

# INTRODUCTION

INCOMING  
MESSAGE

SEND

SAVE

CANCEL

DELETE

Greetings, David!

Thanks again for allowing me to call you "David". Quite cordial of you, I will try not to slip back in to old habits. I have to say that working in such an informal environment takes some getting used to, but I can see the benefits. There seems to be a really genuine exchange of ideas, and everyone feels as if they're making a major contribution to the construction of a kind of nation humanity hasn't seen in centuries, if ever! I certainly hope to do my part to have a lasting impact on the process!

*[Seriously?! What an ass-kisser! David, I've taken the liberty of editing this fool's bombastic document. You'll still find the original attached separately, but honestly, don't bother. Oh and don't worry, I'm not leaving some security breach unattended. I've got admin rights on the message server, swapping attachments is a piece of cake. Anyway, if you're seriously listening to sycophants like this, we're in for a world of hurt! This guy wouldn't know which way a 'Mech walks even if it'd step on him. And don't brush me off neither. ... -AB]*

Ever since you approved the expenditure of funds needed for ComStar to submit details on many of its research projects, I have focused on nothing else.

*[Yeah. Don't tell me, again, that you're just humoring all factions, equal time, level playing field. Once you start spending coin on their pet projects, I'm calling foul. I'm not privy to all the details surrounding the transition of the ComGuards over to us. I pretty much take it as a given that the politics involved would make me puke all over the nearest suit. I don't particularly appreciate them not turning over the data for those projects, it's not like they'll ever deploy them now, huh? But you know what? Here's how a contractor says no: quote way too much. If the fools accept, hey, at least you're raking in the big money. I guarantee you that's what is going on here. Did you at least haggle before you gave this guy a blank check? Did we get some free HPG time out of this crap deal? Coasters? A t-shirt? -AB]*

It is regrettable that ComStar elected to place such a high price on their now defunct projects, but fortunately the cheaper, reduced specs were still enough to determine which projects warrant additional attention. Attached are the projects that I believe warrant additional investment with ComStar to retrieve all project data and material for eventual adoption or adaptation by the RAF.

*[Great, so we paid for superficial data, we didn't even get the whole package. We have to go back for that. Pay more. Seriously David, what the hell? You used to be shrewd and sharp. It's made even worse by the realization that just about all of these ComStar projects are not worth pursuing! Since there's apparently a serious threat of you spending more on this, you'll find my commentary in line with the document.]*

For this analysis, I have had the good fortune of availing myself of the technical expertise of Chief Tech Lawson *[Dreamer. -AB]* Doctor Esther Kalina Vondenbrock bis Lowingen *[Beware of people that need multiple names in general, and this weird dingbat in particular. Did you know she's one of those "alien visitor" conspiracy flakes? Oh, and Lyran too! -AB]* as well as the frequent input of Heinz-Harold Tonne. *[He's not on the payroll. How come he got to have clearance to see any of this murky junk? I hope he's on your shadow payroll. Actually, no; seeing the good sir Brandon Cooper convicted for treason would improve my day. I might even smile. No promises. -AB]*

In closing, I believe we have some excellent opportunities here, and I hope to being considered as the project manager of the effort to receive all ComStar research material, tooling and prototypes. Towards that end, I have attached my resume to facilitate the decision-making process.

*[I hate this guy. -AB]*

Respectfully,  
—Brandon Cooper, esq.  
RFK, RAK, PFS, ALA-1, ALA-2  
(3 May 3082)

*[His alphabet soup makes me throw up in my mouth a bit. Why would he list a cert in facility management? -Andrea Baker, Provisional Director, MilTech Analysis (or should that be "PD/MTA"?)]*

# INTRODUCTION

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## HOW TO USE THIS BOOK

The 'Mechs, combat vehicles, and fighters described in *Experimental Technical Readout: ComStar* provide players with a sampling of the various custom designs that have used by ComStar as test beds for a variety of projects and technologies. The designs featured in this book reflect limited-run prototypes and "one-offs" that have yet to reach full factory production—and most likely never will.

The rules for using 'Mechs, vehicles and fighters 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.

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**Special Thanks:** Paul Sjardijn would like to thank Herbert Beas for letting him live to write another day....



