# INTRODUCTION



SEND

SAVE

CANCEL

DELETE

My Dearest Bertram,

I trust you're settling in nicely on Terra. I must admit that I was somewhat surprised to hear that you would not be returning to the new Checkswa campus on Donegal, though I suppose the allure of humanity's home can be very great indeed.

I am pleased that ComStar found a role for you beyond that of a media pundit for Mister Stone's new Republic. I feared for a time that they would transform you into some kind of cynical armchair politician had they kept you on INN much longer, and I know your passion has always been the study of history. I can also relate to your choice to focus on military history, as your brother did (God rest his soul). On Tharkad, I have always found that study immensely gratifying, and probably would even if it weren't the "family business". I'm sure Arastide would have been proud.

I especially applaud your recent contributions to the compilation of equipment seen in the early days of modern warfare, a research area that I have personally been pursuing of late, especially with respect to the developments that took place during the dark days of the Succession Wars. Contrary to the popular belief, of course, the destruction of knowledge and innovation during the twenty-ninth and thirtieth centuries was far from complete. In fact, this very destruction that forced new innovation, inevitably culminating in the renaissance we saw just as the Clans invaded—or, depending on how ironically one wishes to see it, the renaissance that inspired the Clans' decision to return to the Inner Sphere.

To whet your appetite, I have taken the liberty of compiling some of the Succession Wars' more remarkable records of experimental one-offs and field variants that tried to overcome the declining tech standards of their day. Many of these were failures, admittedly; developmental dead-ends that only served to prove a solution had to be sought elsewhere. Others were simply victims of the changing tides of warfare. But a few have left their footprints on military history that persists to this very day.

I should note upfront that the nature of these articles varies quite wildly. I have chosen to present these reports to you in a largely unedited form, to avoid tainting the primary sources. Thanks to my family's network of associates, I often find these tidbits quite fascinating, and far more exciting than the often-dry official reports one often finds in our court archives. Secrets of the trade, eh?

Let me know if you would like to pursue this particular avenue of research further. I am confident that the study of Succession Wars-era technological innovations is an area that won't fall under royal censorship.

And Bertram? Happy Birthday. I hope this reaches you on time.

Cordially yours, Christopher Auburn Tharkad, 22 January 3082 (sent via Priority HPG)

#### **HOW TO USE THIS BOOK**

The 'Mechs, combat vehicles, and fighters described in *Experimental Technical Readout: Succession Wars* provide players with a sampling of designs maintained or even newly constructed in the dark days of lostech. The designs featured in this book reflect both limited-run production units and "one-offs" that never reached full factory production.

The rules for using 'Mechs, vehicles and fighters in BattleTech game play can be found in *Total Warfare*, while the rules for their construction can be found in *TechManual*. However, the experimental nature of these designs also draws upon the Experimental-level rules presented in *Tactical Operations*. While none of the units featured in this volume are considered tournament legal, their use in introductory games is appropriate due to their Succession War status.

# INTRODUCTION

INCOMING MESSAGE

SEND

SAVE

CANCEL

DELETE

#### **CREDITS**

**Project Development** 

Herbert A. Beas II

**Development Assistance** 

Randall N. Bills

**BattleTech Line Developer** 

Herbert A. Beas II

**Assistant Line Developer** 

Ben H. Rome

#### Writing

Joshua Franklin

William Gauthier

Keith Hann

Johannes Heidler

Daniel Isberner

Chris Marti

Luke Robertson

**Chris Smith** 

Chris Wheeler

#### **Editing:**

Keith Hann

Johannes Heidler

Michael Miller

Chris Wheeler

Patrick Wynne

#### **Art Direction**

**Brent Evans** 





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#### **Production Staff**

Cover Art

**Anthony Scroggins** 

Cover Design and Layout

Ray Arrastia

**Evolved Faction Logos Design** 

Jason Vargas

Illustrations

Doug Chaffee

Chris Lewis

**Duane Loose** Matthew Plog

Record Sheets

Sebastian Brocks

Johannes Heidler

BattleTech Logo Design

Shane Hartley, Steve Walker

and Matt Heerdt

Factchecking/Playtesting: Your MUL Team: Joel Bancroft-Connors, Joshua Franklin, William Gauthier, Keith Hann, Johannes Heidler, Daniel Isberner, Chris Marti, Michael Miller, Luke Robertson, Chris Smith, Chris Wheeler, and Patrick Wynne

Special Thanks: This unique volume of the Experimental Tech Readouts series was originally dedicated to me (Herbert A. Beas II) as a birthday gift from the volunteers from the MUL Team and other noted above. Though presented to me as a complete (but entirely unofficial) PDF, it seemed only right to canonize these efforts and share the results with you, the reader, and the rest of the BattleTech community. To you—and to all of BattleTech's dedicated fans, volunteers, and players—I dedicate this special volume of the Experimental Tech Readout series!



