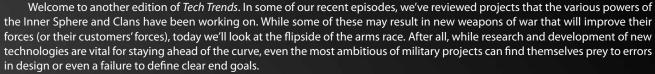


INTRODUCTION



Indeed, many projects have gone into the history books as less than a footnote, their development running too far over budget, with little to nothing to show for their efforts. Even so, many such "failures"—like the Banshee BattleMech and the Potemkin WarShip—still managed to find a useful home in the modern military. But what about those that never even made it that far?

The units included in today's edition of *Tech Trends* introduce us to military designs that never made it: Cancelled projects whose results either served out their limited lives as training wrecks in some backwater militia outpost, or—more often than not—were simply scrapped after their projects ended ingloriously.

-Reginald Dao, Tech Trends vid-zine, Galtean Publishing, 3087

HOW TO USE THIS BOOK

The 'Mechs, combat vehicles, and aerospace craft described in Experimental Technical Readout: Boondoggles provide players with a sampling of the biggest failures that have graced the research and development departments of military manufacturers throughout BattleTech's history. The rules for using 'Mechs, vehicles, fighters and DropShips in BattleTech game play can be found in Total Warfare, while the rules for their construction can be found in TechManual. However, the nature of these designs also draws upon the Experimental-level rules presented in Tactical Operations and a number of special rules presented at the end of this book. As a result, none of the units featured in this volume are considered tournament legal, and their use in introductory games is discouraged.

INCOMING MESSAGE

SEND

SAVE

CANCEL

DELETE

INTRODUCTION



SEND

SAVE

CANCEL

DELETE

CREDITS

Project Development

Herbert A. Beas II

Development Assistance

Randall N. Bills

Jason Schmetzer

BattleTech Line Developer

Herbert A. Beas II

Assistant Line Developer

Ben H. Rome

Primary Writing

Ken' Horner

Art Direction

Brent Evans

Production Staff

Cover Design and Layout

Ray Arrastia

Illustrations

Doug Chaffee

Stephen Huda

Duane Loose

Mike Nielsen

Allen Nunis

Record Sheets

Ray Arrastia

Johannes Heidler

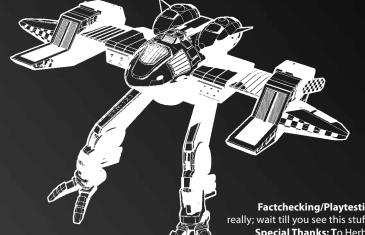
BattleTech Logo Design

Shane Hartley, Steve Walker and Matt Heerdt





©2013 The Topps Company, Inc. All Rights Reserved. Experimental Technical Readout: Boondoggles, 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.



Factchecking/Playtesting: Are you serious? No, really; wait till you see this stuff!

Special Thanks: To Herb Beas, for not only letting me put together something this zany, and going so far as to edit and publish it as well, but also for taking it upon himself to write this special thanks to himself because I was too scatterbrained to.;-)

Oh, and to Johannes Heidler, Luke Robertson, and Sebastian Brocks. They checked some of this stuff out for me, too. I'd have mentioned that under the factchecking and playtesting credits, but... again, wait till you see this stuff!



CAT35XT017

OSTSCOUT IIC

Outcome Summation: Rejected Prototype
Producer/Site: Olivetti Weaponry, Sudeten

Supervising Technician: Senior Technician Hakeem

Project Start Date: 3063 **Failure Analysis:** Poor Design

Overview

Fighting in the Inner Sphere has introduced many challenges for the Clans, with one of the most teling being the need for effective electronic warfare and reconnaissance. Where in the Homeworlds the Clans could expect an accurate list of the defenders from a simple *batchall*, ferreting out this information against Inner Sphere foes proved to be a hands-on challenge. In an effort to address this issue, Clan Jade Falcon tasked its technicians with revamping the venerable *Ostscout* to Clan standards.

While we are unable to determine how exactly the design progressed, we do know that several different plans emerged over the first decade of development, all coming from at least three different teams. The technicians who finally "won" the project consisted mostly of native Inner Sphere engineers, partnered with captured Wolf scientists and Falcon techs. Together, they oversaw the construction of four prototypes delivered for controlled testing on the Hazen Proving Grounds on Sudeten.

While the designers clearly expected mixed feedback from the testing, even they were shocked at how poorly their so-called *Ostscout IIC* fared. Its speed was impressive, outpacing the infamous *Dasher* despite weighing nearly twice as much, but even more impressive was the nearly 400-meter jump capacity gained when its jump jets were used in conjunction with the partial wing assembly built into the 'Mech's rear torso. Unfortunately for the design team, that was where the good reviews ended.

The armor was expected to be thin, but protection even flimsier than a Sphere-made *Stinger* was a disappointment to Jade Falcon leadership. The cramped cockpit—even with the ejection systems reportedly removed to save space—was particularly treacherous for pilots attempting to push the physical limits of their 'Mech, while the bulky construction materials used prevented optimal placement of components, resulting in such oddities as the off-balance jump jets, which the MechWarriors reported caused the 'Mech to spin counter-clockwise in every leap. Finally—and perhaps most egregiously, from the Falcon point of view—was the fact that, like its 3050 predecessor, the *Ostscout IIC* lacked any offensive weaponry to speak of.

While this last deficiency would be objectionable to many in the Inner Sphere, to the Clan warriors, it was especially offensive. The Ostscout IIC's electronics were helpful at spotting hidden enemies and nullifying advanced targeting systems and networks, but none of that could deliver actual damage to the enemy. Only the TAG system prevented the machine from reducing its pilot to a mere spectator in the battlefield, but with artillery support still rare in Falcon toumans, the odds of an Ostscout MechWarrior contributing to his own codex in battle promised to be nearly nil. When a survey tech ruefully suggested the MechWarrior could always ram his opponent if he wished to boost his personal glory so badly, the test pilot had to be restrained to keep from beating the man to death.

Compounding these issues was yet another poor choice. In an effort to reduce the design's outrageous resource costs, the technicians used only standard heat sinks. While this was sufficient for ground movement, the combination of the (highly expensive) ultra-extralight engine and eleven jump jets quickly overwhelmed the prototypes, forcing shut downs after three consecutive jumps. While this oversight—and the lack of weapons—could have been corrected, Khan Clees instead chose to have the project shut down and transferred the staff to other assignments.

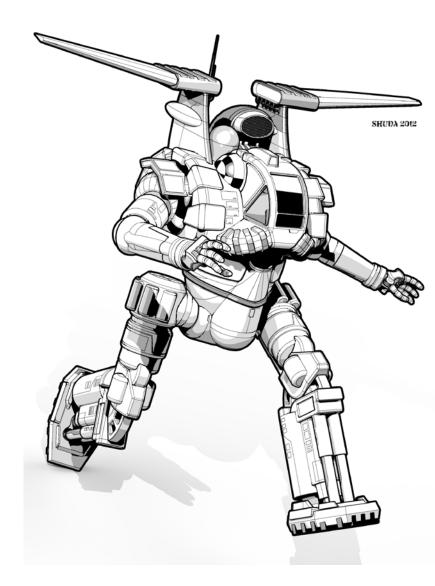
The surviving prototypes were reportedly sold to the Diamond Sharks in an effort to salvage something from all the resources poured into the project. Incredibly, even the Sharks have been unable to sell these machines to date. In the end, much of the blame for this failure can be pointed at inconsistency in the development, with too many teams and leaders.

Type: **Ostscout IIC**Technology Base: Mixed Clan (Experimental)

Tonnage: 35

	N	lass
Endo Steel		2
385 XXL	1	4.5
11		
17		
11*		
10*		0
		2
		2
38		2
Internal	Armor	
Structure	Value	
3	5	
11	6	
	1	
8	5	
	1	
6	2	
8	5	
	385 XXL 11 17 11* 10* 38 Internal Structure 3 11 8	Endo Steel 385 XXL 1 11 17 11* 10* 38 Internal Armor Structure Value 3 5 11 6 18 5 11 6 2

Weapons and Ammo	Location	Critical	Tonnage
TAG	RA	1	1
Jump Jet	RT	5	2.5
Partial Wing	RT/LT	3/3	2
Bloodhound Active Probe (IS)) LT	3	2
Jump Jets	LT	2	1
Jump Jets	RL	2	1
Jump Jets	LL	2	1
Angel ECM	Н	2	2



Notes: *Partial Wing adds +2 Jump MP, -3 heat in Standard Atmosphere (see pp. 293 and 295, *TO*, for additional rules); Features the following Design Quirks: Bad Reputation, No Ejection System, Obsolete/3073, Prototype, Unbalanced.

LIB-4T LIBERATOR

Outcome Summation: Failed Prototype

Producer/Site: KaliYama Weapons Industries, Kalidasa **Supervising Technician:** Dr. Lucien Penobscot

Project Start Date: 3018

Failure Analysis: Inoperable Equipment

Overview

SAFE is not generally known for success, but in the waning days of the Third Succession War, they were able to uncover evidence that both of the Free Worlds' long time enemies, the Lyran Commonwealth and the Capellan Confederation, were developing new BattleMechs. Not to be outdone, Captain-General Janos Marik repurposed a large amount of League eagles to assist KaliYama Weapons in the development of a new BattleMech design to bolster the Free Worlds military. Eager to beat the sales record of their rivals in Irian Technologies, KaliYama leapt at this opportunity.

Focused on outperforming IrTech's mediocre *Hermes II*, KaliYama's initial LIB-4T *Liberator* concept 'Mech concept was sound. With a similar movement profile to the *Hermes*, at an only slight reduction in armor protection, the *Liberator* offered a much harder punch. Its pair of five-tube long-range missile racks, backed up by a Magna large laser, easily outgunned the *Hermes'* Oriente autocannon at a respectable reach, while a pair of shortrange missile tubes rounded out the package for close-range backup. On paper, the engineers demonstrated that the *Liberator's* MechWarriors could easily manage their heat load by alternating the laser with the missiles. How wrong they were.

A severe flaw in the *Liberator's* revolutionary new torso design (developed to reduce manufacturing costs and to make maintenance easier) resulted in a complete failure in the 'Mech's core cooling system not functioning. This flaw was missed during the early testing because the hand-built test models did not employ the same manufacturing techniques. Curiously, some test pilots did express concern about heat spikes the 'Mech generated even before the addition of weapons, but the KaliYama techs waved these complaints off as typical MechWarrior grousing over creature comforts. With the design team silencing the grievances, the *Liberator's* marketing team moved ahead, pushing the new 'Mech as much as they could. Deals were made with the LCCC to purchase the first hundred units off the production line and many were earmarked for specific commands, with some even included on advance TO&Es for billets yet to be filled.

All of this ended spectacularly at the *Liberator's* first unveiling. KaliYama had finally recognized the issue internally but did not want to inform the League Military, so they scrambled to fix the problem before the first open-field tests. The problem persisted as the testing began, so KaliYama had carefully planned the routine to allow plenty of time to cool down. When the testing was concluded, one of the generals pointed to an abandoned Augustus tank and asked the KaliYama representative to have the *Liberator* destroy

it. The representative tried to deflect the request, at which point Captain-General Janos Marik, himself in attendance, spoke up and demanded that they destroy it.

The order was relayed and tentative missile fire impacted the armor. The Captain-General impatiently requested a full barrage until the front of the tank was gone. The KaliYama team complied and within half a minute, there was a tremendous explosion—but rather than the Augustus, it was the *Liberator* that exploded as its ammunition detonated under the crippling heat, sending the ejected pilot rocketing back towards the spectators. Contracts were immediately canceled and marketing pulled back, but all too late to save the *Liberator*'s reputation. Further investigation discovered the flaws in the cooling were so great that the chassis would have to be rebuilt from scratch. The three surviving prototypes languished for nearly half a century, with the last ironically destroyed in a live fire exercise by the Augustus' descendent, the Moltke.

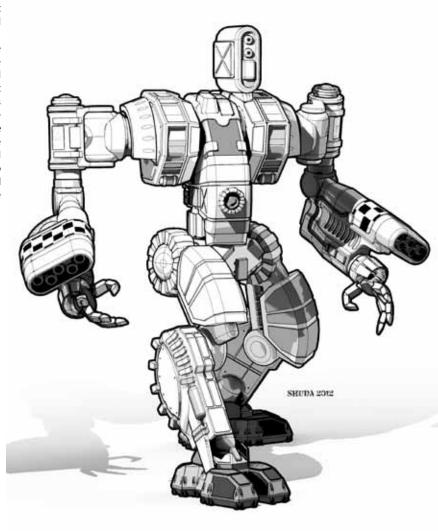
Type: Liberator

Technology Base: Inner Sphere

Tonnage: 40

Equipment			Mass
Internal Structure:			4
Engine:	240		11.5
Walking MP:	6		
Running MP:	9		
Jumping MP:	0		
Heat Sinks:	10		0
Gyro:			3
Cockpit:			3
Armor Factor:	104		6.5
	Internal	Armor	
	Structure	Value	
Head	3	9	
Center Torso	13	15	
Center Torso (rear)		4	
R/L Torso	10	13	
R/L Torso (rear)		4	
R/L Arm	6	8	
R/L Leg	10	13	

Weapons and Ammo	Location	Critical	Tonnage
LRM 5	RA	1	2
Ammo (LRM) 24	RA	1	1
Large Laser	CT	2	5
SRM 2	LT	1	1
Ammo (SRM) 50	LT	1	1
LRM 5	LA	1	2



Notes: Features the following Design Quirks: Bad Reputation, Nonfunctional (Heat Sinks), Poor Workmanship, Obsolete/3025, Prototype

CPN-IXI CHAMPION LAM

Outcome Summation: Failed Prototype Producer/Site: Bergen Industries, New Earth Supervising Technician: Dr. Jerald Flannigan

Project Start Date: 2699

Failure Analysis: Inoperable Equipment

Overview

Brigadier's *Scorpion* LAM was not, of course, the only failure that ever happened when pushing the boundaries of the Land-Air 'Mech concept. The promise of this new technological innovation prompted Star League manufacturers to continue to challenge its limits, be they in terms of configurations or sheer size. While Brigadier challenged the former, Bergan Industries took on the latter in their attempt to create a heavier LAM.

Selecting the *Champion* as their baseline seemed only natural for its speedy, aerodynamic design. Still, unlike most of the other LAM projects, the *Champion* 1X1 model was conceived purely as a proof-of-concept; its end result would not necessarily aim at creating a final, field-ready design, so much as an effort to exceed the design goals of Allied Aerospace's planned *Phoenix Hawk* LAM. With a little pressure off of the design team, they went about drastically rebuilding the *Champion* from a cavalry BattleMech into an LAM.

The first big challenge was freeing up mass for the conversion equipment and jump jets. Engineering realities automatically ruled out the use of extralight engines, as their additional volume interfered with the critical torso alterations LAMs needed for switching between combat modes. Moreover, for similar reasons, the *Champion* could not make use of an endo steel frame and would even have to replace its ferro-fibrous armor with standard plate. This left only one option: removal of the *Champion*'s powerful LB-X autocannon.

Once the entire frame was rebuilt and jump jets were installed, all that was left was to get the *Champion* working. Doctor Flannigan was convinced that the *Champion*'s sleek aerospace-style shape would help its aerodynamics in flight, especially in atmospheric combat. Initial testing showed that the LAM adapted well to its jump jets, enjoying the 150-meter leaps that were so uncommon among heavy 'Mechs. Next they tested the prototype's ability to transform while stationary, and were encouraged to see the craft achieve relatively smooth transitions between fighter and BattleMech with only minor manual adjustments required between modes.

The disappointment came when it was time for the *Champion* LAM to take flight. After launching in fighter mode, the pilot quickly noticed that the LAM's turns were sluggish. The on-board diagnostics and remote viewing could not find a problem during the maiden flight, so the pilot successfully landed after just a few minutes airborne. Further analysis of the footage and the *Champion* discovered that the larger jump thrusters that were required for a 'Mech of the *Champion*'s size struggled to meet the maneuvering needs for combat flying, and made for a poor substitute for the dedicated engines of a true fighter. Left as is, the *Champion* LAM would be an easy target in the air, even for an LAM. Worse, after-flight servicing reports found signs

of extreme wear on the conversion equipment, especially in the hip and waist assemblies, and a few frayed myomer bundles and power feeds that suggested the potential for catastrophic failure from repeated transformations. Though the *Champion* LAM successfully flew, landed, and transformed, its capabilities in all three respects in battle—or even over a short round of routine non-combat patrols—were questionable, at best.

Attempts were made to use lighter jump jets to achieve thrust, but those jets failed to produce enough power to keep the LAM aloft or achieve stable, sustained flight. After a few test pilots were injured, that fix was abandoned and other solutions were proposed. Outfitting the jump jets with additional motors to move them worked, but required so much additional mass that the *Champion* would have to dump additional weapons to accommodate those changes—and that change still did not rectify the structural weakening caused by conversions. With the entire project going nowhere and stock prices falling amid news of a spectacular crash caught on tri-vid, Bergan Industries finally canceled the *Champion* LAM project, and shipped its remaining prototypes to their storehouses on New Dallas.