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CAT35XT011

STAR LEAGUE ERA



SUCCESSION WARS ERA

CLAN INVASION ERA



CIVIL WAR ERA

JIHAD ERA



DARK AGE ERA



# BEO-X-7A BEOWULF

**Field Testing Summation:** Prototype BEO Refit

**Producer/Site:** ComStar / Various

**Supervising Technician:** Adept Jacob Arevalo

**Project Start Date:** 3068

**Non-Production Equipment Analysis:**

- 1 Angel ECM Suite
- 1 Bloodhound Probe
- Armored Components
- Composite Structure

**Overview**

ComStar used its then-close relationship with Odin Manufacturing to have several *Beowulfs* manufactured specifically as a test bed for numerous emerging technologies. The new *Beowulf X* chassis was engineered to be substantially more flexible than the *Beowulf 3* with regards to accepting new equipment. A key component of this process was the use of composite materials in the structure. It freed up mass for greater payloads, and allows one to engineer multiple mounting hard points. As it is less bulky than a full endo-steel frame, the needs to re-arrange myomer, and reroute power and data lines to new equipment were also more easily accommodated.

The *Beowulf X-7a* maintains the MASC, and introduces improved jump jets. The arm-mounted large laser is reduced to a pair of Diverse Optics, bringing the total to four. Introduction of stealth armor supported by an Angel ECM dramatically improves the capabilities of the design to infiltrate hostile territory, and return with information from its Bloodhound probe. Perhaps most interesting of all is that its two most experimental pieces of technology are sheaved in their own supplemental armor shell. The head received major modifications in order to mount the ECM suite, which severely reduced the size of the cockpit. It also forced the relocation of the TAG to the right arm, but that is arguably a more versatile location. Of note is the installation of a full-head ejection system (FHES), which allows the MechWarriors and the expensive Angel ECM suite to be recovered.

I believe the opportunity that presents itself is that it pays to armor high-cost components on scouts, especially if said components may be retrieved via the FHES. Further, the overall *Beowulf X* platform would be an extremely valuable scout for the RAF.

*[And we kick off with an excellent example of why this guy is a fool. Clearly, ComStar did not intend for the Beowulf X-7a to be an actual combat-relevant design, or they would not have used an osteoporotic frame. I'll grant the stealth armor makes up for a lot, but that only leaves the problem of not being able to use half your firepower, as well as sucking at long-range. Even the Capellans would laugh at this thing, and they made the Sha Yu!]*

*My friend here also seems to have failed to notice that other Beowulf X design armor their components, especially when ComStar isn't tripping over replacements. I guarantee you they weren't planning on Odin making a thousand of these, and neither should we. -AB]*

Type: **Beowulf**

Technology Base: Inner Sphere (Experimental)