# **GRF-2N-X SUPER GRIFFIN**

**Field Testing Summation:** Prototype *Griffin* chassis rebuilt and testbed

**Producer/Site:** Friden Aerospace Park, Hoff **Supervising Technician:** Dr. Jorge Belasco

**Project Start Date: 3020** 

**Non-Production Equipment Analysis:** 

Experimental "Freezer" Double Heat Sinks Prototype Improved Jump Jets

#### Overview

The Super Griffin concept was the pinnacle of the NAIS' experimental efforts on Hoff, featuring more prototype technology than the Super Wasp. Built on a custom sixty-ton chassis designed to look like its medium-weight forebear, the Super Griffin's appearance was a deliberate effort to confuse would-be observers and draw less attention to the project.

The additional mass allowed the *Super Griffin*'s engineers to boost its close-in defense with a medium and small laser, while the 'Mech's Starshield A armor was strengthened to improve protection across the torso. The CoreTek 275 fusion engine was downgraded to a 240-rated Pitban, but while this reduced the 'Mech's ground speed, the weight savings allowed the Davion techs to implement the design's biggest changes.

The Super Griffin served as a testbed for the NAIS' first foray into prototype double-strength heat sinks. To retain the weight and volume of standard sinks, these "freezers" used volatile, liquid-metal coolants instead of advanced radiators to increase their efficiency, but would prove to be too dangerous and difficult to maintain in the field. With an estimated lifespan of only a few years before required replacements, these freezers would ultimately be replaced with the Star League technologies recovered in the Helm Memory Core, but at the time of the battle for Hoff, these freezers were revolutionary. (Indeed, based on the promising results from the Super Griffin's early trials, 'Mechs from the Eridani Light Horse's Lightning Company were retrofitted with similar freezers that would be put to great use against the Black Widows at the battle for Johnston's Farm.)

Yet the Super Griffin's most ambitious improvement was its experimental improved jump jet system. Developed to increase mobility beyond the structural limitations of the day, these super-powered jets looked great on paper and provided greatly enhanced mobility at no significant increase in thruster mass, but generated extreme heat levels and were prone to violent explosions when damaged.

Along with the *Super Wasps*, the only working prototype *Super Griffin* was thrown into battle on 13 May 3022, and did not fare well. BattleROMs show the 'Mech using its extended jump range to surprise a Black Widows *Rifleman* and deliver a powerful attack, but the return fire from the *Rifleman* and a companion *Phoenix Hawk* penetrated the *Super Griffin*'s right torso, striking a jump jet mounted there. The explosion in turn ignited the LRM magazine and destroyed the 'Mech utterly.

While research into freezers would continue, House Davion's work on improved jump jets was apparently canceled. It would be nearly fifty years before far less volatile production-grade improved jump jets reached the battlefield—originating with Clan Wolf (in-Exile).

#### Type: Super Griffin

Technology Base: Inner Sphere (Experimental) Tonnage: 60

Equipment			Mass
Internal Structure:			6
Engine:	240		11.5
Walking MP:	4		
Running MP:	6		
Jumping MP:	6		
Heat Sinks:	15 [20]		5
Gyro:			3
Cockpit:			3
Armor Factor:	160		10
	Internal	Armor	
	Structure	Value	
Head	3	9	
Center Torso	20	24	
Center Torso (rear)		7	
R/L Torso	14	22	
R/L Torso (rear)		6	
R/L Arm	10	14	
R/L Leg	14	18	