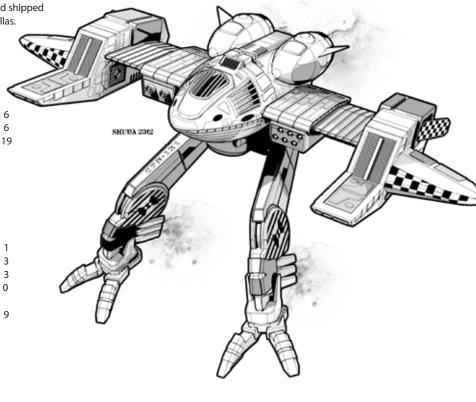
Type: Champion LAM

Technology Base: Inner Sphere (Experimental [Illegal]) Tonnage: 60

Equipment	Mass	
Internal Structure:		
LAM Conversion Equipment:		
Engine:	300	
Walking MP:	5	
Running MP:	8	
Jumping MP:	5	
AirMech Cruising MP:	15	
AirMech Flanking MP:	23	
Safe Thrust:	5	
Maximum Thrust:	8	
Heat Sinks:	11	
Gyro:		
Cockpit:		
Fuel: 80		
Structural Integrity:	20	
Armor Factor:	144	
	Internal	Armor
	Structure	Value
Head	3	9
Center Torso	20	25
Center Torso (rear)		8
R/L Torso	14	18
R/L Torso (rear)		6
R/L Arm	10	12
R/L Leg	14	15

Weapons and Ammo	Location	Critical	Tonnage
Medium Laser	RT	1	1
SRM 6	LT	2	4
Artemis IV FCS	LT	1	1
Ammo (SRM) 15	LT	1	1
2 Medium Lasers	LT	2	2
Jump Jet	RL	2	2
Jump Jet	LL	2	2
Jump Jet	CT	1	1

Notes: Features the following Design Quirks: Hard to Pilot, Illegal (Heavy-LAM), Nonfunctional (Conversion System), No/Minimal Arms, Obsolete/2702, Prototype



SAM-RS2 MATAR

Outcome Summation: Failed Prototype
Producer/Site: Amaris Arms Corporation, Terra
Supervising Technician: Senior General Rifkin Amaris

Project Start Date: 2775

Failure Analysis: Inoperable Equipment

Overview

Stefan Amaris knew that if he was going to fend off Aleksandr Kerensky's SLDF, he would need better defenses for his "empire". As Kerensky crept closer and closer to Terra, weapons development became more and more desperate. The most well known outgrowth of these efforts was the monstrosity known as "Amaris' Folly"—or, more officially, the *Matar*. This last-gasp project was aimed at developing single, super-heavy BattleMech that could theoretically take on an entire 'Mech company. Rifkin Amaris (one of Stefan's closest cousins), technically headed the ambitious project, but the Usurper himself frequently meddled in the project.

Built primarily for static defense, speed was not a concern for this outsized 'Mech. Firepower, and the ability to take more than it could dish out, were instead the primary focus. With dual Gauss rifles—buried deep in the side torsos—the Matar had plenty of long-distance punch, with an extended range large laser thrown in for good measure. Four tons of ammunition would enable this machine to hammer its enemies relentlessly. Curiously, the design team went to great lengths to hide the Gauss rifles deep within their mountings, and even contemplated launcher-style hatches in the hopes that the prominent laser housings would keep attackers guessing about the 'Mech's loadout. This approach prevented the addition of CASE that could have protected against capacitor detonation should the Matar suffer an armor breach. Neither Amaris was fazed by this, apparently, feeling that few enemies would be able to get that far against a well supported MatarAnother issue solved through superior firepower was the threat posed by lighter units. Against speedy units, a Matar would appear be hardpressed to track. To address this hazard, a pair of heavy pulse lasers—one in each arm—gave the *Matar* both the widest possible arc and the best means to deliver a telling blow once such units got close enough to use their own weapons. Even if a bogey got behind the sluggish Matar, a pivot of the torso could enable the 'Mech to bring an arm laser to bear on its would-be flanker. Even the threat of infantry was addressed through the installation of two flamers, something Stefan Amaris himself reportedly insisted upon. Opposing infantrymen would be cooked in the open or burned alive in any structure or woods they hid in.

For its defense, the *Matar* featured twenty and a half tons of Star Slab armor, focused mainly on the torsos, and a Guardian ECM unit was installed in the leg, to negate any of the advanced munitions Kerensky's forces might field against it. Amaris was particularly concerned by the Narc beacon, which could allow missiles to rain down where the *Matar* could not reply. Finally, the heat sink capacity was sufficient to keep the 'Mech cool, so long as all three large lasers were not fired simultaneously. Even then, with no explosive munitions to worry about, the *Matar's* heat level could be pushed as long as its pilot did not want to go anywhere.

Indeed, as luck would have it, the *Matar* never *could* go anywhere once it entered the prototype stage. Three different design teams were unable to resolve the stress issues that prevented the 'Mech's leg actuators from moving the superheavy machine. Grown increasingly

paranoid and desperate as news of Keresnky's campaign continued to filter in, the Amaris cousins turned their rage on these hapless engineers, executing them all for "treasonous incompetence". In the end, the *Matar* project was scrapped, and Rifkin attempted to take his work with him into exile. He was captured trying to leave Terra and the data was recovered by Kerensky's troops.

Yet even though the *Matar* went down in history as a dead-end development created by a desperate and dying regime, it lived to vex the Inner Sphere again when Clan Smoke Jaguar reworked the design as the *Behemoth*.

Mass

11

2

5

2

Type: Matar

Equipment

Internal Structure:

Medium Pulse Laser

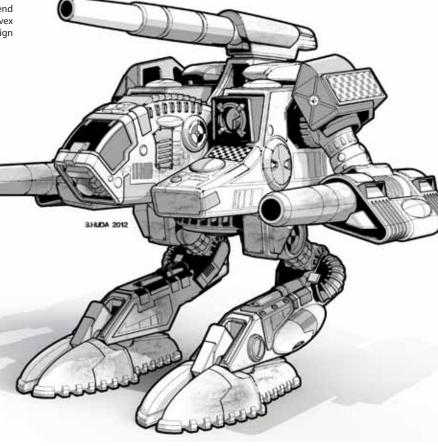
ER Large Laser

Technology Base: Inner Sphere (Experimental [Illegal]) Tonnage: 110

Engine:	220		10
Walking MP:	2		
Running MP:	3		
Jumping MP:	0		
Heat Sinks:	14 [28]		4
Gyro:			3
Cockpit:			3
Armor Factor:	327		20.5
	Internal	Armor	
	Structure	. Value	
Head	3	9	
Center Torso	33	47	
Center Torso (rear)		15	
R/L Torso	23	31	
R/L Torso (rear)		15	
R/L Arm	18	36	
R/L Leg	23	46	
Weapons and Ammo	Location	Critical	Mass
Weapons and Ammo Large Pulse Laser	Location RA	Critical 2	Mass 7
•			
Large Pulse Laser	RA	2	7
Large Pulse Laser Ammo (Gauss) 8	RA RA	2	7
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle	RA RA RT	2 1 7	7 1 15
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle Ammo (Gauss) 8	RA RA RT RT	2 1 7 1	7 1 15 1
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle Ammo (Gauss) 8 Flamer	RA RA RT RT RT	2 1 7 1	7 1 15 1
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle Ammo (Gauss) 8 Flamer Large Pulse Laser	RA RA RT RT RT LA	2 1 7 1 1 2	7 1 15 1 1 7
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle Ammo (Gauss) 8 Flamer Large Pulse Laser Ammo (Gauss) 8	RA RA RT RT RT LA LA	2 1 7 1 1 2	7 1 15 1 1 7
Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle Ammo (Gauss) 8 Flamer Large Pulse Laser Ammo (Gauss) 8 Gauss Rifle	RA RA RT RT RT LA LA LT	2 1 7 1 1 2 1	7 1 15 1 1 7 1

H(R)

CT



Notes: Features the following Design Quirks: Distracting, Illegal (Superheavy 'Mech using Standard rules), Nonfunctional (Upper Leg Actuators), Nonfunctional (Lower Leg Actuators), Obsolete/2778, Prototype

THORIZER

Outcome Summation: Failed Production Model **Producer/Site:** Johnson-Aldis Weaponries, Thorin **Supervising Technician:** Major Uri Fujisama

Project Start Date: 2390 **Failure Analysis:** Poor Design

Overview

Hundreds of years before there were Land-Air 'Mechs, there was another combat unit designed to cross the line between vehicle types: the Thorizer. Conceived by Johnson-Aldis Weaponries, the hybrid between jet and hovercraft was the invention many in the company felt would propel them to the top of the Terran Hegemony's military manufacturing complex.

The Thorizer was built to address a very real need. While most Hegemony divisions possessed plenty of hovercraft, they were chronically short on aerospace support. Named after a predator native to Johnson-Aldis's homeworld of Thorin, this special vehicle would combine the features of both hovercraft and fighter, enabling such divisions to employ a supplemental air cover as needed to surprise and overwhelm any opposition. The Terran Hegemony, intrigued by this potential, agreed to help the company move this concept forward.

The primary goal of the Thorizer project was to develop a good hovercraft capable of converting on the fly into a passable aerospace fighter. Long before its engineers even looked at payloads or velocities, Johnson-Aldis had to design a revolutionary new frame. Fixed, rigid structures simply would not do (as LAM developers would find out generations later); what was structurally sound for a hovercraft was not good for an aerospace fighter. To accommodate two very different lift needs, the vehicle's sides would need to change their very configuration for each mode of movement: extending wings and landing gear for aircraft flight, and collapsing them for ground-level mobility. This only left room in the hovercraft for a single, large centerline weapon. Sadly, as the equipment needed to transform the Thorizer did not leave sufficient mass for even the smallest of autocannons, the designers opted instead for smaller weapons to cover its forward and aft firing arcs, eventually setting on a total of three twin-tube short-range missile launchers, all fed from the same ammunition bin.

Since fuel was not a great necessity for something built only to serve as a short-range aerofighter, only three and a half tons of reaction mass was installed. This left less than three tons of low-grade armor to cover the vehicle. This weak armor, in conjunction with a forward armament consisting of only two short-range missile tubes, meant that the Thorizer could only realistically threaten another Thorizer—but, for a prototype, these were seen as minor issues, since weapon loads would be more easily corrected once the concept was suitably proven.

As it turned out, the Thorizer was not so easily fixed. When the craft made its maiden flight in fighter configuration, observers quickly wondered why its pilot was being so conservative with the thrusters. The craft struggled to lift off the ground, and its fastest maneuvers showed the same acceleration profiles as the most ponderous fighters in the Hegemony. Debriefing determined that the pilot *was* pushing the craft to its limits, but the engines simply failed to deliver the output. As an initial production run continued, the design team struggled to correct this issue,

but ultimately determined that the acceleration flaw was inherent to the basic design, due to the inherent trade-offs between the vehicle's two motive modes. Johnson-Aldis refused to discontinue the Thorizer but did change its presentation to the Hegemony.

Desperate to add to their aerospace defenses, the Hegemony bought the initial production run despite the sluggish maneuverability, but quickly came to regret its choice. With its slow air speed, the Thorizer was virtually useless against any sort of airborne opponent, and prone to stalling. After losing too many crews to crashes, the Hegemony disabled the Thorizer's flight conversion equipment, repurposed the fuel tanks for cargo, and relegated the remaining vehicles to militia forces strictly as a mediocre hovercraft. Dubbed the "Gooney Bird" by its crews, the Thorizer only survived two decades in this reserve role, before the remaining units were sold for scrap.

Mass

Type: Thorizer

Equipment

Technology Base: Inner Sphere (Experimental [Illegal]) Movement Type: Hover (Medium) Equipment Rating: C/F-X-X Tonnage: 35

	Armor	
	Value	
Front	10	
R/L Side	10/10	
Rear	9	
Weapons and Ammo	Location	Tonnage
2 SRM 2s	Front	2
SRM 2	Rear	1
Ammo (SRM) 50	Body	1
Basic Fire Control	Body	.5

39

2.5

1

Crew: 3 (2 enlisted, 1 gunner)

Armor Factor (BAR 5):

Notes: Features bimodal conversion equipment (5.5 tons), and 3 jump jets (1.5 tons). Features the following Design Quirks: Bad Reputation, Distracting, Difficult to Maintain, Hard to Pilot, Illegal (Support Vehicle with Bimodal LAM Equipment and pre-Prototype Jump Jets), Non-Standard Parts, Obsolete/2415, Poor Performance

-	Chassis:		10.5			v Q i	1
,	Engine/Controls:	Fusion	7	2.			1
:	Cruising MP:	4		0'		\$\S\S\-	1
•	Flank MP:	6			100 00	1 2 2	.1
;	Jump MP:	3		~ \	· IM M		
:	Safe Thrust:	3		52 B	IN MI ACIM		1
ı	Max Thrust:	5		A Alberta	LAY MAN	_~~\	1
,	Heat Sinks:	0	0	N # 12	ا ا	\	= \
•	Fuel:	280	3.5				
,	Structural Integrity:	4					_'
							3
•							J \
			- /2	35, 3			To the same
		11					
;	//	1	T+ 100	16 5 10		_	
			4				一 \ 7 7 7
			-///				11 11 11 11 11 11
			1 1	1.4	-	A	
,	1			1973		1 477) //
,		(Darry)		SIED	3	Diam.	· Comment
		<u></u>		MP)			1
	-	1		1	T	1	
,				L	1,200	The second secon	
:						The second secon	
ı		4					

CONDOR TRANS-TRACK

Outcome Summation: Rejected Prototypes **Producer/Site:** Red Devil Test Fields, Pandora

Supervising Technician: Kommandant Thomas Hogarth

Project Start Date: 3043

Failure Analysis: Inoperable Equipment/Poor Design

Overview

Ever since they became a regular part of modern militaries, hovercraft have offered a tremendous speed advantage over other armored vehicles, while often packing comparable firepower. Unfortunately, their delicate air skirts render these swift vehicles extremely vulnerable to enemy fire, and their excellent maneuverability can be undone by even a moderately thick tree line. With some terrain preventing the use of lift fans altogether, Red Devil Industries of Pandora proposed a radical modification for hovercraft that would install retractable treads for use in difficult terrain, and allow the vulnerable hover skirt to be withdrawn when damaged or rendered impractical. This concept was expected to be showcased in an entirely a new craft, but management rejected this to reduce expenses. Instead, Red Devil opted to test the new innovation on a proven hull instead: the classic Condor.

To evaluate the design, the LCAF assigned a young officer to help oversee the project as it moved forward: then-Kommandant Thomas Hogarth.

Refitting the Condor hovercraft with the new technology proved costly in terms of the sheer weight involved, forcing Pandora's engineers to replace the main cannon with a smaller one, while also reducing the vehicle's armor coverage. These changes permitted the installation of the new tread and skirt retraction/deployment systems, but tests attempted immediately afterward swiftly demonstrated that the newly developed equipment amounted to nothing. The complicated retraction system would repeatedly fail to engage on command and often snagged—a failure repeated on the entire batch of prototypes that Pandora had constructed.

Yet, if one were to check the progress reports from the program, one would have presumed the project a smashing success. At least three large "demonstration parties" were thrown with guests from across the Commonwealth and Federated Suns—though no one ever saw the Condor Trans-Tracks actually operating on the field. There were many prototypes displayed, and one even featured as a centerpiece for a party, yet as the visitors came and went from Pandora, most were so pleased with their chance to network that few even noticed the lack of evidence in the project's success. Indeed, those few guests who were concerned with the Trans-Track quickly grew tired of trying to wrangle more information from their hosts, and fell silent before these festivities ended. With such a glowing reception, the LCAF ordered a full battalion for combat duty, and Red Devil began work on expanding their production line to meet the demand for their new hovertank.

When they arrived at their assigned units, the crews quickly realized they were sold a lemon. Unable to make the tread-to-hover conversions work, most crews suffered through the use of these vehicles (almost always delivered in "tracks-down mode") as best as they could. Other commands simply refused to allow their crews to use the vehicles once they discovered

the limitations. As the complaints rolled in, the LCAF quickly canceled the order and (reportedly) moved to dismiss Hogarth. Somehow, the well-connected Kommandant managed instead to be reassigned to the Furillo militia, while the Condors he so glowingly recommended ultimately found themselves dispatched to backwater defense forces over the next decade. Many—likely as a sort of payback from the Lyran High Command—eventually found their way to the Furillo BPM, where they once again became a problem for Thomas Hogarth to deal with.

Type: Condor Trans-Track

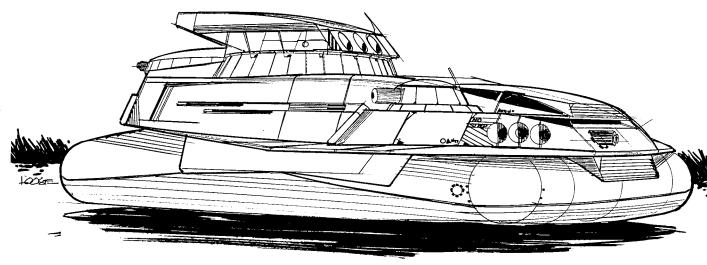
Technology Base: Inner Sphere (Experimental [Illegal]) Movement Type: Hover/Track Tonnage: 50

Equipment		Mass
Internal Structure:		5
Engine:	165	12
Type:	ICE	
Cruising MP (Hover):	8	
Flank MP (Hover):	12	
Cruising MP (Tracked):	3	
Flank MP (Tracked):	5	
Heat Sinks:	6	6

Control Equipment (Hover):		2.5
Control Equipment (Tracks):		2.5
Lift Equipment:		5
Power Amplifier:		.5
Turret:		1
Armor Factor:	88	5.5
	Armor	
	Value	
Front	28	
R/L Side	14/14	
Rear	13	
Turret	30	

Weapons and Ammo	Location	Mass
AC/2	Turret	6
Ammo (AC) 45	Body	1
2 Medium Lasers	Turret	2
Machine Gun	Front	.5
Ammo (MG) 100	Body	.5

Notes: Features the following Design Quirks: Bad Reputation, Difficult to Maintain, Illegal (Dual Motive System), Nonfunctional (Dual Motive System), Obsolete/3045



NEPTUNE HYPER

Outcome Summation: Failed Prototype Producer/Site: Galtor Naval Yards, Galtor Supervising Technician: Admiral Minh Yan

Project Start Date: 3031

Failure Analysis: Inoperable Equipment

Overview

Underwater, there is little doubt that submarines are the masters of their domain. Yet, on water-rich worlds where such assets are needed, the limits of submerged or even surface-level maneuvering on sub still means that it can take such vessels longer to get from one theater to another than many commanders would like. Intrigued by a proposed solution from the recently captured Galtor Naval Yards, the Draconis Combine funded a project aimed at combining the advantages of a hydrofoil with the company's solid Neptune submarine. Advised that there would have to be sacrifices in order to add the hydrofoil system, the DCMS brass nevertheless found the prospect of faster blue-water forces worth investigating.