Tonnage: 45

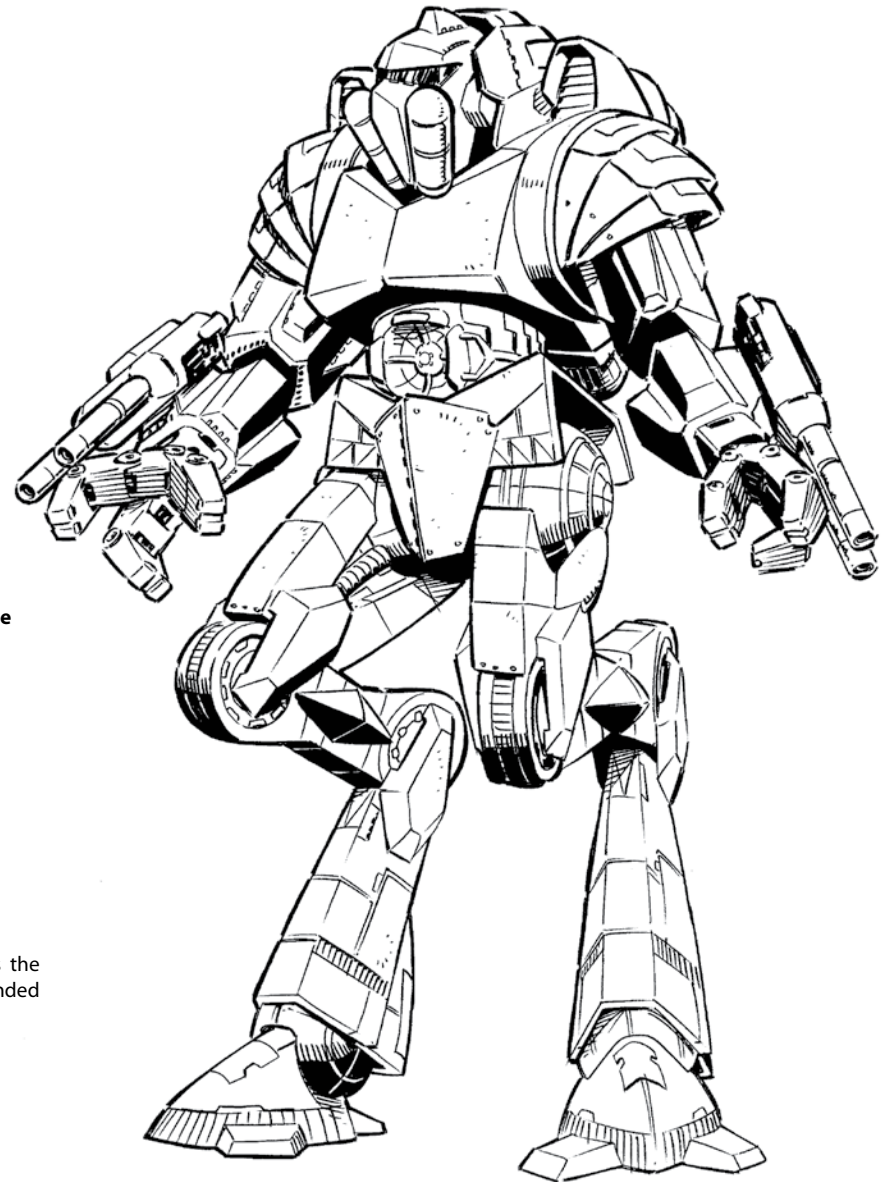
**Equipment**

Internal Structure:	Composite	Mass	2.5
Engine:	270 XL		7.5
Walking MP:	6		
Running MP:	9 (12)		
Jumping MP:	7		
Heat Sinks:	10 [20]		0
Gyro:			3
Cockpit (Small):			2
Armor Factor (Stealth):	152		9.5
	<i>Internal Structure</i>	<i>Armor Value</i>	
Head	3	9	
Center Torso	14	20	
Center Torso (rear)		7	
R/L Torso	11	16	
R/L Torso (rear)		6	
R/L Arm	7	14	
R/L Leg	11	22	

**Weapons and Ammo**

	Location	Critical	Tonnage
2 ER Medium Lasers	RA	2	2
TAG	RA	1	1
MASC	RA	2	2
Angel ECM Suite	H	2	2
2 ER Medium Lasers	LA	2	2
Bloodhound Active Probe	LA	3	2
Improved Jump Jets	RT	6	3
Improved Jump Jet	CT	2	1
Improved Jump Jets	LT	6	3
Armored Comp. (Angel ECM)	H	0	1
Armored Comp. (Bloodhound) LA	LA	0	1.5

**Notes:** Equipped with Full-Head Ejection System. Features the following Design Quirks: Prototype, Exposed Actuators, Extended Torso Twist



EXPERIMENTAL

# DEMON CX-2

**Field Testing Summation:** Prototype Refit

**Producer/Site:** Undisclosed

**Supervising Technician:** Adept Liam York

**Project Start Date:** 3070

**Non-Production Equipment Analysis:**

- Improved Heavy Gauss
- Mine Dispensers
- Reactive Armor
- Sponson Turrets

**Overview**

It seems our friends with ComStar were paying attention when the Word deployed a brace of Demons with heavy Gauss rifles in 3070. Work immediately began on modifying a series of Demon tanks using the Lyrans' improved heavy Gauss rifle. To assist in its ambush role, or to help it disengage, ComStar also installed mine dispensers. While using Thunder LRMs is the de-facto norm to dispense mines, their use is also relatively easy to observe at a distance, especially at night. The more conventional mine dispensers enable the Demons to work with substantially greater stealth. ComStar even introduced of reactive armor to the hull, replacing the PanzerSlab of old.