<b>Weapons and Ammo</b>	Location	Critical	Tonnage
PPC	RA	3	7
LRM 10	RT	2	5
Ammo (LRM) 24	RT	2	2
Small Laser	CT	1	.5
Medium Laser	LA	1	1
Prototype Improved Jum	p Jets RT	3	3
Prototype Improved Jum	p Jets LT	3	3

**Notes:** Features the following Design Quirks: Prototype, Rumble Seat.



# **CONDOR HEAVY HOVER TANK (FISSION)**

Field Testing Summation: Condor fission engine test bed

Producer/Site: Unknown

Supervising Technician: Unknown Project Start Date: Early thirty-first century Non-Production Equipment Analysis:

Sponson Turrets

#### Overview

[Sometimes, even the tabloids get it right. The following is an "informational" clip taken from Bild von Tharkad. Yes, the old tabloid magazine. Humor me. A quick bit of research proved the essence of the article to be correct, although I've made a few amendments for clarity's sake. –CA]

In the early thirty-first century, House Liao attempted to upgrade its Condor heavy hover tanks without tapping its dwindling reserves of fusion plants. As fusion engines remained desperately needed for BattleMechs and heavy tanks, the Capellan engineers took some old Condor husks and replaced their damaged combustion engines with mothballed fission models. How they could possibly think this was a good idea is probably even beyond the abilities of today's Capellans to explain, but it was a different time, those Succession Wars.

[Surprisingly insightful for Bild von Tharkad, but they soon return to their usual standards. The following description is factually incorrect in its assumption that these modifications were undertaken on standard Condor bases. We believe instead that the fission engine "upgrades" more likely tested on the urban combat flamer variants, which would have required far less structural alteration. –CA]

To make up for the additional weight consumed the engine shielding, the Capellans decided to remove the Condor's autocannon and replace it with a third medium laser. This choice, which traded tonnage for reach, demonstrated once again that the engineers had no idea what they were doing. After all, not only would this change force their fragile hover tank close in with its targets, the added heat sink needs would virtually offset the weight savings made possible by swapping the gun out in the first place.

[But then the Capellans have a history of modifying standard Condors with short-ranged lasers, so that's not news. –CA]

At this point someone with some brains must have chimed in, because they did decide to address protection with an additional two and a half tons of armor and some additional anti-personnel weaponry. A vehicle flamer and machine gun, one each mounted on side sponson turrets, gave this Condor better ability to defend itself against infantry forces at point-blank range—without distracting the main gunners at the same time.

Still, even these last two additions did not stave off the inevitable failure. The few tanks that could be put together from the old husks ran out of replacement fission engines after just a few years in operation.

[Even from a less farcical standpoint, the fission engine Condors' failure makes sense. As a power source whose development has stagnated for centuries now, fission engines rated for combat duty simply cannot perform any better than a comparable internal combustion engine—while costing more than their high-tech fusion equivalents. Even the Capellans reasoned this one out in short order, and likely shelved the concept before wasting any further effort on the folly of improving a dead technology. —CA

#### Type: Condor Heavy Hover Tank (Fission)

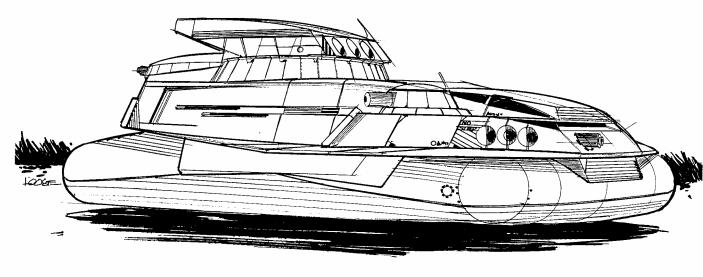
Technology Base: Inner Sphere (Experimental)
Tonnage: 50

Equipment		Mass
Internal Structure:		5
Engine:	165	16
Type:	Fission	
Cruise MP:	8	
Flank MP:	12	
Heat Sinks:	9	4
Control Equipment:		2.5
Lift Equipment:		5
Power Amplifier:		0

Turret:		.5
Sponson Turrets:		.5
Armor Factor:	136	8.5
	Armor	
	Value	
Front	40	
R/L Side	25/25	
Rear	21	
Turret	25	