The first challenge Galtor's technicians faced was obtaining the original design files. While they had retained the Neptune construction plans when House Kurita captured the facilities, the complicated files that could be used for such an extensive redesign were lacking. A very cautious diplomatic inquiry was put out to the remainder of the company still in the Federated Suns. These Davion counterparts pressed for compensation for the plans and the Combine agreed to a limited replacement parts exchange, supplying parts for captured *Panthers* (at cost) in exchange for the files.

Once the design was finalized, Admiral Yan, the head of the DCMS' obscure maritime fleet, personally led the procurement department through the changes. The addition of hydrofoil equipment was at the forefront of the conversion, but the changes in weaponry were also a topic of much anticipation. To free up the room for the hydrofoil equipment, the submarine's large laser and its eight-ton cooling system had been removed. This allowed six new short-range torpedo tubes to be connected to the existing ammunition bin, protecting the submarine's aft against tailing enemies. By removing half a ton of armor from the bow, Galtor was also able to replace the vessel's power amplifier with an additional ton of ammunition for the deadly long-range torpedo launcher. Despite the loss of the laser, Yan felt that the new Neptune's firepower was arguably improved.

All that was left was the testing of the prototype. With storm clouds overhead, observers were treated to a remote broadcast of the submersible capabilities. The Neptune was as good as advertised, defeating three mock BattleMechs and two surface craft. As the skies cleared and the seas calmed, the Neptune began its most important trial. Surfacing, it quickly obtained its normal top speed and kept accelerating, moving up on plane. The prototype was to accelerate towards the limit of eighty kilometers per hour, established by the engineering team for the initial testing, but as the vessel neared seventy, one of the hydrofoil fins snapped off, sending the hundred-ton submarine capsizing into the water.

The ensemble from the procurement department quickly departed, leaving a deeply shamed Admiral Yan to determine what went wrong and explore any possible corrections for the problem. A post-mortem

determined that the hydrofoil components were simply incapable of withstanding the pressures and maneuvering stress of operating at depths greater than 250 meters below the surface, and that these limits were further taxed by strain of the hydrofoil engagement systems. Unwilling to compromise the submarine's ability to patrol the depths in exchange for unreliable surface speed bursts, the DCMS chose to discontinue the project. The two remaining prototypes joined the Galtor militia once the hydrofoils were removed, serving with some distinction.

Type: Neptune Hyper

Technology Base: Inner Sphere (Experimental [Illegal])

Movement Type: Naval

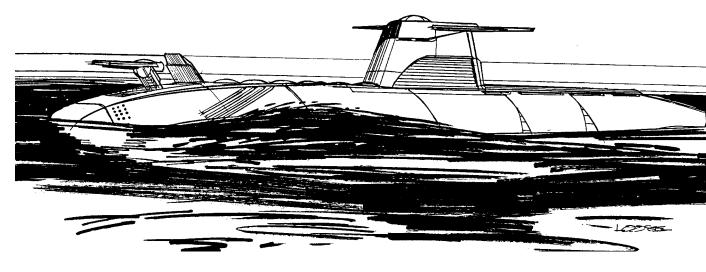
Tonnage: 100

Equipment		Mass
Internal Structure:		10
Engine:	270	29
Type:	ICE	
Cruising MP (Sub):	3	
Flank MP (Sub):	5	
Cruising MP (Hydrofoil):	7	
Flank MP (Hydrofoil):	11	

Heat Sinks:	0	0
Control Equipment:		5
Diving Equipment:		10
Lift Equipment:		10
Armor Factor:	224	14
	Armor Value	
Front	70	
R/L Side	58/58	
Rear	38	

Weapons and Ammo	Location	Mass
LR Torpedo 20	Front	10
2 SR Torpedo 6	Front	6
SR Torpedo 6	Rear	3
Ammo (LR-T) 12	Body	2
Ammo (SR-T) 15	Body	1

Notes: Features the following Design Quirks: Difficult to Maintain, Illegal (Dual Motive System), Nonfunctional (Hydrofoil Motive System), Obsolete/3032



MUSE IRONHORSE

Outcome Summation: Failed Prototype
Producer/Site: B&W Enterprises, El Dorado

Supervising Technician: Colonel Eduardo MacNiel

Project Start Date: 3078

Failure Analysis: Limited Application

Overview

The Federated Suns' MUSE program developed many prototype weapons in the latter days of the Jihad. Some of these—like the *Legionnaire* MUSE FIRE, or the *Rifleman* MUSE WIND BattleMechs—showed real battlefield potential and would eventually lead to production-grade units. Others, however, were merely costly demonstrations of a concept.

MUSE Ironhorse was one of the latter.

The Ironhorse was a rail-based support unit specifically designed to provide massive firepower and C3 capabilities ideal for the defensive needs of any large-scale position such as a city, spaceport, or major military installation. Mounting six extended range particle cannons—built to Clan standards—on any ground vehicle would make it fearsome enough, but the MUSE Ironhorse backed these weapons up with thirty tubes of longrange missiles also built to the same advanced specs. Plasma cannons acquired from Diamond Shark sources also protected the tractor unit from every side except the rear, while a Thumper artillery tube added the ability to strike at enemy positions several kilometers away. Sixteen tons of combat-grade armor protected the Ironhorse tractor. For the rear, a trailer of almost equal firepower was built, including a turret housing a massive Clan-grade payload of four particle cannons, four large pulse lasers, and an Arrow IV missile launcher.

While the generals were excited by the possibilities, the designers were not done with simply breathtaking firepower. A massive communications and control suite was installed in the tractor while the trailer offered nearly 200 tons of cargo space. This made it possible for the Ironhorse to not only act as a command unit, but also made it a viable transport for enough supplies to keep a battalion-sized command well supported. With a top speed of over 150 kilometers per hour, the Ironhorse could theoretically match the speed of most combat hovercraft while still being able to unleash its horrifying destructive capacity, and the tractor's fusion plant enabled operation independent of a rail-based power grid.

Yet, for all it offered, the Ironhorse suffered from some serious flaws. Firstly, its cost was immense, especially with all of the Clan-level technology permeating the design. Secondly, it was—after all said and done—still a train, which meant it was slow to accelerate or decelerate, and completely reliant upon fixed (and quite vulnerable) tracks. Indeed, during one of the Ironhorse's first field tests, the opposing force effectively eliminated its hundreds of millions of C-Bills worth of firepower by simply dispatching a pair of *Stingers* to tear up the tracks ahead of and behind the train, leaving it isolated to a mere two kilometers of track. While it still could provide some artillery support to the area around its position, the same could far more easily be accomplished by two smaller vehicles that would not have been so easily sidelined.

With the Ironhorse's application so limited and its price tag so high, the project was shut down. As with much of the MUSE project, designers and builders learned about the applications of cutting edge technology, but at a high cost to the AFFS budget.

Type: MUSE Ironhorse (Tractor)

Technology Base: Clan (Experimental) Equipment Rating: F/X-X-F Movement Type: Rail (Large) Tonnage: 600

Equipment		Mass
Chassis:		214
Engine/Controls:	Fusion	79.5
Cruising MP:	9	
Flank MP:	14	
Heat Sinks:	132	132
Fuel:		0
Turret:		5
Armor Factor (BAR 10):	304	16
	Armor	
	Value	
Front	54	
F R/L Side	40/40	
R R/L Side	40/40	
Rear	30	
Turret	60	

Weapons and Ammo	Location	Mass
4 ER PPCs	Turret	24
2 LRM 15	Turret	7
Thumper Artillery	Turret	15
Plasma Cannon	Turret	3
2 ER PPC	Front	12
2 Plasma Cannon	Front	6
2 Plasma Cannon	Right	6
Ammo (LRM) 40	Body	5
Ammo (Plasma) 100	Body	10
Ammo (Thumper) 100	Body	5
Communications Equipment	Body	10
Advanced Fire Control	Body	8

Crew: 31 (5 officers, 13 enlisted/non-rated, 13 gunners)

Cargo:

39.5 tons standard 1 Door (Right)

Notes: Features Armored and Tractor Chassis modifications. Features the following Design Quirks: Non-Standard Parts, Obsolete/3077, Prototype.

Type: MUSE Ironhorse (Trailer)

Technology Base: Clan (Experimental)

Equipment Rating: F/X-X-F Movement Type: Rail

Tonnage: 600

	Mass
	171.5
	0
N/A	
N/A	
135	135
	0
	6
304	16
Armor	
Value	
30	
40/40	
40/40	
54	
60	
	304 Armor Value 30 40/40 40/40 54

Weapons and Ammo	Location	Mass
4 ER PPCs	Turret	24
4 Large Pulse Lasers	Turret	24
Arrow IV	Turret	12
2 Plasma Cannon	Right	6
2 Plasma Cannon	Right	6
Ammo (Plasma) 100	Body	10
Ammo (Arrow IV) 50	Body	10
Advanced Fire Control	Body	25

Crew: 16 (3 officers, 13 gunners)

Cargo:

169 tons standard 1 Door (Right)

Notes: Features Armored, Tractor, and Trailer Chassis modifications. Features the following Design Quirks: Obsolete/3077, Prototype

MUSE IRONHORSE



SEABASS

Outcome Summation: Failed Prototype Producer/Site: Irian BattleMechs Unlimited, Irian Supervising Technician: Colonel Ethel Marik-Reynolds

Project Start Date: 3071

Failure Analysis: Inoperable Equipment

Overview

Some ideas wait for a great innovator to discover them; others wait for someone bold enough to actually act on them. The Seabass was the latter. An aerial and aquatic vehicle would give any army a tactical advantage, pinning the enemy and providing the choice of where to engage their opponents. There have been many units that tried and failed to tackle two roles or environments at once, the designers at Irian were hoping that the differences in the flow dynamics between atmospheric and aquatic conditions could be minimized.

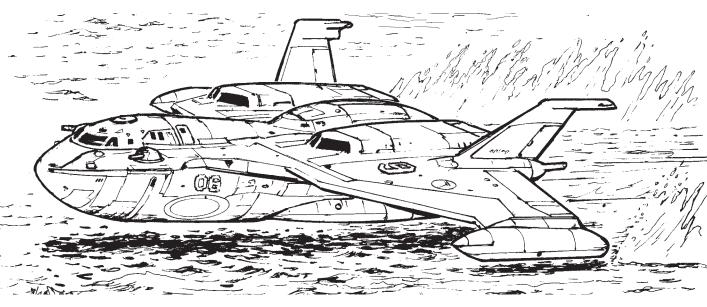
Irian chose to be relatively cautious in developing their revolutionary design, using less restricted materials for the test bed. The Seabass called for modest speed and an energy payload to provide firepower in and out of the water. Able to keep up with the slightly heavier Defender, it had a similar armor layout, but not the superior grade armor. This didn't appear to be a significant issue; historical data from the Defender showed that weapons heavy enough to defeat the armor's protection would cripple or destroy either fighter in most cases.

Two different prototypes were built for testing, one for each environment. Both developed failures during testing and were lost, but the dedicated survival equipment in each allowed the pilot and data to survive. Learning from their first failures, both prototypes were rebuilt and succeeded in their trial runs.

The first complete test run was scheduled for the morning of 22 October 3072. The weather was calm and Irian management was hopeful that they would finally see a potential product for all the Eagles they had spent in development. Test pilot Jake "Flash" Warner left the dock and quickly submerged the Seabass, safely surfacing after nearly three kilometers underwater. He then proceeded to taxi along the surface for half of a kilometer before he was able to take off.

This was nearly twice as long as Irian had expected, souring the mood in the observation room as the plane landed again on the water after circling the test facility in a sixty-kilometer loop. Warner took the Seabass back down again under the water as most of the observers started to visit the buffet bar. After ten minutes of not hearing from Warner, the control room dispatched a submersible to make contact. After another ten minutes, the observers were sent back home and search and rescue operations were begun. It took three hours to locate the wreck of the Seabass under Lake Nabsquith.

Studying the wreckage showed that the seals by the cockpit door were damaged by the flight and failed when the Seabass resubmerged. Warner's widower, Chester, sued Irian in a heavily publicized trial once the facts came out. Between the lack of success and the poor publicity, Irian finally pulled the plug on the project. The lone remaining prototype was sold to the Albert Falls militia where it remains their sole armed aircraft.



Structural Integrity:

Armor Factor (BAR 7):

Heat Sinks:

Fuel:

6

3

222 24

Armor

Type: Seabass Flying Submersible
Technology Base: Inner Sphere (Experimental [Illegal])
Equipment Rating: E/F-X-X
Movement Type: Fixed Wing/Naval (Sub)
Tonnage: 20

Value
7
6/6
5

Weapons and Ammo	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
Medium Laser	Nose	1	3	5	_	_	_

Crew: 3 (2 elinsted/non-rated, 1 gunner)

Cruising MP (Sub):

Flank MP (Sub):

Cargo:

0.5 tons 1 Door (rear)

7

11

Notes: Features Amphibious and Submersible Chassis Modification. Features the following Design Quirks: Illegal (Submersible Fixed Wing Chassis Modification), Prototype

BSE-X2 BANSHEE AEROSPACE FIGHTER

Outcome Summation: Rejected Prototype **Producer/Site:** Wangker Aerospace, Axton

Supervising Technician: Colonel Hartisan Yunupingu

Project Start Date: 3046 **Failure Analysis:** Poor Design

Overview

Seeking to address limitations on fuel expenditure in aerospace fighter deployment, Wangker approached the Federated Commonwealth military command with a new concept fighter that would feature turbine propulsion for atmosphere, while still being able to fly in space. The AFFC granted Wangker millions of kroner in grants based on the proposal, and diverted further money as the project moved along, meeting or exceeding its milestones.

After three years of development, Wangker unveiled its prototype before the military review board. True to their word, they delivered a quality machine that met all of their claims. The *Banshee*, as it was dubbed, functioned in space as well as in the atmosphere, and even handled better than some of the Commonwealth's current craft. Its fusion-based turbine gave it far greater operational lifespan while operating in atmosphere, while its generous fiveton fuel mass provided more than enough range for space ops.

Unfortunately, it soon became clear that excellent handling and stretching its fuel reserves in air flight were about the only things the new fighter could offer. Thanks to the sheer mass demanded by the *Banshee's* extremely unconventional dual-power design, the medium fighter could only boast the speed of a heavy fighter, combined with the armor and firepower of a lightweight. Its mere four Gs of maximum thrust put the *Banshee* in league with the *Stuka* and *Chippewa*, allowing almost any medium fighter to fly circles around it, while its armor was equal to that of the *Sabre*—though some aerospace aficionados conceded that the placement of this protection was better balanced for a dogfighter. Unfortunately, balanced armor would still have mattered little as the *Banshee's* dual medium lasers could not even match the weaponry of the lightly armed F-10 *Cheetah*.

After the initial trial data came out, the AFFC's representatives were deeply disappointed at what they had gotten for their money, and some of the Quartermaster Corps panicked, fearing that the budget outlays they had authorized for the project would damage their careers when it became clear that the result was such a failure. Eager to sweep the matter under the rug, but bound by contractual obligations, they instead found a way to dispatch the handful of prototypes already produced to forces near the Lyran//Periphery border for "extended testing". There, it was believed, the fighters would languish in obscurity, with little likelihood of experiencing enemy action that would call attention to their deficiencies.

The ruse actually succeeded, until the coming of the Clans, when these few *Banshee* fighters found themselves desperately pressed into action against the Jade Falcons. Though the prototypes failed miserably in combat, one pilot scored a noteworthy kill against a Falcon *Avar* on Anywhere. The Clan pilot, believing that his opponent was deliberately under-utilizing his fighter as some kind of trick, ducked into a metal-rich canyon to avoid the heavier fighter's guns when the AFFC pilot turned toward him, and crashed against the canyon walls.

Type: Banshee Aerospace Technology Base: Inner Sp Tonnage: 50	-		Heat Sinks: Fuel: Cockpit:	10 400	0 5 3
			VTOL Equipment		2.5
Equipment	Mass		Armor Factor:	64	4
Aerospace Engine:	150 Fusion	5.5		Armor	
Conventional Engine:	250 Turbine	25		Value	
Safe Thrust:	5		Nose	23	
Maximum Thrust:	8		Wings	14/14	
Structural Integrity:	5		Aft	13	



Weapons and Ammo	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
Medium Laser	LW	1	3	5	_	_	_
Medium Laser	RW	1	3	5	_	_	_

Note: Features Cockpit Command Console (3 tons); Halves fuel consumption and moves as a Conventional Fighter in atmosphere. Features the following Design Quirks: Atmospheric Flyer, Illegal (Dual engine design), Illegal (Conventional VTOL equipment on aerospace fighter).

F-12A CHEETAH II

Outcome Summation: Rejected Prototype Producer/Site: Imstar Aerospace, Amity Supervising Technician: Admiral Garland Smith

Project Start Date: 3021 **Failure Analysis:** Poor Design

Overview

Though the innovation of the Free Worlds League has served it well at times, it can often be so aggressive that it handcuffs the military with designs that don't seem to be thought out in terms of tactical doctrine. The *Cheetah II* fits this picture. Imstar Aerospace wanted to upgrade their flagship light fighter, the *Cheetah*, which already served the Free Worlds adequately, albeit without distinction. CEO Woodrow "Tiger" Gurnstoggle requested design teams to give him proposals for a rework of the venerable fighter. Three plans emerged from the commissioned studies: one that called for making the fighter heavier, and two that adjusted its thrust, with one decreasing airspeed in favor of greater firepower, and the other increasing speed.

After reviewing the plans and observing the presentations, Gurnstoggle, a former conventional fighter pilot, chose the faster design, knowing that more speed had always served him well in his time in service. He turned to a former colleague, Admiral Garland Smith, to liaise with the military for the project. Smith approved the prototype for League funding.

The Cheetah II prototypes demonstrated both more powerful thrust and better handling in atmosphere, and Admiral Smith put in a requisition for three squadrons over the next two years. Imstar quickly began contacting component manufacturers to set up shipments for the new design, when a chance meeting between a member of the procurement department and Admiral Smith's superior made her aware that a new aerospace design that was going to be introduced. The procurement officer requested Smith's analysis and was stunned at what she saw.