The end result is even more capable in its traditional role, and would be a welcome addition to the RAF. The CX-2 spec Demons were previously built on Terra, and could be again!

*[The SLDF used Demons extensively, putting them in the field in pairs at choke points for days on end—because they could afford to! This is arguably worse than his Lightning advice, since those would at least deploy. Actually shedding a bunch of units to sit around with their big main guns doing nothing is either Capellan or incompetent.*

*Wait, does that hurt your feelings? Heh.*

*Anyway, the Blakists got plenty of mileage from their C3 link back to the rest of the thugs. They were active units, not left about the scenery for days.*

*It all just gets worse when you consider these things are basically tank destroyers. Look up the term. Note the concept basically died out in the twentieth or twenty-first century or so. Without the Harpoons and turret-mounted gun, anyone sneaking up on these things will have a rather easy time, despite putting the Inteks on sponson.*

*Speaking of turrets, they left it on! What's up with that? Smells like a rush job, like they didn't want to spend the resources on removing it and redistributing the armor. I'd almost wish they parked the Inteks in there, or something.*

*What's really weird here is that they've actually been pondering this kind of HGR and iHGR deployment as far back as 3065. While the Demon had mixed reviews as an ambush vehicle against the Clans, ComStar has been thinking about it for quite some time. So why the rush job? –AB]*

Type: **Demon**

Technology Base: Inner Sphere (Experimental)

Movement Type: Wheeled

Tonnage: 60

**Equipment**

Internal Structure:

Engine:

220

Type:

Light Fusion

Cruise MP:

4

Flank MP:

6

Heat Sinks:

10

Control Equipment:

Mass

6

11.5

Lift Equipment:

0

Power Amplifier:

0

Turret:

0

Sponson Turrets:

.5

Armor Factor (Reactive):

