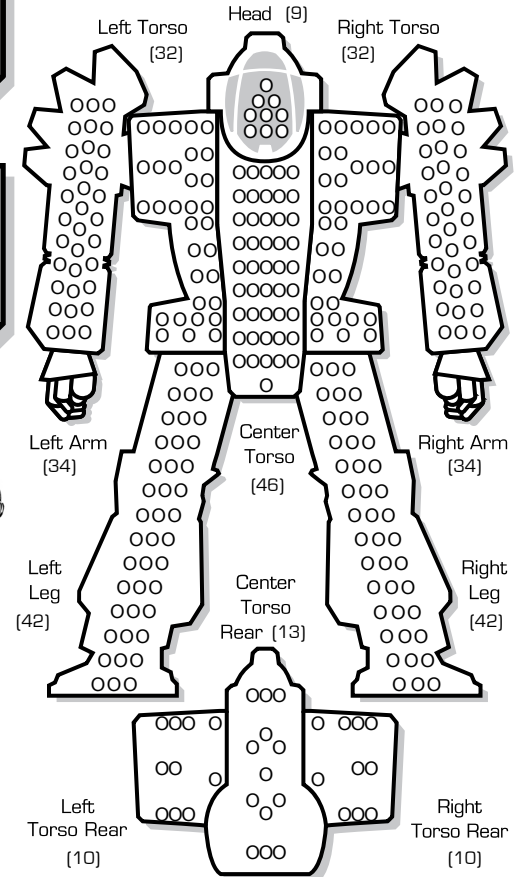
Name: \_\_\_\_\_

Gunnery Skill: \_\_\_\_\_ Piloting Skill: \_\_\_\_\_

Hits Taken	1	2	3	4	5	6
Consciousness#	3	5	7	10	11	Dead



### ARMOR DIAGRAM



### CRITICAL HIT TABLE

#### Left Arm (CASE II)

- Shoulder
- Upper Arm Actuator
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2

- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Ammo (RAC/2) 45
- CASE II

#### Left Torso (CASE II)

- XL Fusion Engine
- XL Fusion Engine
- Laser Heat Sink
- Laser Heat Sink
- Laser Heat Sink
- Laser Heat Sink
- Streak LRM 10
- Streak LRM 10
- ER Large Laser
- Ammo (Streak LRM 10) 12
- CASE II
- Endo-Composite

#### Left Leg

- Hip
- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator
- Reflective
- Reflective

#### Head

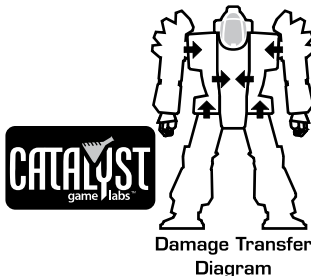
- Life Support
- Sensors
- Cockpit
- Endo-Composite
- Sensors
- Life Support

#### Center Torso

- XL Fusion Engine
- XL Fusion Engine
- XL Fusion Engine
- Gyro
- Gyro
- Gyro

- Gyro
- XL Fusion Engine
- XL Fusion Engine
- XL Fusion Engine
- Endo-Composite
- Reflective

Engine Hits ○○○  
 Gyro Hits ○○  
 Sensor Hits ○○  
 Life Support ○



#### Right Arm (CASE II)

- Shoulder
- Upper Arm Actuator
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2

- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Rotary AC/2
- Ammo (RAC/2) 45
- CASE II

#### Right Torso (CASE II)

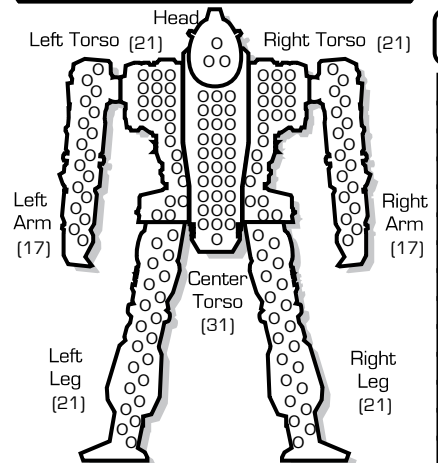
- XL Fusion Engine
- XL Fusion Engine
- Laser Heat Sink
- Laser Heat Sink
- Laser Heat Sink
- Laser Heat Sink
- Streak LRM 10
- Streak LRM 10
- Ammo (Streak LRM 10) 12
- CASE II
- Endo-Composite
- Roll Again

- Streak LRM 10
- Streak LRM 10
- Ammo (Streak LRM 10) 12
- CASE II
- Endo-Composite
- Roll Again

#### Right Leg

- Hip
- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator
- Reflective
- Reflective

### INTERNAL STRUCTURE DIAGRAM



### HEAT DATA

Heat Level*	Effects	Heat Sinks: Laser
30	Shutdown	16 (32)
28	Ammo Exp. avoid on 8+	○ ○
26	Shutdown, avoid on 10+	○ ○
25	-5 Movement Points	○ ○
24	+4 Modifier to Fire	○ ○
23	Ammo Exp. avoid on 6+	○ ○
22	Shutdown, avoid on 8+	○ ○
20	-4 Movement Points	○ ○
19	Ammo Exp. avoid on 4+	○ ○
18	Shutdown, avoid on 6+	○ ○
17	+3 Modifier to Fire	○ ○
15	-3 Movement Points	○ ○
14	Shutdown, avoid on 4+	○ ○
13	+2 Modifier to Fire	○ ○
10	-2 Movement Points	○ ○
8	+1 Modifier to Fire	○ ○
5	-1 Movement Points	○ ○

### Heat Scale

Overflow
30*
29
28*
27
26*
25*
24*
23*
22*
21
20*
19*
18*
17*
16
15*
14*
13*
12
11
10*
9
8*
7
6
5*
4
3
2
1
0