The increased engine forced the removal of a third of the fighter's armor and dropped its two medium lasers as well, leaving the thinly armored fighter with only a single small laser for combat. Smith's justification, that the increased speed allowed the *Cheetah II* to better serve as a high speed bomber, did not go over well, as it carried the same external ordinance load a standard *Cheetah* could already bring to bear. With basically an overly expensive jump-bomber on their hands, the military hated the purchase and brought about a very public review of the matter.

With their stock falling, Imstar's board of directors was forced to dismiss Gurnstoggle from (albeit with a few-million-eagle "golden parachute"). A full investigation carried out by Imstar later revealed that Gurnstoggle, Smith and the head of the design

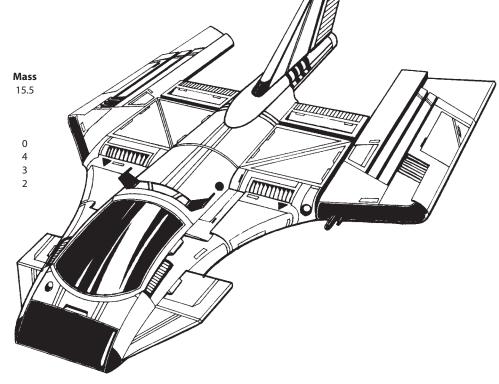
team that proposed the *Cheetah II* were having an inappropriate relationship and were heavily invested in Spyratos Engine Systems, makers of the fighter's unusual 275-rated aerospace fusion engine. A lawsuit saw recovery of some of the money (including Gurnstoggle's severance package), but the stain of the scandal remained with Imstar and the Free Worlds military for some time. Spyratos Engine Systems was cleared of any wrongdoing, but was unable to recover from the loss in building a new fusion engine line that had no customers.

Type: Cheetah II

Technology Base: Inner Sphere

Tonnage: 25

Equipment	
Engine:	275
Safe Thrust:	13
Maximum Thrust:	20
Structural Integrity:	13
Heat Sinks:	10
Fuel:	320
Cockpit:	
Armor Factor:	32
	Armor
	Value
Nose	9
Wings	9/9
Aft	5



Weapons and Ammo	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
Small Laser	Nose	.5	1	3	_	_	_

Notes: Features the following Design Quirks: Atmospheric Flyer, Bad Reputation, Difficult to Maintain

BRIGHT STAR AUTO SCOUT

Outcome Summation: Failed Prototype **Producer/Site:** Ulsop Robotics, Zebebelgenubi

Supervising Technician: General Jamison Cameron

Project Start Date: 2539 **Failure Analysis:** Unknown

Overview

A longtime builder of quality robots and computers, Ulsop Robotics was looking to branch out into other areas of high technology. Their first attempt was to use their expertise to develop an unmanned exploration JumpShip, hoping to reduce or eliminate the need for human beings to take up the mundane tasks of mapping and evaluating distant star systems, a duty that had cost the lives of more than a few crews during the time of the Star League. A fully automated system would end the risk as well as perform the job cheaper and quicker.

As Ulsop had never built any spacecraft before—let alone JumpShips—many doubted the company's ambitious new project, though the resulting design was very compact and efficient. Built to operate completely unmanned, the *Bright Star* (as the prototype was dubbed), possessed limited life support capacity and access ways that were barely human-sized, sufficient enough only for the technical teams who would periodically work on the craft between missions. It possessed a lifeboat should something go wrong while the crew was onboard, but even this amenity was configured more for unmanned operation, as it was to double as an emergency data dump capsule, intended to jettison in emergencies with a backup copy of all collected data to date.

The true challenge would be in the operation of the JumpShip. Not only would it have to perform the calculations for the next jump, it would need to determine which system to visit next. It would also need to monitor its supply of consumables and plot a return path that would allow it to be resupplied from its home base. Beyond the navigation, the *Bright Star* needed to map out the systems it visited, identifying all the major celestial bodies and any important raw materials, such as ice. As the needs of a survey differed based on the size and how many celestial bodies it contained, the time and supplies it would require could vary, adding another complicated process for the software to determine. Yet Ulsop believed they had addressed all the issues.

An escorted trip to Ozawa from Zebebelgenubi showed that the *Bright Star* could safely perform jumps and survey a system faster than a human crew. After a celebratory christening, where an Ulsop robot smashed a glass container of microchips across the bow, the scout was sent on its maiden voyage. While the SLDF liaison requested to begin with a five-year mission, Ulsop had planned a ten-jump limit for the first solo voyage, with it returning to Zebebelgenubi when it was complete.

Instead of following the programmed course, the *Bright Star* immediately jumped to already explored systems. Ulsop attempted to reclaim control of the ship, using HPGs and command circuits to try and catch it before its jumps, but to no avail. Remote access failed and the last confirmed sighting of it was in the New Samarkand system before it left the known space. There have been rumored sightings in the time since then, but nothing confirmed. It seems unlikely that the *Bright Star* is still functional after half a millennium, but as the Champlain-III probe showed in 3075, it is possible for some probes to survive even a thousand years.

Bright Star Automated Scout

Use: Exploration Unit

Tech: Inner Sphere (Experimental)

Introduced: 2543 Mass: 60,000 tons

Dimensions

Length: 124 meters Width: 22 meters Height: 15.2 meters Sail Diameter: 890 meters

Fuel: 150 tons (1,500 points) **Tons/Burn-day:** 0.977

Station-keeping Thrust: 0.1G (0.2 Thrust)

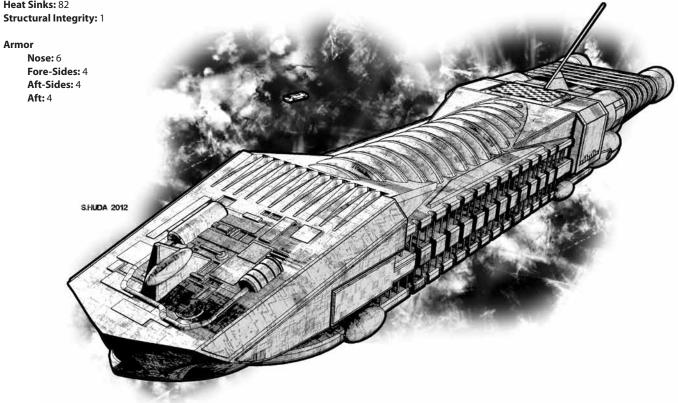
Sail Integrity: 3 KF Drive Integrity: 3 Heat Sinks: 82

Cargo

Bay 1: Small Craft (2) 1 Door Bay 2: Cargo (123.5 tons) 1 Door

Life Boats: 1 Escape Pods: 0 Crew: None

Notes: Equipped with 32.5 tons of standard armor. Features prototype Aerospace Smart Robotic Control System (ASRCS)-style equipment (Gunnery: 4, Piloting: 5; 360 tons), Large NCSS, Communications equipment (13 tons), 2 Drone Carrier Control Systems (3 tons). Features the following Design Quirk: Non-functional (Fully automated ASRCS-driven JumpShip)



ENTERPRISE

Outcome Summation: Failed Prototype

Producer/Site: Daussault-Shimmon Enterprises, New Earth **Supervising Technician:** Admiral Ursula Verlander

Project Start Date: 2745

Failure Analysis: Inoperable Equipment

Overview

Warfare is ever changing, every time that the 'ultimate weapon' appears to be approaching, another one neutralizes it. The appearance of aircraft carriers in the mid twentieth century signaled the beginning of the end for the battleship. Fearing the historical ramifications, commanders of the Star League black navy felt that the same thing might occur in space. Rather than leave matters to chance, they assigned the head of naval architecture to design a WarShip carrier that would invalidate the WarShips of the member states.

The first draft of the specifications called for a million ton ship that could carry three wings of fighters. As with many of the Star League's projects, specifications changed multiple times. The final vessel was sixty percent bigger and carried almost a thousand fighters. In addition to changing the design multiple times, each major revision brought in a new set of engineers, with over a dozen firms receiving payment for a complete set of schematics.

The first ship to be built was named after a long line of Terran aircraft carriers. Holding eighteen wings of fighters internally, in addition to the capacity of any DropShips on its four docking points. With a total of fifty-four fighter bay doors, the Enterprise could launch an entire wing every ten seconds at peak combat performance. In the bowels of the ship, the most complex command and control system that the Star League had ever designed for a vessel lay, capable of tracking up to 2500 different objects during combat. A large assortment of capital weapons gave the Enterprise not only a good punch, but reach as well. Perhaps the biggest innovation was the inclusion of vast arrays of large pulse lasers and anti-missile systems. These would prevent the ship from falling prey to its own revolution in space combat, swarms of fighters. The anti-missile systems would also allow incoming missiles, both conventional and nuclear, to be shot down before they could damage the vessel and leave it's hoards of fighters stranded.

When the vessel finally launched, some five years after the first drafts were drawn, all the eyes in the SLDF navy were on it. The *Enterprise* could not produce enough thrust to leave its berth and tugs were forced to move the ship out of its construction dock around the planet Saturn. The viewing audience gave up after four hours of waiting for the WarShip to rectify the propulsion problem and the test runs were rescheduled for a later date. That date never arrived.

Due to the multitude of different plans, investigators determined that the engines did not work with the thruster network. Even if they could repair the main thrusters, the ship could never maneuver. Admiral Verlander took an early retirement, saving the careers of the other supporters of the program. The project was canceled and never revisited. The ship itself was towed to asteroid belt where it has since been stripped down to a bare hulk, with chunks cut out of even that by scavengers of the Sol system.

Enterprise Super Carrier

Use: Carrier WarShip

Tech: Inner Sphere (Experimental)

Introduced: 2749 Mass: 1,600,000 tons

Dimensions

Length: 1,250 meters **Width:** 158 meters **Height:** 98 meters

Sail Diameter: 1,190 meters

Fuel: 4000 tons (10,000 points)

Tons/Burn-day: 39.52 Safe Thrust: 2 Maximum Thrust: 3 Sail Integrity: 7 KF Drive Integrity: 31 Heat Sinks: 2,988 (5,976) Structural Integrity: 50

Armor

Nose: 235 Fore-Sides: 210 Aft-Sides: 208 Aft: 188

Cargo

Bay 1: Fighters (648) 11 Doors Bay 2: Cargo (288,220.5) 2 Doors Bay 3: Fighters (324) 11 Doors

DropShip Capacity: 4 Grave Decks: 2 (150 meters) Life Boats: 435

Escape Pods: 640

Crew: 115 officers, 280 enlisted/non-rated, 100 gunners, 1,944 bay

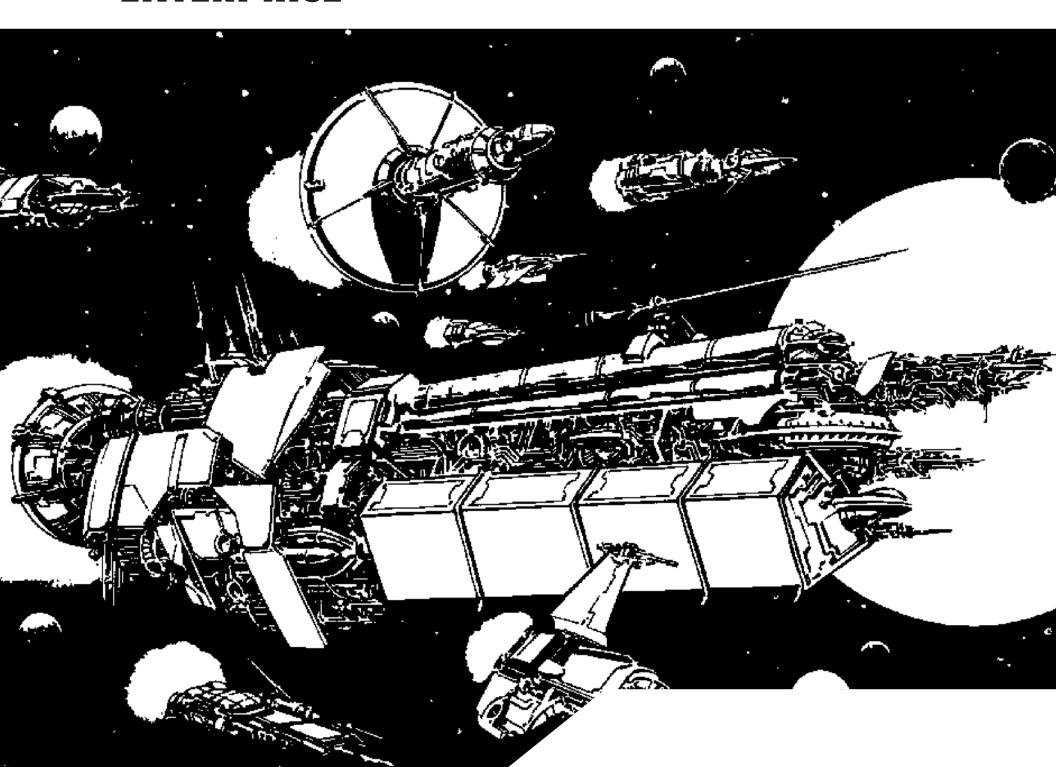
personnel

Ammunition: 77 rounds Killer Whale ammunition (2,000 tons), 77 rounds White Shark ammunition (1,600 tons), 77 rounds Barracuda ammunition (1,200 tons), 10 rounds of NAC/25 ammunition (10 tons) 60 rounds NAC/30 ammunition (60 tons), 40 rounds NAC/35 ammunition (40 tons), 864 rounds AMS ammunition (72 tons)

Notes: Equipped with 1,536.5 tons of Ferro-carbide armor and lithium-fusion batteries.

Weapons:	Cap	ital Attac	k Values	(Standaı	rd)	
Arc (Heat) Type	Heat	Short	Medium	Long	Extreme	Class
Nose (820 Heat)						
4 NL/45	280					Capital Laser
2 Medium NPPC	270				. ,	Capital PPC
5 AR10	100	**	**	**	**	Capital Missile
(17 KW, 17 WS,	,					
8 Large Pulse Lasei		7 (72)	7 (72)	_	_	Pulse Laser
8 Large Pulse Lasei		7 (72)	7 (72)	_	_	Pulse Laser
10 AMS	10	_	_	_	_	Point Defense
(108 rounds)						
FL/FR (760 Heat)		/	/	/	/	
4 NL/55	340	. ,	. ,	. ,	. ,	Capital Laser
2 Medium NPPC	270					Capital PPC
3 AR10	120	**	**	**	**	Capital Missile
(10 KW, 10 WS,		7 (70)	7 (70)			
8 Large Pulse Lasei		7 (72)	7 (72)	_	_	Pulse Laser
10 AMS	10	_	_	_	_	Point Defense
(108 rounds)	- 43					
LBS/RBS (1,605 He 4 NL/55	at) 340	22 (220)	22 (220)	22 (220)	22 (220)	C:+-!!
	540 675					Capital Laser Capital PPC
3 Heavy NPPC 2 NAC/30	200				45 (450)	
(30 rounds)	200	60 (600)	60 (600)	00 (000)	_	Capital AC
2 NAC/35	240	70 (700)	70 (700)			Capital AC
(20 rounds)	240	70 (700)	70 (700)	_		Capital AC
3 AR10	60	**	**	**	**	Capital Missile
(10 KW, 10 WS,						Capital Missile
8 Large Pulse Laser	,	7 (72)	7 (72)	_	_	Pulse Laser
10 AMS	10	, (, 2)	, (, 2)	_	_	Point Defense
(108 rounds)	10					r ome belense
AL/AR (610 Heat)						
3 NL/45	210	14 (140)	14 (140)	14 (140)	14 (140)	Capital Laser
2 Medium NPPC	270					Capital PPC
3 AR10	120	**	**	**	**	Capital Missile
(30 rounds)						•
8 Large Pulse Laser	s 80	7 (72)	7 (72)	_	_	Pulse Laser
10 AMS	10	_	_	_	_	Point Defense
(108 rounds)						
Aft (584 Heat)						
2 NL/35	104	7 (70)	7 (70)	7 (70)	7 (70)	Capital Laser
1 Heavy NPPC	225					Capital PPC
1 NAC/25	85	25 (250)	25 (250)	25 (250)	_	Capital Missile
(10 rounds)						
8 Large Pulse Laser		7 (72)	7 (72)	_	_	Pulse Laser
8 Large Pulse Lasei		7 (72)	7 (72)	_	_	Pulse Laser
10 AMS	10	_	_	_	_	Point Defense
(108 rounds)						

ENTERPRISE



MONITORS

Outcome Summation: Canceled Prototype Producer/Site: Blue Nose Clipperships of Mars, Sol **Supervising Technician:** Commodore Mortimer Basquiz

Project Start Date: 2683

Failure Analysis: Inefficient Design and Inadequate Infrastructure

Overview

With the advent of the compact KF drive, space became a much more dangerous place. No longer were warships limited to assault DropShips, but they could easily surpass a million tons. Yet, almost half of that mass was still tied up in the KF drive. During the latter part of the twenty-seventh century, a group of SLDF admirals pushed to create a new breed of WarShip, dispensing with the KF drive with the goal of doubling the potential firepower such a vessel could bring to bear. After over a decade of campaigning, funding was finally allocated for project AMHITRITE and Blue Nose Clipperships won the bidding to provide

construction for the prototype.

Though the concept "monitor" was based on the proven hull of the venerable Avatar class cruiser, almost immediately problems emerged when the KF drive was removed from the equation. Without the frame around the KF drive acting as the ship's primary keel, stress analysis revealed that a great deal of additional structural reinforcement would be needed to avoid integrity failure under combat thrust. The design plans were hastily re-drawn and construction resumed, but the structure reinforcements ate away far more mass than originally expected.