160

10

Armor

Value

Front

50

R/L Side

30/30

Rear

20

Turret

30

**Weapons and Ammo**

**Location**

**Tonnage**

Improved Heavy Gauss Rifle

Front

20

Ammo (iHeavy Gauss) 20

Body

5

Medium Laser

Right Sponson

1

Medium Laser

Left Sponson

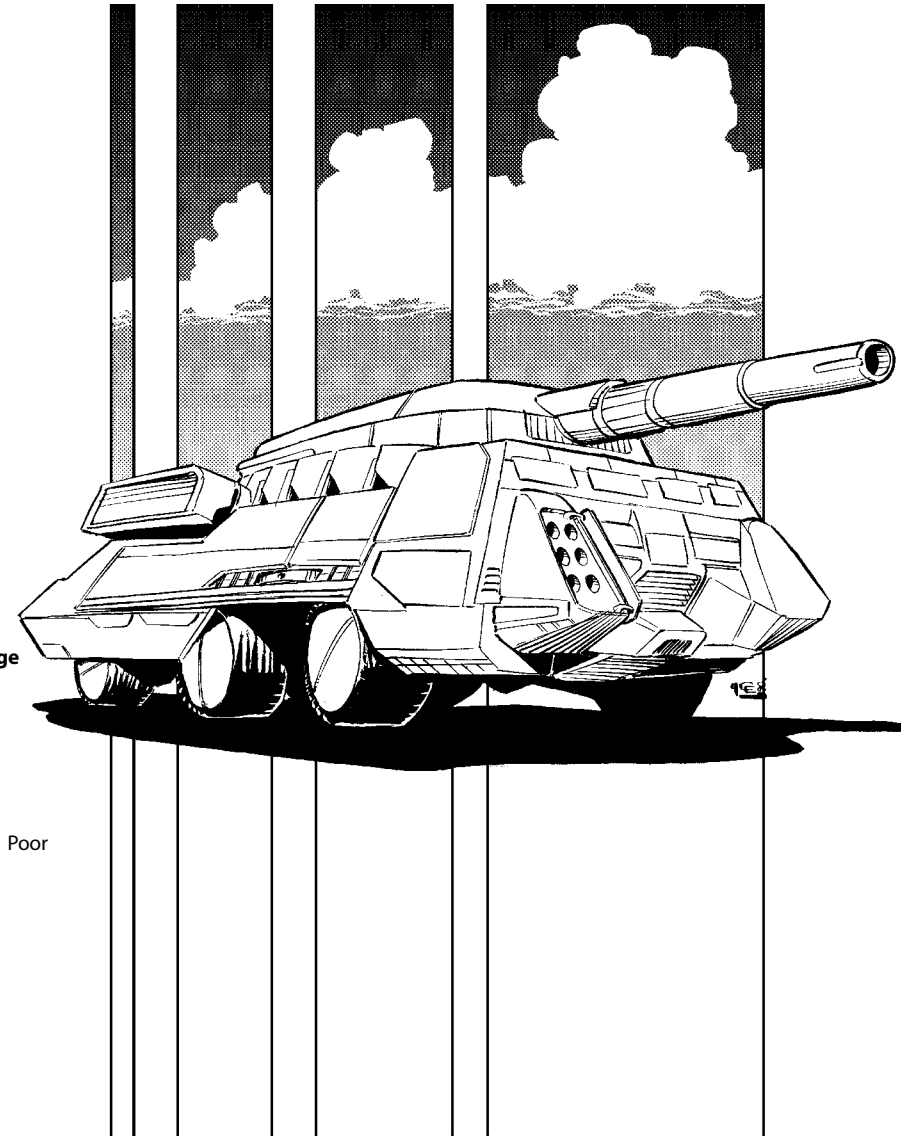
1

4 Mine Dispensers

Body

2

**Notes:** Features the following Design Quirks: Prototype, Poor Workmanship, Trailer Hitch



EXPERIMENTAL

# ZERO ZRO-CX-3

**Field Testing Summation:** Prototype Zero Refit

**Producer/Site:** Undisclosed

**Supervising Technician:** [Redacted] (person was terminated by ComStar)

**Project Start Date:** 3073

**Non-Production Equipment Analysis:**

PPC Capacitor  
Enhanced LRM-5

## Overview

The venerable Zero aerospace fighter was upgraded by ComStar to the ZRO-115 specification in response to encounters with the Clans. The improved capabilities at range were deemed crucial to stay competitive. ComStar has apparently not been content with their work, and proceeded to further enhance its nose-mounted ER PPC with a capacitor. This approach seems promising, as it allows the weapon to exceed the capabilities of the armor on most every fighter, and numerous DropShips. It demands a more restrained firing policy, however. The Streak launchers were likewise replaced with a new Enhanced LRM, providing consistent performance across much longer ranges than the Streak launchers.

ComStar has apparently been able to deploy its CX-3 prototypes several times, each with positive results.

I believe the proven performance of the capacitor enhanced ER PPC is something the RAF should emulate in its own designs. Acquiring the ZRO-CX-3 research will dramatically reduce the cost and time investment required on our end.

We do not know the circumstances surrounding the elimination of this project's manager, however, and this may be of concern. We know for a fact that their Adept Jacob Arevalo has passed, but they saw no reason to redact anything. That may warrant additional research on our part.

*[I don't know about this one. Is this answering a question anyone actually asked?*

*Also shaky on the Enhanced LRM launcher; Its main claim to fame is reduced minimum range, but is that really that much of a problem for fighters?*

*Feeling pretty confident in advising against this though.*

*As for the business about not disclosing who worked on this thing, that's definitely suspicious. Smells like skeletons in the closet. Maybe look in to that some; could be leverage. Or just make them turn over everything, like they're supposed to. Jerks. -AB]*