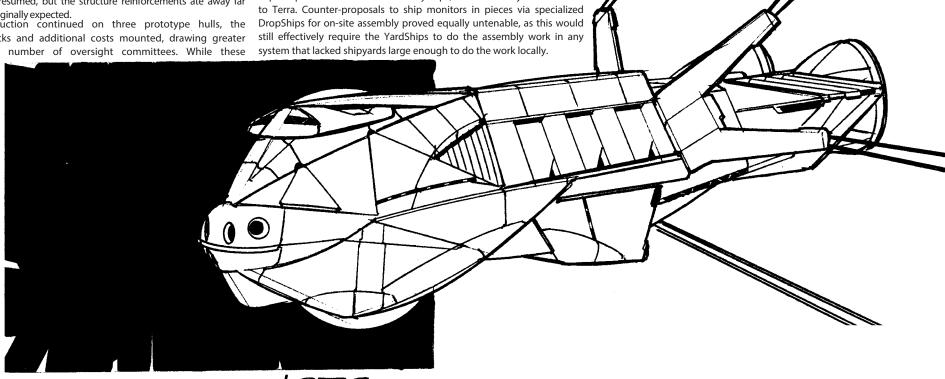
As construction continued on three prototype hulls, the numerous setbacks and additional costs mounted, drawing greater scrutiny from a number of oversight committees. While these monitors had

a potential military impact, the potential political impact of their possible failure was orders of magnitudes greater. Internal divisions, even among the Star League admiralty, quickly formed, with pro-monitor and antimonitor camps ignoring any data that failed to agree with their positions. Combat simulations and technical projections won the first victories in favor of the monitors, with most simulations showing overwhelming victories between the heavily armed monitors against larger jumpcapable opponents. Unfortunately, these tactical advantages paled in comparison with the logistical studies ordered by Admiral Arthur Ubuntu, who led the challenge against AMHITRITE as the construction effort stretched past eight years without a single prototype emerging

Ubuntu's studies quickly revealed that, in addition to the greater manpower needs each monitor would need by dint of their extra firepower alone, the support apparatus needed for widespread deployment of monitors would quickly outstrip the Hegemony's naval resources. This monumental problem primarily stemmed from the monitors' inability to perform their own jumps. Unbuntu noted that the monitors' sheer mass—well beyond the scale of the largest DropShips of the day—would force the SLDF to use YardShips to transport and deploy each monitor fleet to its duty station, an expensive proposition as any sizable monitor presence in any given system would thus require dozens —perhaps even hundreds—of such jumps, even for the systems nearest

To make matters worse, after disputing computer simulations that underscored the physical dangers of moving monitors in this fashion, Commodore Basquiz, as head of the project, insisted on a "live test", in which one of the half-completed prototypes would be moved from Mars to New Earth via the SLS J. Swift, a Newgrange-class YardShip. After tugboats were needed to get the prototype from its shipyard in Martian orbit to the Swift, the YardShip was damaged during the mooring process and suffered severe structural and drive damage after the jump to New Earth. The damage was so severe that a second YardShip was needed to take the monitor back to Mars, while the J. Swift needed five months of repairs before she could jump

Convinced of the inability to properly produce, deploy, and maintain a suitable fleet of monitors for local system defense even in the Sol system, the Star League scrapped the monitor project, and ordered the incomplete hulls dismantled. Not a single one of the prototypes ever flew under its own power.



'MECH RECORD SHEET

'MECH DATA

Type: Ostscout IIC

Movement Points: Tonnage: 35

Tech Base: Mixed Tech (Clan) Walking: 11

(Experimental) Running: 17

Jumping: Era: Jihad

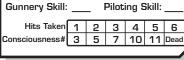
Weapons & Equipment Inventory (hexes)

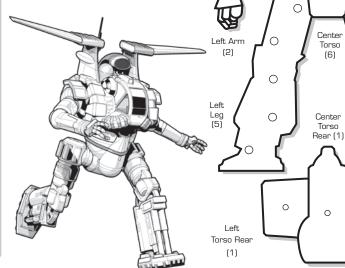
Qty	Туре	Loc	Ht	Dmg	Min	Sht	Med	Lng
1	Angel ECM Suite	HD	_	[E]	_	_	_	6
1	Bloodhound	LT	_	[E]	_	_	_	6
	Active Probe (IS)							

Clan TAG RA O 0 [S] 5 9

WARRIOR DATA

Name:	
Gunnery Skill:	Piloting Skil





CRITICAL HIT TABLE

Left Arm

- 1. Shoulder
- Upper Arm Actuator
- 1-3 3. Lower Arm Actuator
- Hand Actuator
 - 5. Endo Steel
 - Endo Steel 6.
 - Endo Steel
 - Endo Steel
- Ferro-Fibrous
- 4-6 ^{5.} Ferro-Fibrous
- Ferro-Fibrous
 - Ferro-Fibrous

Left Torso

- 1. XXL Fusion Engine
- 2. XXL Fusion Engine
- XXL Fusion Engine
- 1-3 3. XXL Fusion Engine
 - Partial Wing 5.
 - Partial Wing 6.

 - Partial Wing 1. Jump Jet
- 4-6 ³. Jump Jet
 - Bloodhound Active Probe (IS)
 - Bloodhound Active Probe (IS)
 - Bloodhound Active Probe (IS)

Left Leg

- Hip 1.
- 2. **Upper Leg Actuator**
- Lower Leg Actuator 3
- 4. Foot Actuator
- Jump Jet
- 6. Jump Jet

Head

- 1. Life Support
- Sensors
- Cockpit 3.
- 4. Angel ECM
- Sensors
- Life Support

Center Torso

- XXL Fusion Engine
- XXL Fusion Engine
- XXL Fusion Engine
- 1-3 XL Gyro (IS)
 - 5. XL Gyro (IS)
 - XL Gyro (IS)

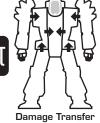
 - XL Gyro (IS)
 - 2. XL Gyro (IS)
- XL Gyro (IS) 4-6
 - 4. XXL Fusion Engine
 - XXL Fusion Engine

 - XXL Fusion Engine

Engine Hits OOO Gyro Hits O O

Sensor Hits O O

Life Support O



Diagram

Right Arm

- 1. Shoulder
- Upper Arm Actuator 2.
- 1-3 3. Lower Arm Actuator
- Hand Actuator
 - 5. Clan TAG
 - Endo Steel 6.
 - 1. Endo Steel

 - Endo Steel
- 3. Ferro-Fibrous
- 4-6 Ferro-Fibrous 4.
 - 5. Ferro-Fibrous
 - Roll Again

Right Torso

- 1. XXL Fusion Engine
- XXL Fusion Engine
- 1-3 3. XXL Fusion Engine XXL Fusion Engine
- 5. Partial Wing
 - Partial Wing
- Partial Wing Jump Jet
- 4-6 3. Jump Jet
 - Jump Jet Jump Jet
 - 6. Jump Jet

Right Leg

- Hip
- Upper Leg Actuator
- 3 Lower Leg Actuator
- 4. Foot Actuator
- Jump Jet
- Jump Jet

INTERNAL STRUCTURE DIAGRAM

ARMOR DIAGRAM

Head (5)

0 00 00

0 0

00

0 0

Right Torso (5)

0

0

(2)

Right

Leg (5)

Right

Torso Rear

(1)

Heat

Scale

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

0

00

0

0

0

0

0

0

Left Torso

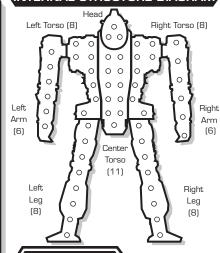
0

0

0 0

0

0



HEAT DATA

Heat Sinks: Heat 10 (23) Effects Level* Shutdown Double Ammo Exp. avoid on 8+ 28 26 Shutdown, avoid on 10+ 0000000000 -5 Movement Points 25 24 +4 Modifier to Fire 23 Ammo Exp. avoid on 6+ 22 Shutdown, avoid on 8+ 20 -4 Movement Points Ammo Exp. avoid on 4+ 18

- Shutdown, avoid on 6+ +3 Modifier to Fire
- -3 Movement Points 15 Shutdown, avoid on 4+ 14 13 +2 Modifier to Fire
- 10 -2 Movement Points 8
- +1 Modifier to Fire -1 Movement Points

'MECH RECORD SHEET

'MECH DATA

1 LRM 5

Type: LIB-4T Liberator

Movement Points: Tonnage: 40

Tech Base: Inner Sphere Walking: 6

(Introductory) Running: 9

Era: Succession Wars

7

14 21

Weapons & Equipment Inventory (hexes)

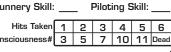
					-			
	Qty Type 1 Large Laser	Loc	Ht	Dmg	Min	Sht	Med	Lng
	1 Large Laser	CT	8	8 [DE]	_	5	10	15
	1 SRM 2	LT	2	2/Msl	_	3	6	9
				[M,C,S]				
	1 LRM 5	RA	2	1/Msl	_	3	6	9
١				IM C SI				

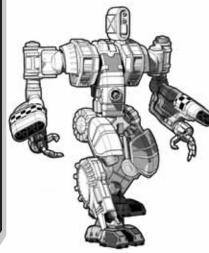
LA 2

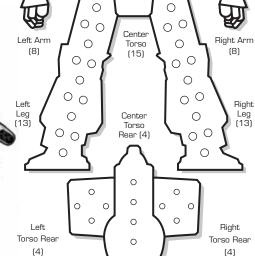
1/Msl [M,C,S]

WARRIOR DATA

Name:		
Gunnery	y Skill:	Piloting Sl







ARMOR DIAGRAM

Head (9)

000

000

000

000

0

Right Torso [13]

0

C 0

0

Heat

Overflo

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

0

0

00

0

0

0

0 0

Left Torso

0

0 0

0

0 0 0

0 0

000

0

0

0

CRITICAL HIT TABLE

Left Arm

- 1. Shoulder
- Upper Arm Actuator
- 1-3 3. Lower Arm Actuator
- **Hand Actuator**
 - 5. LRM 5
 - 6. Roll Again
 - Roll Again
 - Roll Again
- Roll Again 4-6
 - Roll Again 4.
 - Roll Again Roll Again
 - Left Torso
 - SRM 2
 - Ammo (SRM 2) 50 2.
- Roll Again 1-3
 - 4. Roll Again
 - 5. Roll Again
 - 6. Roll Again
 - Roll Again Roll Again
 - Roll Again 3.
- 4-6 4. Roll Again
 - 5. Roll Again
 - Roll Again
 - Left Leg
 - Hip
 - Upper Leg Actuator 2.
 - Lower Leg Actuator 3.
 - 4. Foot Actuator
 - Heat Sink
 - 6. Roll Again

Head

- 1. Life Support
- 2. Sensors
- Cockpit 3.
- Roll Again 4.
- Sensors
- Life Support

Center Torso

- **Fusion Engine**
- **Fusion Engine**
- **Fusion Engine** 1-3 _{4.}
 - Gyro
 - 5. Gyro 6.
 - Gyro
 - 1. Gyro
 - Fusion Engine 2.
- **Fusion Engine** 4-6 Fusion Engine
 - Large Laser
 - Large Laser

Engine Hits OOO Gyro Hits O O Sensor Hits O O Life Support O



Right Arm

- 1. Shoulder
- Upper Arm Actuator
- 1-3 3. Lower Arm Actuator
 - Hand Actuator
 - 5. LRM 5
 - Ammo (LRM 5) 24
 - Roll Again
 - Roll Again
- Roll Again 4-6 4. Roll Again
 - - Roll Again 5.
 - Roll Again

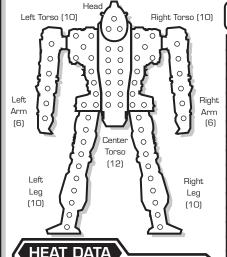
Right Torso

- 1. Roll Again
- Roll Again
- 1-3 3. Roll Again
- Roll Again Roll Again 5.
 - Roll Again
 - Roll Again
- Roll Again
- Roll Again 4-6 4.
 - Roll Again
 - 5. Roll Again
 - Roll Again

Right Leg

- 1. Hip
- Upper Leg Actuator
- 3. Lower Leg Actuator
- 4. Foot Actuator
- Roll Again 6. Roll Again

INTERNAL STRUCTURE DIAGRAM



DATA Heat Sinks: Heat Effects Level* Shutdown Single

30 Ammo Exp. avoid on 8+ 28 Shutdown, avoid on 10+ 26 -5 Movement Points

- 24 +4 Modifier to Fire Ammo Exp. avoid on 6+ 23 Shutdown, avoid on 8+
- 22 -4 Movement Points Ammo Exp. avoid on 4+
- Shutdown, avoid on 6+ 18 +3 Modifier to Fire
- -3 Movement Points 15 14 Shutdown, avoid on 4+

LAND-AIR BATTLEMECH RECORD SHEET

LAM DATA

Type: SCP-X1 SCORPION LAM

Tonnage: 55 Tech Base: Inner Sphere

(Experimental—Illegal) Movement Points:

BattleMech Mode AirMech Mode Fighter Mode 15 Safe Thrust: Walking: Cruising: 5

5 Running: 8 Flank: 23 Max Thrust: 8 Jumping:

Weapons & Equipment Inventory (hexes)

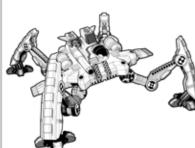
Qty Type Loc Ht Dmg Min Sht Med Lng Aero

PPC RT 10 10 [DE] 3 6 12 18 10(M SRM 6 4 2/Msl — 3 6 9 12(S) [M,C,S]

WARRIOR DATA

BattleMech Gunnery Skill: Piloting Skill: Aerospace Gunnery Skill: Pilotina Skill:

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



Advanced Movement Compass



Right Front Leg

Upper Leg Actuator

Lower Leg Actuator

Foot Actuator

Jump Jet

Roll Again

(5)

Head (8) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0000 0 0 0 0 0000 Left Right Torso 0 0000 0 Torso [11][11]0000 0 0 0000 0000 0 0 0 \bigcirc 0 0 0 0 0 Center 0 Torso 0 0 0 (24) 0 Left Right Rear Leg Rear Leg Left Right Front Leg (10)(10)Front Leg (10) (10)0 0 0 0 0 Left 0 0 Right Torso Rear Torso Rear 0

(5)

Heat

Overfloo

30

29

28

27

267

25

24

23

22*

21

20

19

18

17,

16

15

14

13

12

11

10

9

8*

6

5*

4

3

2

1

O

ARMOR DIAGRAM

CRITICAL HIT TABLE

Left Front Leg

- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator

Left Torso

Ammo (SRM 6) 15

1. Landing Gear

Roll Again

5. Roll Again

Avionics

1-3 3.

4-6 4.

- Jump Jet
- Roll Again

Life Support

Life Support

Sensors

Cockpit

Avionics

Sensors

- Center Torso **Fusion Engine**
- **Fusion Engine**
- **Fusion Engine** Gyro

Head

2.

3.

4.

- 1-3 4.
 - 5. Gyro
 - 6. Gyro

 - Gyro
- **Fusion Engine**
- **Fusion Engine** 4-6
- 4. Fusion Engine
 - Landing Gear

Avionics OOO

Engine Hits 000

Gyro Hits 00

Sensor Hits OO

Structural Integrity

000000000

0000000

Landing Gear O

Life Support O

Jump Jet

Right Torso

- 1. Landing Gear
- 2. **Avionics**
- 1-3 3. **TPPC**

5.

6.

- PPC
- PPC 5.
- 6. SRM 6
- 1. SRM 6 2. Roll Again
- **4-6** 3. Roll Again Roll Again
- 5. Roll Again
 - Roll Again

Left Rear Leg

- Hip 1.
- Upper Leg Actuator
- Lower Leg Actuator
- Foot Actuator
- Jump Jet Roll Again 6.

Damage Transfer Diagram



Right Rear Leg

- Hip
- Upper Leg Actuator
- 3. Lower Leg Actuator
- 4. Foot Actuator
- Heat Sink
- Jump Jet

INTERNAL STRUCTURE DIAGRAM Scale Left Right Torso Torso (13) (13) 0 0 0 0 0 0 0000 0 000 Left Right 00 Front Leg Front Leg (13)(13)Center Torso Left (18) Right Rear Leg Rear Leg (13)(13)

Center Torso Rear (8)

HIE		
leat evel*	Effects	Heat Sinks:
30 28 26 25	Shutdown Ammo Exp. avoid on 8+ Shutdown, avoid on 10+ -5 Movement Points	Single (AirMech +3)
24 23	/Rand. Movement 10+ +4 Modifier to Fire Ammo Exp. avoid on 6+	
20 20	Shutdown, avoid on 8+ -4 Movement Points	00000000
19 18	/Rand . Movement 8+ Ammo Exp. avoid on 4+ Shutdown, avoid on 6+	8
17 15	+3 Modifier to Fire -3 Movement Points /Rand. Movement 7+	8
14 13 10	Shutdown, avoid on 4+ +2 Modifier to Fire -2 Movement Points	Ö
8	/Rand. Movement 6+ +1 Modifier to Fire -1 Movement Points	•
_	/D	

LAND-AIR BATTLEMECH RECORD SHEET

LAM DATA

Type: CPN-1X1 CHAMPION LAM

Tonnage: 60 Tech Base: Inner Sphere

(Experimental—Illegal) Movement Points:

Fighter Mode BattleMech Mode AirMech Mode 15 Safe Thrust: Cruising: Walking: 5 5 Running: 8 Flank: 23 Max Thrust: 8

Jumping: 5

Weapons & Equipment Inventory (hexes)

Qty	Туре		Loc	Ht	Dmg	Min	Sht	Med	Lng	Aero
1	Medium Lase	r	RT	3	5 [DE] —	3	6	9	5(S)

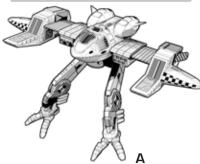
LT 3 5 [DE] — 3 6 9 5(S) Medium Laser 3 6 SRM 6 LT 4 2/Msl 9 12(S

w/Artemis IV FCS [M,C,S]

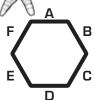
WARRIOR DATA

BattleMech Gunnery Skill: Piloting Skill: Aerospace Gunnery Skill: Piloting Skill:

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



Advanced Movement Compass



00 0 0 0 00 C 0 0 0 0 0 0 0 0 0 0 0 C0 0 00 0000000 00 0 0 00 С 0 0 0 0 0 0 \cap \bigcirc \bigcirc C 0 0 \bigcirc 0 0 0 0 0 0 0 0 00 00 Center Left Arm 0 0 Right Arm Torso (12) (12)0 0 0 0 0 0 00 0 0 Left \bigcirc 0 Right Leg (15) Center Leg (15) 0 0 \bigcirc \bigcirc Torso Rear (8) 0 0 0 0 0 0 0 0

ARMOR DIAGRAM

Head (9)

Right Torso (18)

Left Torso

CRITICAL HIT TABLE

Left Arm

- 1. Shoulder
- Upper Arm Actuator
- 1-3 3. Roll Again
- Roll Again
 - 5. Roll Again
 - 6. Roll Again
 - Roll Again
- Roll Again
- Roll Again
- 4-6 4. Roll Again
 - 5. Roll Again
 - Roll Again

Left Torso

- Landing Gear
- 2. **Avionics** SRM 6
- 1-3 3. SRM 6

 - Artemis IV FCS 5.
 - 6. Medium Laser
 - Medium Laser
 - Ammo (SRM 6 Artemis) 15
- Roll Again 3. 4-6 4
 - Roll Again
 - Roll Again
 - Roll Again

Left Leg

- 1. Hip
- 2. **Upper Leg Actuator**
- Lower Leg Actuator 3
- 4. Foot Actuator
- Jump Jet 6. Jump Jet

Head

- Life Support
- Sensors
- 3. Cockpit
- 4. Avionics
- 5. Sensors
- Life Support

Center Torso

- **Fusion Engine**
- Fusion Engine
- Fusion Engine
- 1-3 4. Gyro
 - 5. Gyro
 - 6.
 - Gyro
 - Gyro

4-6

- 2. **Fusion Engine**
- **Fusion Engine**
- 4. **Fusion Engine**
- Landing Gear
- Jump Jet
 - Avionics OOO

Engine Hits 000

Gyro Hits OO

Sensor Hits OO Landing Gear O Life Support O

Structural Integrity

000000000 000000000



Diagram

Right Arm

- 1. Shoulder
- **Upper Arm Actuator** 2.
- Roll Again 1-3
- Roll Again
 - 5. Roll Again 6. Roll Again
 - Roll Again
 - Roll Again
 - Roll Again
- 4-6 Roll Again 4.
 - 5. Roll Again
 - Roll Again

Right Torso

- 1. Landing Gear
- 2. **Avionics**
- Medium Laser
- 1-3 3. Roll Again
 - Roll Again 5.
 - Roll Again
 - Roll Again Roll Again
- Roll Again
- **4-6** 4. Roll Again
 - 5. Roll Again
 - Roll Again

Right Leg

- Hip
- Upper Leg Actuator
- 3. Lower Leg Actuator
- 4. Foot Actuator
- Jump Jet
- Jump Jet

INTERNAL STRUCTURE DIAGRAM

0 0

0 0 0 0

0 0

Right

Torso Rear

(6)

Heat

Scale

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

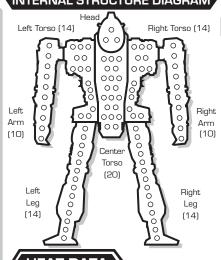
0 0

0 0

Left

Torso Rear

ເອາ



HEAT DATA Heat Sinks: **Effects** Level³ 11 Shutdown Ammo Exp. avoid on 8+ Single Shutdown, avoid on 10+ -5 Movement Points /Rand. Movement 10+ (AirMech +3) 00 +4 Modifier to Fire Ammo Exp. avoid on 6+ Shutdown, avoid on 8+ -4 Movement Points 000000000 /Rand . Movement 8+ Ammo Exp. avoid on 4 19 Shutdown, avoid on 6+ +3 Modifier to Fire -3 Movement Points 18 17 -3 Movement Points /Rand. Movement 7+ Shutdown, avoid on 4+ +2 Modifier to Fire -2 Movement Points /Rand. Movement 6+

13 10

85 +1 Modifier to Fire -1 Movement Points /Rand. Movement 5-

'MECH RECORD SHEET

'MECH DATA

Type: SAM-RS2 MATAR

Movement Points: Tonnage: 110

Walking: 2 Tech Base: Inner Sphere

Running: (Experimental—Illegal) 3

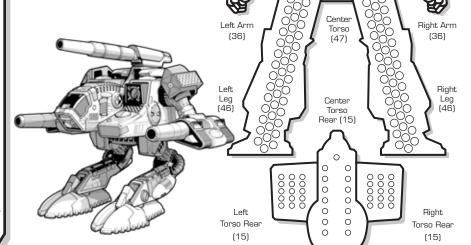
Era: Star League

Weapons & Equipment Inventory (hexes)								
Qty	Туре	Loc	Ht	Dmg	Min	Sht	Med	Lng
1	Large Pulse Laser	RA	10	9	-	3	7	10
1	Gauss Rifle	RT	1	15	2	7	15	22
1	Flamer	RT	2	2	-	1	2	3
1	Gauss Rifle	LT	1	15	2	7	15	22
1	Flamer	LT	2	2	-	1	2	3
1	Guardian ECM	LL	0	-	-	-	_	6
1	Large Pulse Laser	LA	10	9	_	3	7	10
1	Medium Pulse Laser	H(R)	4	6	-	2	4	6
1	ER Large Laser	CT	12	8	-	7	14	19

WARRIOR DATA

Gunnery Skill: Piloting Skill:

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



CRITICAL HIT TABLE

Left Arm

- 1. Shoulder
- Upper Arm Actuator
- 1-3 3. Lower Arm Actua 4. Double Heat Sink Lower Arm Actuator
- Double Heat Sink
 - Double Heat Sink 6.
 - Double Heat Sink
- Double Heat Sink
- 3. Double Heat Sink 4-6 4. Flarge Pulse Laser
 - _Large Pulse Laser
 - Ammo (Gauss) 8

Left Torso

- Double Heat Sink
- Double Heat Sink
- 3. LDouble Heat Sink
- 1-3 3. Gauss Rifle
 - Gauss Rifle 5
 - 6 Gauss Rifle
 - Gauss Rifle
 - Gauss Rifle
- 3. Gauss Rifle
- 4-6 Gauss Rifle 4
 - Flamer
 - 6. Ammo (Gauss) 8

Left Leg

- Hip 1.
- 2. **Upper Leg Actuator**
- Lower Leg Actuator
- Foot Actuator
- Guardian ECM
- **Guardian ECM**

Head

- 1. Life Support
- Sensors
- Cockpit 3.
- Medium Pulse Laser (R) 1-3 3.
 Sensors 1-3 4. 4.
- Sensors
- Life Support

Center Torso

- **Fusion Engine**
- Fusion Engine
- Fusion Engine 4 Gyro
- - 5. Gyro

 - Gyro
 - Gyro
 - Fusion Engine
 - **Fusion Engine**
- 4-6 Fusion Engine
 - ER Large Laser
 - 6. ER Large Laser

Engine Hits OOO Gyro Hits O O

Sensor Hits O O Life Support O



Right Arm

- 1. Shoulder
- Upper Arm Actuator
 - Lower Arm Actuator Double Heat Sink
 - Double Heat Sink
 - Double Heat Sink
 - Double Heat Sink
 - Double Heat Sink
- 3. _Double Heat Sink
- 4. Large Pulse Laser
 - Large Pulse Laser

 - Ammo (Gauss) 8

Right Torso

- 1. Double Heat Sink **Double Heat Sink**
- 1-3 3. 3. Double Heat Sink Gauss Rifle
- Gauss Rifle 5.
- Gauss Rifle Gauss Rifle
- Gauss Rifle 3.
- Gauss Rifle 4-6 Gauss Rifle
- Flamer
 - Ammo (Gauss) 8

Right Leg

- Hip
- **Upper Leg Actuator**
- Lower Leg Actuator
- Foot Actuator
- Roll Again
- Roll Again

INTERNAL STRUCTURE DIAGRAM

Heat

Scale

30*

29

28*

27

26

25*

24*

23*

ARMOR DIAGRAM

Head (9)

Right Torso

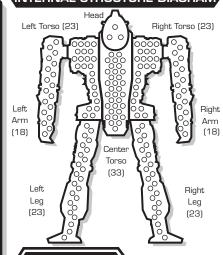
(31)

00

Left Torso

(31)

000



Heat Effects Level* Shutdown Double Ammo Exp. avoid on 8+ 28 26 Shutdown, avoid on 10+ -5 Movement Points 24 +4 Modifier to Fire Ammo Exp. avoid on 6+

22 Shutdown, avoid on 8+ 20 -4 Movement Points

HEAT

- 18
- -3 Movement Points 15
- Shutdown, avoid on 4+ 13 +2 Modifier to Fire
- 10 8 +1 Modifier to Fire
- -1 Movement Points

NTTLETECH

ARMOR DIAGRAM

BAR: 5

Front Armor (10)

HOVER VEHICLE RECORD SHEET

VEHICLE DATA Type: THORIZER

Movement Points:

Tonnage: 35

Hover Mode Air Mode Tech Base: Inner Sphere (Experimental—Illegal) Cruising: 4 Safe Thrust: 4

Flank: Max Thrust: 6 Era: Age of War

Jump: Engine Type: Fusion

Weapons & Equipment Inventory (hexes)

Min Sht Med Lng Qty Type Dmg SRM 2 Front 2/Msl 3 6 9 SRM 2 Rear 2/Msl 3 6 9

Ammo: (SRM 2) 50

2

CREW DATA

Crew: 4

Front

Rear

Gunnery Skill:

Driving Skill:

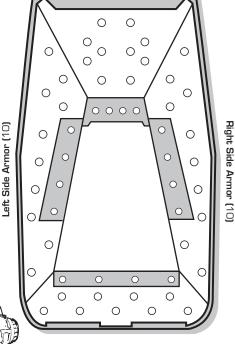
Commander Hit +1 Modifier to all Skill rolls

Driver Hit Modifier to Driving Skill rolls

CRITICAL DAMAGE

Engine Hit F1F2F3D Sensor Hits Motive System Hits

Stabilizers Left



Rear Armor (9)



© 2013 The Topps Company, Inc. Classic BattleTech, BattleTech, 'Mech and BattleMech are trademarks of The Topps Company, Inc. All rights reserved. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Production, LLC. Permission to photocopy for personal use.

GROUND COMBAT VEHICLE HIT LOCATION TABLE

		ATTACK DIRECTION	
D6 Roll	FRONT	REAR	SIDE§
2*	Front (critical)	Rear (critical)	Side (critical)
3	Front†	Rear†	Side†
4	Front†	Rear†	Side†
5	Right Side†	Left Side†	Front†
6	Front	Rear	Side
7	Front	Rear	Side
8	Front	Rear	Side (critical)*
9	Left Side†	Right Side†	Rear†
10	Turret	Turret	Turret
11	Turret	Turret	Turret
12*	Turret (critical)	Turret (critical)	Turret (critical)

A result of 2 or 12 (or an 8 if the attack strikes the side) may inflict a critical hit on the vehicle. For each result of 2 or 12 (or 8 for side attacks), apply damage normally to the armor in that section. The attacking player then automatically rolls once on the Ground Combat Vehicle Critical Hits Table below (see Combat, p. 192 in Total Warfare for more information). A result of 12 on the Ground Combat Vehicles Hit Location Table may inflict critical hit against the turnet; if the vehicle has

no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.
†The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in
that section, but the attacking player also rolls once on the Motive System Damage Table at right (see Combat, p. 192 in
Total Warfare for more information). Apply damage at the end of the phase in which the damage takes effect. Side hits strike the side as indicated by the attack direction. For example, if an attack hits right side, all Side results strike the right side, all Side results strike the right side, all Side results strike the right side, armor. If the vehicle has no turnet, a turnet hit strikes the armor on the side attacked.

MOTIVE SYSTEM DAMAGE TABLE

2D6 Roll	EFFECT*
2-5	No effect
6-7	Minor damage; +1 modifier to all Driving Skill Rolls
8-9	Moderate damage; -1 Cruising MP, +2 modifier to all
	Driving Skill Rolls
10–11	Heavy damage; only half Cruising MP (round fractions up),
	+3 modifier to all Driving Skill Rolls
12+	Major damage; no movement for the rest of the game.

Vehicle Type Modifiers: Attack Direction Modifier: Hit from rear Tracked, Naval +0 +2 Hit from the sides +2 Wheeled

Vehicle is immobile.

Hovercraft, Hydrofoil +3 WiGE

*All movement and Driving Skill Roll penalties are cumulative. However, each Driving Skill Roll modifier can only be applied once. For example, if a roll of 6-7 is made for a vehicle, inflicting a +1 modifier, that is the only time that particular +1 can be applied; a subsequent roll of 6-7 has no additional effect. This means the maximum Driving Skill Roll modifier that can be inflicted from the Motive System Damage Table is +6. If a unit's Cruising MP is reduced to O, it cannot move for the rest of the game, but is not considered an immobile target. In addition, all motive system damage takes effect at the end of the phase in which the damage occurred. For example, if two units are attacking the same Combat Vehicle during the Weapon Attack Phase and the first unit inflicts motive system damage and rolls a 12, the -4 immobile target modifier would not apply for the second unit. However, the –4 modifier would take effect during the Physical Attack Phase. If a hover vehicle is rendered immobile while over a Depth 1 or deeper water hex, it sinks and is destroyed.

GROUND COMBAT VEHICLE CRITICAL HITS TABLE

		LUCA	ION HII	
2D6 Roll	FRONT	SIDE	REAR	TURRET
2-5	No Critical Hit	No Critical Hit	No Critical Hit	No Critical Hit
6	Driver Hit	Cargo/Infantry Hit	Weapon Malfunction	Stabilizer
7	Weapon Malfunction	Weapon Malfunction	Cargo/Infantry Hit	Turret Jam
8	Stabilizer	Crew Stunned	Stabilizer	Weapon Malfunction
9	Sensors	Stabilizer	Weapon Destroyed	Turret Locks
10	Commander Hit	Weapon Destroyed	Engine Hit	Weapon Destroyed
11	Weapon Destroyed	Engine Hit	Ammunition **	Ammunition **
12	Crew Killed	Fuel Tank*	Fuel Tank*	Turret Blown Off

^{*}If Combat Vehicle has ICE engine only. If Combat Vehicle has a fusion engine, treat this result as Engine Hit.



^{**} If Combat Vehicle carries no ammunition, treat this result as Weapon Destroyed.

ARMOR DIAGRAM

Front Armor (28)

TRANS-TRACK VEHICLE RECORD SHEET VEHICLE DATA Type: CONDOR TRANS-TRACK Movement Points: Tonnage: 50 Crew: 4 Gunnery Skill: ____ Driv

Hover Mode Tracked Mode Tech Base: Inner Sphere
Cruising: 8 Cruising: 3 (Experimental—Illegal)

Flank: 12 Flank: 5 Era: Succession Wars

Engine Type: ICE

We	apons & Equip	(he	(es)				
Qty	Туре	Loc	Dmg	Min	Sht	Med	Lng
1	AC/2	Turret	2	4	8	16	24
2	Medium Laser	Turret	3	-	3	6	9
1	Machine Gun	Front	2	-	1	2	3

Ammo: (AC/2) 45, (MG) 100



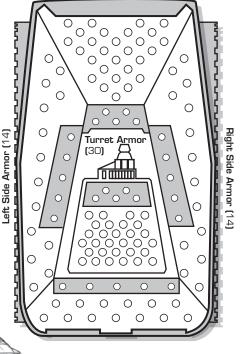
CRITICAL DAMAGE Turret Locked Engine Hit

Sensor Hits +1+2+3 D

Motive System Hits +1+2+3

Stabilizers

Front Left Right Rear Turret



Rear Armor (13)



© 2013 The Topps Company, Inc. Classic BattleTech, BattleTech, 'Mech and BattleMech are trademarks of The Topps Company, Inc. All rights reserved. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Production, LLC. Permission to photocopy for personal use.

GROUND COMBAT VEHICLE HIT LOCATION TABLE

		ATTACK DIRECTION	
2D6 Roll	FRONT	REAR	SIDES
2*	Front (critical)	Rear (critical)	Side (critical)
3	Front†	Rear†	Side†
4	Front†	Rear†	Side†
5	Right Side†	Left Side†	Front†
6	Front	Rear	Side
7	Front	Rear	Side
8	Front	Rear	Side (critical)*
9	Left Side†	Right Side†	Rear†
10	Turret	Turret	Turret
11	Turret	Turret	Turret
12*	Turret (critical)	Turret (critical)	Turret (critical)

*A result of 2 or 12 (or an 8 if the attack strikes the side) may inflict a critical hit on the vehicle. For each result of 2 or 12 (or 8 for side attacks), apply damage normally to the armor in that section. The attacking player then automatically rolls once on the Ground Combat Vehicle Critical Hits Table below (see Combat, p. 192 in Total Warfare for more information). A result of 12 on the Ground Combat Vehicles Hit Location Table may inflict critical hit against the turret; if the vehicle has no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.

no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.
†The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in
that section, but the attacking player also rolls once on the Motive System Damage Table at right (see Combat, p. 192 in
Total Warfare for more information). Apply damage at the end of the phase in which the damage takes effect.
\$Side hits strike the side as indicated by the attack direction. For example, if an attack hits right side, all Side results
strike the right side armor. If the vehicle has no turret, a turret hit strikes the armor on the side attacked.

MOTIVE SYSTEM DAMAGE TABLE

2D6 Roll	EFFECT*
2-5	No effect
6-7	Minor damage; +1 modifier to all Driving Skill Rolls
8-9	Moderate damage; -1 Cruising MP, +2 modifier to all
	Driving Skill Rolls
10-11	Heavy damage; only half Cruising MP (round fractions up),
	+3 modifier to all Driving Skill Rolls
12+	Major damage; no movement for the rest of the game.
	Vehicle is immobile.

Attack Direction Modifier:
Hit from rear +1 Tracked, Naval +0
Hit from the sides +2 Wheeled +2
Hovercraft, Hydrofoil +3
WiGE +4

*All movement and Driving Skill Roll penalties are cumulative. However, each Driving Skill Roll modifier can only be applied once. For example, if a roll of 6-7 is made for a vehicle, inflicting a +1 modifier, that is the only time that particular +1 can be applied; a subsequent roll of 6-7 has no additional effect. This means the maximum Driving Skill Roll modifier that can be inflicted from the Motive System Damage Table is +6. If a unit's Cruising MP is reduced to 0, it cannot move for the rest of the game, but is not considered an immobile target. In addition, all motive system damage takes effect at the end of the phase in which the damage occurred. For example, if two units are attacking the same Combat Vehicle during the Weapon Attack Phase and the first unit inflicts motive system damage and rolls a 12, the -4 immobile target modifier would not apply for the second unit. However, the -4 modifier would take effect during the Physical Attack Phase. If a hover vehicle is rendered immobile while wer a Depth 1 or deeper water hex, it sinks and is destroyed.