**Type:** Zero

**Technology Base:** Inner Sphere (Experimental)

**Tonnage:** 35

## Equipment

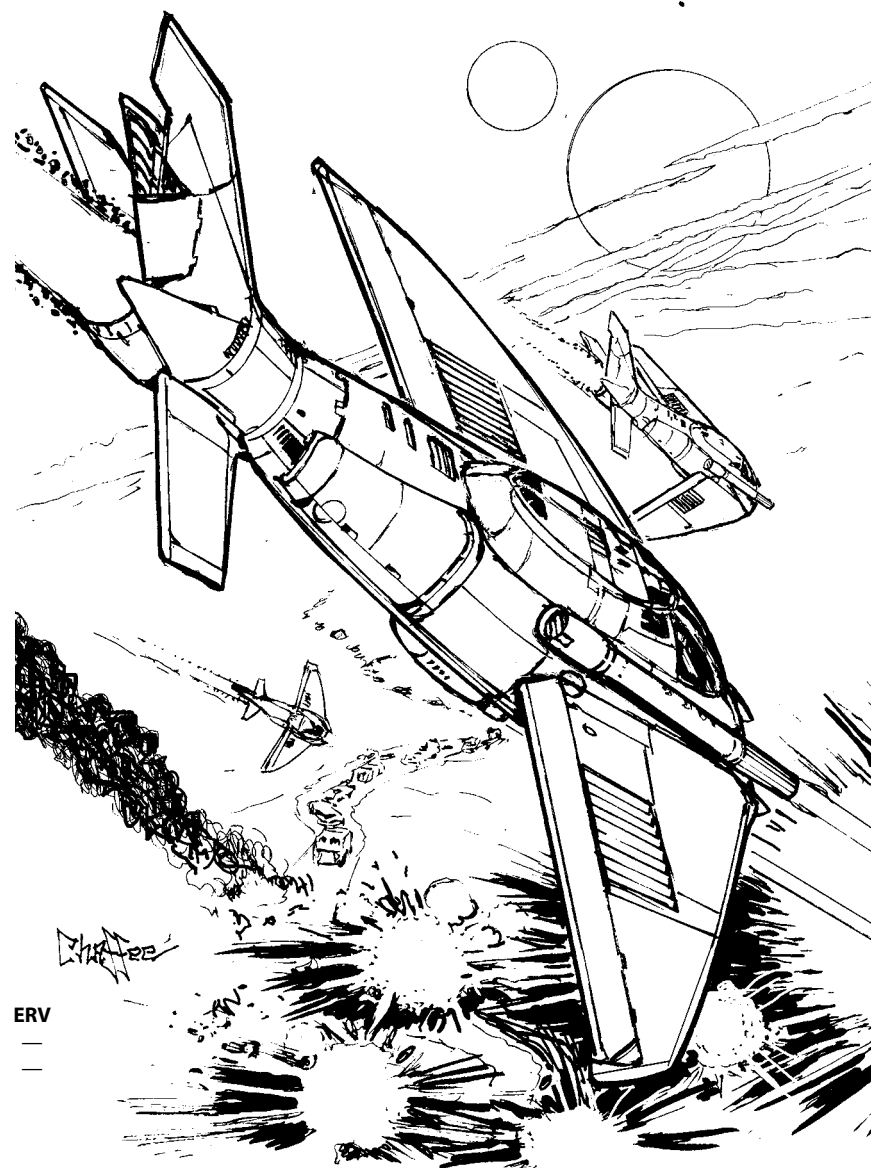
Engine:	140
Safe Thrust:	6
Maximum Thrust:	9
Structural Integrity:	6
Heat Sinks:	10 [20]
Fuel:	400
Cockpit	
Armor Factor:	160
	<i>Armor Value</i>
Nose	61
Wings	28/28
Aft	43

## Mass

5
0
5
3
10

Weapons and Ammo	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
ER PPC with Capacitor	Nose	8	5/20	10/15	10/15	10/15	—
Enhanced LRM 5	Nose	3	2	3	3	3	—
Ammo (NLRM) 24	—	1					

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



EXPERIMENTAL

# BATTLETECH

## 'MECH RECORD SHEET

### 'MECH DATA

Type: **Beowulf BEO-X-7a**

Movement Points: **Tonnage: 45**  
 Walking: 6 **Tech Base: Inner Sphere**  
 Running: 9 [12] **(Experimental)**  
 Jumping: 7 **Era: Jihad**

### Weapons & Equipment Inventory (hexes)

Qty	Type	Loc	Ht	Dmg	Min	Sht	Med	Lng
1	Angel ECM Suite	HD	—	[E]	—	—	—	6
2	ER Medium Laser	RA	5	5 [DE]	—	4	8	12
1	TAG	RA	0	0 [S]	—	5	9	15
1	Bloodhound Active Probe	LA	—	[E]	—	—	—	6
2	ER Medium Laser	LA	5	5 [DE]	—	4	8	12

Note: If playing under Advanced Rules, treat head as having a Full-Head Ejection System.