GROUND COMBAT VEHICLE CRITICAL HITS TABLE

LOCATION HIT

		LOCAT	TON HIT	
2D6 Roll	FRONT	SIDE	REAR	TURRET
2-5	No Critical Hit	No Critical Hit	No Critical Hit	No Critical Hit
6	Driver Hit	Cargo/Infantry Hit	Weapon Malfunction	Stabilizer
7	Weapon Malfunction	Weapon Malfunction	Cargo/Infantry Hit	Turret Jam
8	Stabilizer	Crew Stunned	Stabilizer	Weapon Malfunction
9	Sensors	Stabilizer	Weapon Destroyed	Turret Locks
10	Commander Hit	Weapon Destroyed	Engine Hit	Weapon Destroyed
11	Weapon Destroyed	Engine Hit	Ammunition **	Ammunition **
12	Crew Killed	Fuel Tank*	Fuel Tank*	Turret Blown Off

^{*}If Combat Vehicle has ICE engine only. If Combat Vehicle has a fusion engine, treat this result as Engine Hit.

** If Combat Vehicle carries no ammunition, treat this result as Weapon Destroyed.



NAVAL VESSEL RECORD SHEET

VEHICLE DATA Type: NEPTUNE HYPER Movement Points: Tonnage: 100 Hydrofoil Mode Tech Base: Inner Sphere Sub Mode (Experimental—Illegal) Cruising: 3 Cruising: 7 Flank: 5 Flank: 11 Succession Wars Era: Engine Type: ICE Weapons & Equipment Inventory (hexes) Qty Type Loc Dmg Min Sht Med Lng LR Torpedo 20 Front 1/Msl 14 21 SR Torpedo 6 Front 2/Msl 1 SR Torpedo 6 Rear 2/Msl

Ammo: (LR-T 20) 12, (SR-T 6) 15

CREW DATA

Crew: 8 Gunnery Skill: ____ Driving Skill: Commander Hit +1 +2 Driver Hit Modifier to Driving Skill rolls Modifier to all Skill rolls

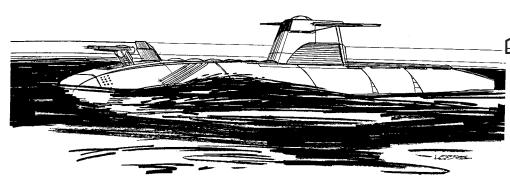
CRITICAL DAMAGE

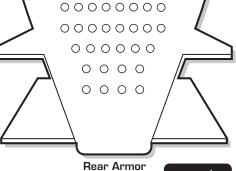
Engine Hit +1+2+3D Sensor Hits Motive System Hits +1 +2 +3 Stabilizers Left Right [Rear

NOTES

ARMOR DIAGRAM

Front Armor (70)





(38)

DEP.	ГЫ	ΤО	Λ CI	
			Ē	

Turn	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depth																				

/TTLETECL

SUPER-HEAVY VEHICLE RECORD SHEET

VEHICLE DATA

Type: MUSE IRONHORSE (TRACTOR)

Tonnage: 600 Movement Points: Cruising: 9 Tech Base: Clan

(Experimental) Flank:

Movement Type: Rail Era: Jihad

Engine Type: Fusion

Weapons & Equipment Inventory (hexes)

GLY	туре	LOC	Ding	IVIIII	SIIL	ivieu	ruí
4	ER PPC	Turret	15	0	7	14	23
1	Thumper	Turret	15A	_		_	21
2	LRM 15	Turret	1/Msl	0	7	14	21
1	Plasma Cannon	Turret	**	0	6	12	18
2	ER PPC	Front	15	0	7	14	23
1	Plasma Cannon	Front	* *	0	6	12	18
1	Plasma Cannon	F Right	**	0	6	12	18
1	Plasma Cannon	F Left	* *	0	6	12	18
1	Plasma Cannon	R Right	**	0	6	12	18
1	Plasma Cannon	R Left	**	0	6	12	18

Notes:

Features Armored and Tractor Chassis modifications.

Ammo: (LRM 15) 40, (Plasma Cannon) 100, (Thumper) 200

CREW DATA

Crew: 16 Gunnery Skill:

Driving Skill:

Commander Hit +1 Modifier to all Skill rolls

Driver Hit Modifier to Driving Skill rolls

F1F2F3D

2D6 Roll

2-5 6-7

8-9

EFFECT

CRITICAL DAMAGE

Front Turret Locked | Engine Hit |

Sensor Hits Motive System Hits

Stabilizers Left Right Ft. Turret



(54)0000000000 0 ŠО Front Right Side Armor (40) 00 00 Front Left Side Armor (40) οŏ о́О 000 000 000 000 1000 Ó00 000000 000 ŏoó όοό 000000000 000 000 0000000000 0000000000 ο̈́O 000000000 000 റററ Rear Right Side Armor (40 00 Rear Left Side Armor (40) 0 O Ô 0 O 0 0 0 0 0

ARMOR DIAGRAM

Front Armor

BAR: 10

Front

Turret Armor (60)

Rear Armor (30)



© 2013 The Topps Company, Inc. Classic BattleTech, BattleTech, 'Mech and BattleMech are trademarks of The Topps Company, Inc. All rights reserved. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Production, LLC. Permission to photocopy for personal use.

SUPER-HEAVY VEHICLE HIT LOCATION TABLE

	ATTACK DIRECTION								
2D6 Roll	FRONT	REAR	FRONT SIDE	REAR SIDE					
2*	Front (critical)	Rear (critical)	Side (critical)§	Side (critical)§					
3	Right Side†	Left Side†	Front†	Rear†					
4	Front†	Rear†	Side†	Side†					
5	Front†	Rear†	Side	Side					
6	Front	Rear	Side	Side					
7	Front	Rear	Side	Side					
8	Front	Rear	Side (critical)*	Side (critical)*					
9	Front†	Rear†	Side†	Side†					
10	Turret	Turret	Turret	Turret					
11	Turret	Turret	Turret	Turret					
12*	Turret (critical)	Turret (critical)	Turret (critical)	Turret (critical)					

A result of 2 or 12 (or an 8 if the attack strikes the side) may inflict a critical bit on the vehicle. For each result of 2 or "A result of 2 or 12 or 13 or 10 the attack switches the step may finite a crucial filt of the ventice. For each result of 2 or 12 (or 8 for side attacks), apply damage normally to the armor in that section. The attacking player then automatically rolls once on the Ground Combat. Vehicle Critical Hits Table below (see *Combat*, p. 194 in *Total Warfare* for more information). A result of 12 on the Ground Combat Vehicles Hit Location Table may inflict critical hit against the turret; if the vehicle has

A result of 12 on the Ground combact vertices his Location habit may finite chuican it against the turnet, if the vertice has no turnet, a 12 indicates the chance of a critical hit to the side corresponding to the attack direction.

The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in that section, but the attacking player also rolls once on the Motive System Damage Table at right (see Combat, p. 192 in Total Warfare for more information). Apply damage at the end of the phase in which the damage takes effect.

Siff the attack hits the front right or left side, all Front side results strike the front armor, while Rear Side results strike the ar right or rear left side armor. If the vehicle has no turret, a turret hit strikes the armor on the side attacked

MOTIVE SYSTEM DAMAGE TABLE

Minor damage; +1 modifier to all Driving Skill Rolls Moderate damage: -1 Cruising MP, +2 modifier to all

0 \bigcirc 0 $\hat{}$

	Driving Skill Rolls	. Craising ivin, 12 mean					
10-11 Heavy damage; only half Cruising MP (round fraction							
12+	+3 modifier to all Driving Skill Rolls Major damage; no movement for the rest of the game. Vehicle is immobile.						
Attack Direction N	/lodifier:	Vehicle Type Modifiers:					
Hit from rear	+1	Tracked, Naval	+0				
Hit from the sides	+2	Wheeled	+2				

Hovercraft, Hydrofoil +3 WiGE *All movement and Driving Skill Roll penalties are cumulative. However, each Driving Skill Roll

*All movement and Driving Skill Roll penalties are cumulative. However, each Driving Skill Roll modifier can only be applied once. For example, if a roll of 6-7 is made for a vehicle, inflicting a +1 modifier, that is the only time that particular +1 can be applied; a subsequent roll of 6-7 has no additional effect. This means the maximum Driving Skill Roll modifier that can be inflicted from the Motive System Damage Table is +6. If a units Cruising MP is reduced to 0, it cannot move for the rest of the game, but is not considered an immobile target. In addition, all motive system damage takes effect at the end of the phase in which the damage occurred. For example, if two units are attacking the same Combat Vehicle during the Weapon Attack Phase and the first unit inflicts motive system damage and rolls a 12, the -4 immobile teach modified which the development of the propriet of immobile target modifier would not apply for the second unit. However, the -4 modifier would take effect during the Physical Attack Phase. If a hover vehicle is rendered immobile while over a Depth 1 or deeper water hex, it sinks and is destroyed.

SUPER-HEAVY VEHICLE CRITICAL HITS TABLE

		LUCAI	ION HII	
2D6 Roll	FRONT	SIDE	REAR	TURRET
2-5	No Critical Hit	No Critical Hit	No Critical Hit	No Critical Hit
6	Driver Hit	Cargo/Infantry Hit	Weapon Malfunction	Stabilizer
7	Weapon Malfunction	Weapon Malfunction	Cargo/Infantry Hit	Turret Jam
8	Stabilizer	Crew Stunned	Stabilizer	Weapon Malfunction
9	Sensors	Stabilizer	Weapon Destroyed	Turret Locks
10	Commander Hit	Weapon Destroyed	Engine Hit	Weapon Destroyed
11	Weapon Destroyed	Engine Hit	Ammunition **	Ammunition **
12	Crew Killed	Fuel Tank*	Fuel Tank*	Turret Blown Off

^{*}If Combat Vehicle has ICE engine only. If Combat Vehicle has a fusion engine, treat this result as Engine Hit.



^{**} If Combat Vehicle carries no ammunition, treat this result as Weapon Destroyed.



SUPER-HEAVY VEHICLE RECORD SHEET

VEHICLE DATA

Type: MUSE IRONHORSE (TRAILER)

Tonnage: 600 Movement Points: Cruising: N/A Tech Base: Clan

(Experimental) Flank: N/A

Movement Type: Rail Era: Jihad

Engine Type: Fusion

Weapons & Equipment Inventory (hexes)

Qty	Туре	Loc	Dmg	Min	Sht	Med	Lng
4	ER PPC	Turret	15	0	7	14	23
1	Arrow IV	Turret	20A	-		-	9*
4	Large Pulse Laser	Turret	10	0	6	14	20
1	Plasma Cannon	Rear	**	0	6	12	18
1	Plasma Cannon	F Right	**	0	6	12	18
1	Plasma Cannon	F Left	* *	0	6	12	18
1	Plasma Cannon	R Right	**	0	6	12	18
1	Plasma Cannon	R Left	**	0	6	12	18

Notes:

Features Armored, Tractor, and Trailer Chassis modifications

Ammo: (Plasma Cannon) 100, (Arrow IV) 100

CREW DATA

Crew: 16

Gunnery Skill:

Driving Skill:

Commander Hit +1 Modifier to all Skill rolls

Driver Hit Modifier to Driving Skill rolls

CRITICAL DAMAGE

	Engine Hit
Rear Turret Locked	
Sensor Hits	+1+2+3D
Motive System Hits	+1+2+3
Stabilizer	s

Front Left Right Rear Rr. Turret



Front Left Side Armor (40) 000 000 000 Š00 0000 000 000 ο̈́O 000 റററ 000000000 Rear Left Side Armor (40) 000000000 0000000000 0000000000 0 0

ARMOR DIAGRAM

Front Armor (30)0000000000

000000000

00000000

Ó0

о́О

Front Right Side Armor (40)

Rear Right Side Armor (40

BAR: 10

00

000

Rear Armor (54)Rear Turret Armor

(60)

EFFECT:

No effect

2D6 Roll

2-5

6-7

8-9



© 2013 The Topps Company, Inc. Classic BattleTech, BattleTech, 'Mech and BattleMech are trademarks of The Topps Company, Inc. All rights reserved. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Production, LLC. Permission to photocopy for personal use.

SUPER-HEAVY VEHICLE HIT LOCATION TABLE

		ATTACK D	IRECTION	
2D6 Roll	FRONT	REAR	FRONT SIDE	REAR SIDE
2*	Front (critical)	Rear (critical)	Side (critical)§	Side (critical)§
3	Right Side†	Left Side†	Front†	Rear†
4	Front†	Rear†	Side†	Side†
5	Front†	Rear†	Side	Side
6	Front	Rear	Side	Side
7	Front	Rear	Side	Side
8	Front	Rear	Side (critical)*	Side (critical)*
9	Front†	Rear†	Side†	Side†
10	Turret	Turret	Turret	Turret
11	Turret	Turret	Turret	Turret
12*	Turret (critical)	Turret (critical)	Turret (critical)	Turret (critical)

*A result of 2 or 12 (or an 8 if the attack strikes the side) may inflict a critical bit on the vehicle. For each result of 2 or "A result of 2 or 12 or 13 or 10 the attack switches the step may finite a crucial filt of the ventice. For each result of 2 or 12 (or 8 for side attacks), apply damage normally to the armor in that section. The attacking player then automatically rolls once on the Ground Combat. Vehicle Critical Hits Table below (see *Combat*, p. 194 in *Total Warfare* for more information). A result of 12 on the Ground Combat Vehicles Hit Location Table may inflict critical hit against the turret; if the vehicle has no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.

† The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in that section, but the attacking player also rolls once on the Motive System Damage Table at right (see *Combat*, p. 192 in *Total Warfare* for more information). Apply damage at the end of the phase in which the damage takes effect. Siff the attack hits the front right or left side, all Front side results strike the front armor, while Rear Side results strike the ar right or rear left side armor. If the vehicle has no turret, a turret hit strikes the armor on the side attacked

MOTIVE SYSTEM DAMAGE TABLE

Minor damage; +1 modifier to all Driving Skill Rolls

Moderate damage; -1 Cruising MP, +2 modifier to all

10-11 12+	+3 modifier to all	nly half Cruising MP (round Driving Skill Rolls In movement for the rest o				
	Vehicle is immobile	в.	-			
Attack Direction N	/lodifier:	Vehicle Type Modifiers:				
lit from rear	+1	Tracked, Naval	+0			
lit from the sides	+2	Wheeled	+2			
		Hovercraft, Hydrofoil	+3			
		WiGE	+4			

*All movement and Driving Skill Boll penalties are cumulative. However, each Driving Skill Boll *All movement and Driving Skill Roll penalties are cumulative. However, each Driving Skill Roll modifier can only be applied once. For example, if a roll of 6-7 is made for a vehicle, inflicting a +1 modifier, that is the only time that particular +1 can be applied; a subsequent roll of 6-7 has no additional effect. This means the maximum Driving Skill Roll modifier that can be inflicted from the Motive System Damage Table is +6. If a units Cruising MP is reduced to 0, it cannot move for the rest of the game, but is not considered an immobile target. In addition, all motive system damage takes effect at the end of the phase in which the damage occurred. For example, if two units are attacking the same Combat Vehicle during the Weapon Attack Phase and the first unit inflicts motive system damage and rolls a 12, the -4 immobile teach modified which the development of the propriet of immobile target modifier would not apply for the second unit. However, the -4 modifier would take effect during the Physical Attack Phase. If a hover vehicle is rendered immobile while over a Depth 1 or deeper water hex, it sinks and is destroyed.

SUPER-HEAVY VEHICLE CRITICAL HITS TABLE

		LOCAT	ION HIT	
2D6 Roll	FRONT	SIDE	REAR	TURRET
2-5	No Critical Hit	No Critical Hit	No Critical Hit	No Critical Hit
6	Driver Hit	Cargo/Infantry Hit	Weapon Malfunction	Stabilizer
7	Weapon Malfunction	Weapon Malfunction	Cargo/Infantry Hit	Turret Jam
8	Stabilizer	Crew Stunned	Stabilizer	Weapon Malfunction
9	Sensors	Stabilizer	Weapon Destroyed	Turret Locks
10	Commander Hit	Weapon Destroyed	Engine Hit	Weapon Destroyed
11	Weapon Destroyed	Engine Hit	Ammunition **	Ammunition **
12	Crew Killed	Fuel Tank*	Fuel Tank*	Turret Blown Off

^{*}If Combat Vehicle has ICE engine only. If Combat Vehicle has a fusion engine, treat this result as Engine Hit.



^{**} If Combat Vehicle carries no ammunition, treat this result as Weapon Destroyed.

EXTERNAL STORES/BOMBS BATTLETECH CONVENTIONAL FIGHTER RECORD SHEET FIGHTER DATA ARMOR DIAGRAM Type: SEABASS FLYING SUBMERSIBLE Nose Damage Threshold (Total Armor) Movement Points: Tonnage: 1 (7) Submerged Tech Base: Inner Sphere Flying (Experimental-Illegal) Safe Thrust: 6 Crusing: 6 HE - High Explosive BAR: 7 LG - Laser Guided Max Thrust: 9 Flank: 9 Era: Jihad C - Cluster RL - Rocket Launcher Weapons & Equipment Inventory Standard Scale (1-6) (7-12) (13-20)(21-25) 000 Qty Type Loc Ht SRV MRV LRV ERV 0 5 Medium Laser [DE] 3 000 Structural Integrity: 000000 Left Wing Right Wing Damage Threshold Damage Threshold (Total Armor) (Total Armor) 1 (6) 1 (6) Fuel: 222 Points 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Aft Damage Threshold (Total Armor) 1 (5) CRITICAL DAMAGE PILOT DATA GROUND MAR STRAIGHT MOVEMENT Name: 4 D Engine **Avionics** Gunnery Skill: Piloting Skill: FCS Gear 6 Hits Taken 2 3 4 5 Life 3 5 7 10 11 Dea Sensors Support +1 +2 +3 +4 +5 Modifier **VELOCITY RECORD**

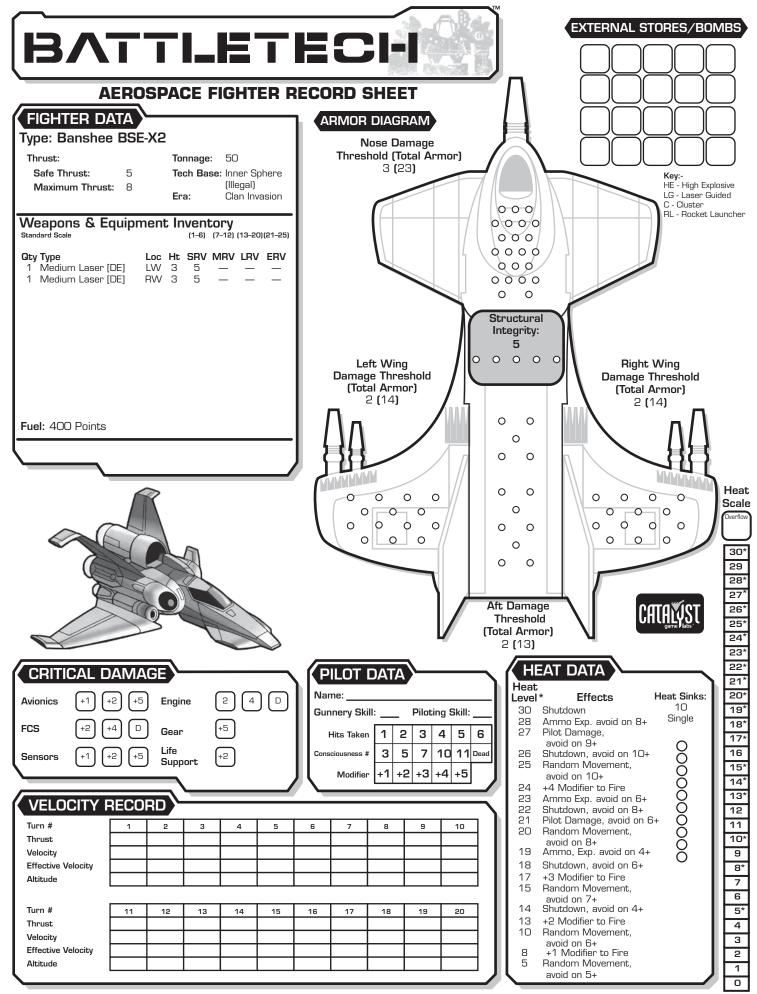
Effective Velocity Altitude 12 13 14 15 16 17 18 19 20 11 Thrust Velocity Effective Velocity Altitude

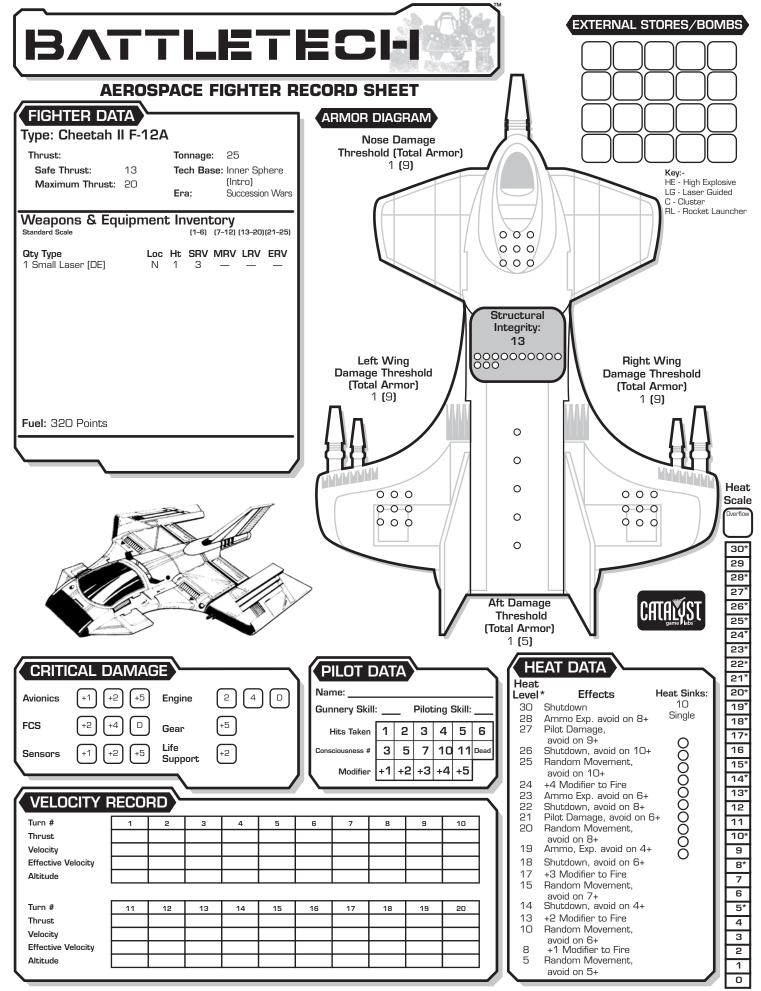
Thrust Velocity

	•	SMALL CRAFT AND FIXED
VELOCITY	FIGHTER	WING SUPPORT VEHICLES
1	8	8
2	12	14
3	16	20
4	20	26
5	24	32
6	28	38
7	32	44
8	36	50
9	40	56
10	44	62
11	48	68
12	52	74

FIGHTER RETURN TABLE SAFE THRUST TURNS BEFORE RETURN 1-4 5-8 2 9-12 1 13+ Ω

10







Left/Right Broadside

Left/Right Aft:

Aft:

0/0

0 / 0

Capital Scale

Nose Damage Threshold (Total Armor) **JUMPSHIP RECORD SHEET** JUMPSHIP DATA Type: BRIGHT STAR AUTO SCOUT Fore-Left Damage Fore-Right Damage Name: Tonnage: 60,000 Threshold (Total Armor) Threshold (Total Armor) Thrust: Tech Base:Inner Sphere 1 (4) 1 (4) (Experimental) Station-Keeping Only ш Era: Star League DropShip Capacity: O Fighters/Small Craft: 0 / 2 Launch Rate: 2/Turn Weapons & Equipment Inventory Structural Integrity: K-F Drive Integrity: Sail Integrity: **Docking Collars:** Cargo: Bay 1: Small Craft (2) (1 Door) 0 Bay 2: Cargo (123.5 tons) (1 Door) ш ш Aft-Left Damage Aft-Right Damage Threshold (Total Armor) Threshold (Total Armor) 1 (4) 1 (4) Fuel: 1,500 Aft Damage Threshold (Total Armor) 1 (4) ш DAMAGE **CREW DATA** Life **Avionics** Gunnery Skill: Piloting Skill: +2 Support 2 4 5 6 Hits Taken 1 3 CIC D +4 +3 +5 Modifier Incp Sensors Ω Crew: Marines: 0 Ω Passengers: Flementals: Π **Thrusters** 0 Battle Armor: Left Life Boats/Escape Pods: 1 / 0 VELOCITY RECORD Right Turn # 10 -5 D Engine Thrust Velocity Effective Velocity **HEAT DATA** Heat Sinks: Heat Generation Per Arc Turn # 12 13 14 15 16 17 18 19 20 \cap 82 Left/Right Fore: Thrust 0/0

Velocity

Effective Velocity



Capital Scale

CATATYST

WARSHIP RECORD SHEET

WARSHIP DATA

Type: ENTERPRISE SUPER CARRIER

 Name:
 Tonnage: 1,600,000

 Thrust:
 Tech Base: Inner Sphere

(Experimental)

(1-12) (13-24)(25-40)(41-50)

LRV ERV

18

25 25

18 18

22 22

60

18

15 15

18

45

18

SRV MRV

18 18 18

18

70

14 14 14

18

Safe Thrust: 2

Maximum Thrust: 3

Era: Jihad

Weapons & Equipment Inventory

DropShip Capacity: 4

Capital Scale

4 NL/45s

3 AR/10

4 NL/55s

3 NL/45s

3 AR/10

2 Medium Naval PPC

5 AR/10 O Anti-Missile Systems

(108 rounds) 4 NL/55s

2 Medium Naval PPC

(108 rounds)

3 Heavy Naval PPC

(108 rounds)

2 Medium Naval PPC

(108 rounds) 2 NL/35s

1 Heavy Naval PPC

(108 rounds)

Fuel: 10,000

10 Anti-Missile Systems

1 NAC/25 (10 rounds) 10 Anti-Missile Systems

10 Anti-Missile Systems

2 NAC/30 (60 rounds) 2 NAC/35 (20 rounds) 10 Anti-Missile Systems

Bay

Fighters/Small Craft: 970/0 Launch Rate: 44/turn

N 280 18

N 270 18

Ν

Ν

FL/FR

FL/FR

FL/FR 340

FL/FR 270

L/R BS 340

L/R BS 675

L/R BS 200

1 /R RS 240

AL /AR 210

AL/AR 270

AL/AR 120

AL/AR 10

AL/AR 10

Loc Ht

100

10

60

L/R BS 10

104

225 15 15

85 25 25 25

22

18 18

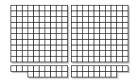
25 25

60

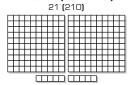
70

18

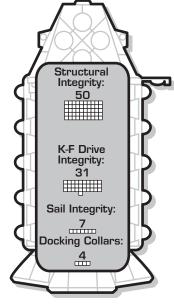
Fore-Left Damage Threshold (Total Armor) 21 (210)

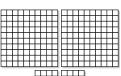


Nose Damage Threshold (Total Armor) 24 (235)

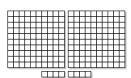


Fore-Right Damage Threshold (Total Armor)





Aft-Left Damage Threshold (Total Armor) 21 (208)



Aft-Right Damage Threshold (Total Armor) 21 (208)

+2

Aft Damage Threshold (Total Armor) 19 (188)

Life

D

Support

CREW DATA

 Gunnery Skill:
 Piloting Skill:

 Hits Taken
 1
 2
 3
 4
 5
 6

 Modifier
 +1
 +2
 +3
 +4
 +5
 Incp.

Crew:2,439Marines:0Passengers:0Elementals:0Other:0Battle Armor:0

Life Boats/Escape Pods: 435/640

+1|+2|+3|+4|+5|Incp.| | | Sensors

10

Thrusters

Avionics

CIC

Left (+1) (+2) (+3) (D

CRITICAL DAMAGE

Right +1 +2 +3 D

Engine $\begin{bmatrix} -1 \end{bmatrix} \begin{bmatrix} -2 \end{bmatrix} \begin{bmatrix} -3 \end{bmatrix} \begin{bmatrix} -4 \end{bmatrix} \begin{bmatrix} -5 \end{bmatrix} \begin{bmatrix} D \end{bmatrix}$

VELOCITY RECORD

Turn # 1 2 3 4 5 6 7 8

Thrust

Velocity

Effective Velocity

Turn #
Thrust
Velocity
Effective Velocity

11	12	13	14	15	16	17	18	19	20

HEAT DATA

 Heat Sinks:
 Heat Generation Per Arc

 2,988
 Nose:
 820

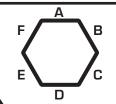
 (5,976)
 Left/Right Fore:
 760/760

 Left/Right Broadside:
 1,605/1,605

 Left/Right Aft:
 610/610

 Aft:
 584

Advanced Movement Compass



WARSHIP RECORD SHEET (REVERSE)

WARSHIP DATA (Cont.)

Type:ENTERPRISE SUPER CARRIER

Name:

Weapons & Equipment Inventory (Cont.)

				-		
l	Standard Scale			(1-12) (13-24)	(25-40)	(41–50)
l	Bay	Loc	Ht	SRV MRV	LRV	ERV
l	8 Large Pulse Lasers	N	80	7 (72) 7 (72)	_	_
ı	8 Large Pulse Lasers	Ν	80	7 (72) 7 (72)	_	_
ı	8 Large Pulse Lasers	FL/FR	80	7 (72) 7 (72)	_	_
l	8 Large Pulse Lasers	L/R BS	80	7 (72) 7 (72)	_	_
ı	8 Large Pulse Lasers	AL/AR	80	7 (72) 7 (72)	_	_
ı	8 Large Pulse Lasers	Α	80	7 (72) 7 (72)	_	_
ı	8 Large Pulse Lasers	Α	80	7 (72) 7 (72)	_	_

Grav Decks:

Grav Deck #1: 50-meter Grav Deck #2: 50-meter

Cargo:

Bay 1: Fighters (648) (11 Doors) Bay 2: Cargo (288,220.5) (2 Doors) Bay 3: Fighters (324) (11 Doors)

ADVANCED MOVEMENT

A vector is active if thrust is applied while the unit is facing that hexside. A vector is inactive if the unit spends no thrust to move through that hexside.

Each time a unit spends thrust, note down that number on the record sheet in the appropriate vector (the vector of the unit's facing). Next, determine the effect of spending thrust by consolidating the active vectors.

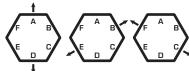
First, consolidate any active opposing vectors (see Opposing Vectors diagram) by subtracting the lowest thrust value from both vectors, reducing one vector to \mathbf{O} .

Next, consolidate the oblique vectors (see Oblique Vectors diagram). When any pair of oblique vectors is active, subtract the lowest of the two thrust values from both vectors (or from both if they are equal), reducing one (or both) oblique vectors to O, and add the same value to the thrust value of the vector in between.

After consolidating all vectors, a unit should have no more than two active vectors.

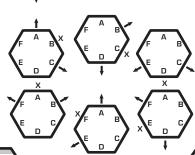
OPPOSING VECTORS

If both vectors marked with arrows are active, subtract an equal amount from both until only one of them is active.



OBLIQUE VECTORS

If both vector markers are active, subtract an equal amount from both and add that amount to vector X.





V	ELOCIT	Y RECC	RD) —					$\overline{}$
Unit	:								
Turn	Turn Velocity								
#	Thrust	Facing	Α	В	С	D	Ε	F	Fuel
1			_/_	_/_	_/_	_/_	_/_	_/_	
2			_/_	_/_	_/_	_/_	_/_	_/_	
3			_/_	_/_	_/_	_/_	_/_	_/_	
4			_/_	_/_	_/_	_/_	_/_	_/_	
5			_/_	_/_	_/_	_/_	_/_	_/_	
6			_/_	_/_	_/_	_/_	_/_	_/_	—
7			_/_	_/_	_/_	_/_	_/_	_/_	—
8			_/_	_/_	_/_	_/_	_/_	_/_	—
9			_/_	_/_	_/_	_/_	_/_	_/_	—
10			_/_	_/_	_/_	_/_	_/_	_/_	
11			_/_	_/_	_/_	_/_	_/_	_/_	—
12			_/_	_/_	_/_	_/_	_/_	_/_	—
13			_/_	_/_	_/_	_/_	_/_	_/_	—
14			_/_	_/_	_/_	_/_	_/_	_/_	
15			_/_	_/_	_/_	_/_	_/_	_/_	
16			_/_	_/_	_/_	_/_	_/_	_/_	
17			_/_	_/_	_/_	_/_	_/_	_/_	
18			_/_	_/_	_/_	_/_	_/_	_/_	
19			_/_	_/_	_/_	_/_	_/_	_/_	
20			_/_	_/_	_/_	_/_	_/_	_/_	J

GAME RULES









DELETE

Design Quirks

Every prototype and primitive unit described in this *Experimental Technical Readout* has one or more listed positive and/or negative Design Quirks (see p. 193, SO). These quirks are included to give each design a unique flavor based upon its history and use in the post Star League era known as the Succession Wars. Use of these quirks is optional and should be agreed upon by all players before play begins.

New Design Quirks

The unique nature of the designs presented in this Experimental Technical Readout introduce peculiar new Design Quirks unique to virtually any unit ever dubbed a "Boondoggle". These Design Quirks use the optional rules found in Strategic Operations (see pp. 193-199, SO), as well as few additional Quirks presented in Technical Readout: Prototypes and Interstellar Operations. Design Quirks are an advanced game rule, with limited game balance, and so they are not appropriate for tournament play. Instead, these unique effects would be far better suited to role-playing or campaign-based games, where greater in-universe depth is desired.

Unless noted otherwise in the Quirk's rules, a Design Quirk may be taken only once per unit.

Negative Quirk: Nonfunctional (5 points)

Available to: All

A unit possessing this quirk has one or more components or pieces of equipment that simply does not work. No amount of repairs or replacement will correct this issue; the unit must be redesigned from the ground up to solve the problem.

A unit can have multiple Nonfunctional quirks, but each must be assigned to the specifically non-operational components they possess.

Negative Quirk: Illegal (0 points)

Available to: All

Units designed with this Quirk do not follow the existing construction rules for some reason, achieving effects that are not normally allowed in game-play, and which can fail spectacularly at any moment. These units should not be employed unless all players agree.

If employed, the opposing player may roll 2D6 to determine if the unit with this Quirk suffers a catastrophic failure once every 6 turns of combat. On a result of 6 or higher, such catastrophic failure occurs in 1D6 of the unit's hit locations (using the Front/Back Hit Locations Table). A Critical Hits check is then made for each failure location determined, applying a +4 modifier to the roll result. On any modified roll result of 13+, the location suffers complete collapse if it is an arm, leg, head, wing, main gun, or turret. This will destroy all items within (and any explosive components checks should be made as appropriate for location destruction). If the affected location is none of the above, it suffers 4 critical hits, determined as normal.

Illegal units suffer an additional +4 target number modifier to repair or replace any damaged or destroyed components, and double all repair and maintenance times for work performed on them. If an Illegal unit repair fails, the item gains the Nonfunctional Quirk as well.

Finally, because they are technically failures at the time of production, Illegal units should also receive the Obsolete Design Quirk (see p. 205, TRO: Prototypes), with the year of their obsolescence determined to be the same as their year of introduction.