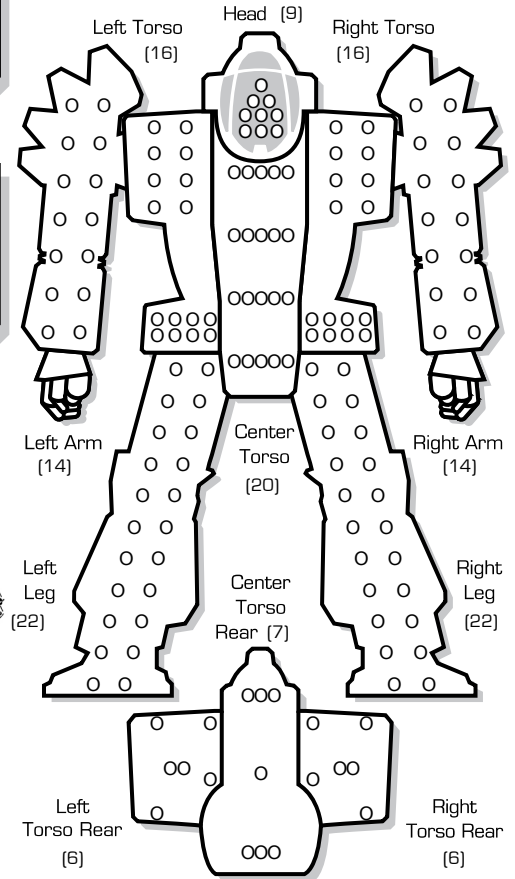
### WARRIOR DATA

Name: \_\_\_\_\_  
 Gunnery Skill: \_\_\_\_\_ Piloting Skill: \_\_\_\_\_  
 Hits Taken  
 Consciousness#

1	2	3	4	5	6
3	5	7	10	11	Dead



### ARMOR DIAGRAM



### CRITICAL HIT TABLE

#### Left Arm

- Shoulder
- Upper Arm Actuator
- Lower Arm Actuator

1-3

- Hand Actuator
- ER Medium Laser
- ER Medium Laser

4-6

- [O] Bloodhound Active Probe
- [O] Bloodhound Active Probe
- [O] Bloodhound Active Probe
- Stealth
- Stealth
- Roll Again

#### Left Torso

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

1-3

- Improved Jump Jet
- Improved Jump Jet
- Improved Jump Jet

4-6

- Stealth
- Stealth
- Roll Again

#### Left Leg

- Hip
- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator
- Stealth
- Stealth

#### Head

- Life Support
- Sensors
- Small Cockpit
- Sensors
- [O] Angel ECM Suite
- [O] Angel ECM Suite

#### Center Torso

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

1-3

- Gyro
- XL Fusion Engine
- XL Fusion Engine
- XL Fusion Engine
- Improved Jump Jet
- Improved Jump Jet

4-6

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

#### Right Arm

- Shoulder
- Upper Arm Actuator
- Lower Arm Actuator
- Hand Actuator
- ER Medium Laser
- ER Medium Laser

1-3

- TAG
- MASC
- MASC
- Stealth
- Stealth
- Roll Again

4-6

#### Right Torso

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

1-3

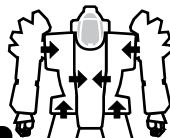
- Improved Jump Jet
- Improved Jump Jet
- Improved Jump Jet

4-6

- Stealth
- Stealth
- Roll Again

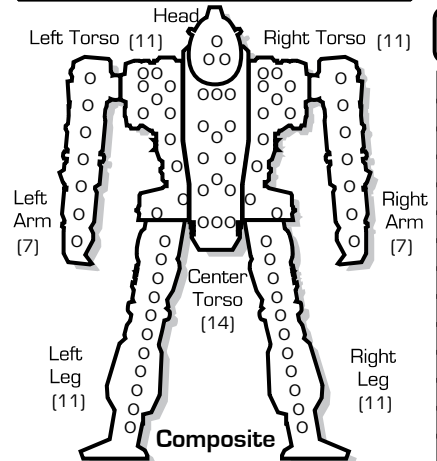
#### Right Leg

- Hip
- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator
- Stealth
- Stealth



Damage Transfer Diagram

### INTERNAL STRUCTURE DIAGRAM



### HEAT DATA

Heat Level*	Effects	Heat Sinks: 10 (20) Double
30	Shutdown	○
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

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	