Weapons and Ammo	Location	Tonnage
3 Medium Lasers	Turret	3
Machine Gun	Right Sponson	.5
Vehicle Flamer	Right Sponson	.5
Machine Gun	Left Sponson	.5
Vehicle Flamer	Left Sponson	.5
Ammo (MG) 200	Body	1
Ammo (Flamer) 40	Body	2

**Notes:** Features the following Design Quirks: Non-Standard Parts.



## SF-1X STARFIRE

Field Testing Summation: Experimental airframe

**Producer/Site:** Banzai Weapons Design Company, New Avalon

Supervising Technician: Dr. B. Banzai

**Project Start Date: 3028** 

**Non-Production Equipment Analysis:** 

Prototype Ultra Autocannon/5 Prototype Ferro-Aluminum Armor

#### Overview

The discovery of the Helm Memory Core was, of course, the watershed event that sparked the Inner Sphere's technological renaissance. Though other discoveries and research were gradually dragging us out of the technology dark age of the Succession Wars were being made, the so-called Gray Death Core kicked this recovery into overdrive, especially in the military fields. With manufacturing still limited by centuries of decline, the first beneficiaries of this revival were, naturally, the older and proven machines that still remained on the modern battlefield. Newly developed machines, in the meantime, found use as test beds, and survived more often than not only in a niche role.

The *Starfire* is an example of these test beds. As basic as its airframe is when reviewed today, the craft was groundbreaking for being one of the first new designs of its day—albeit one devised specifically for testing. Wolfnet reached this same understanding when they included the fighter in their update of ComStar's original 3026 *Technical Readout*. The following was Wolfnet's abstract:

The *Starfire* was an early upgraded technology project of the NAIS, following the dissemination of the Gray Death Memory Core. Based on the Star League's *Hellcat II* frame, the newly created *Starfire* was the aviation research project running alongside the development of the *Axman* and *Caesar* BattleMechs. Unlike the 'Mechs, the aerospace fighter never saw widespread deployment, as its construction was archaic and did not offer advantages over line units. It was, however, an exemplary testbed, and easily modified to trial a slew of new weapons, armor and heat sink systems.

The *Starfire* was exemplary, but I find it interesting that Wolfnet's coverage shows discrepancies. In their 3050 Inner Sphere brief, they noted that the fighter reached actual production, while the TR 3026 revision essentially called it a stillborn concept.

As always, the truth is somewhere in the middle: while most rediscovered Star League weapons were tested on the *Starfire*, the Ultra autocannon was of most interest (in typical Davion fashion). While the initial *Starfires* were hand-built custom craft, each with a different payload, the SF-1X that featured the Ultra AC/5 entered limited production until the mid-3040s. Most of these ultimately appeared in the ranks of the NAIS Training Cadre. While the prototype featured in the NAIS museum did not survive the Word of Blake's New Avalon rampage, a few of the Cadre's

Starfires were still reportedly flying even during the occupation of the FedSuns capital. Of course, by then, with their production lines long destroyed and technology advanced well beyond their capabilities, these fighters had become relics of a bygone age.

Type: Starfire

	rype: <b>stariire</b>								
	Technology Base: Inner Sp	here (Experimental)							
	Tonnage: 55			-				Sharing	
	-								
	Equipment		Mass			The state of the s			
	Engine:	275	15.5						
,	Safe Thrust:	7					Dell'ille		
	Max Thrust:	11			-				
	Structural Integrity:	7			The same of the sa				2
	Heat Sinks:	20	10						TO S
	Fuel: 400		5	_					
ı	Cockpit:		3			A CONTRACTOR OF THE PARTY OF TH			//=
,	Armor Factor (Ferro):	125	7		The same			// .	//
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		Value			11	J/ /		///	
	Nose	42				/ <b>/</b> / / /	<b>\</b> '	\/\/\!	
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<b>Weapons and Ammo</b>	Location	Tonnage	Heat	SRV	MRV	LRV	ERV
Prototype Ultra AC/5	Nose	9	2	7	7	7	_
Ammo (UAC-P) 20	_	1					
2 Medium Lasers	RW	2	3	5	_	_	_
2 Medium Lasers	LW	2	3	5	_	_	_
Small Laser	Aft	.5	_	_	_	_	_

Notes: Features the following Design Quirks: Atmospheric Flyer, Modular Weapons, Obsolete/3045.



# **NTTLETECH**

#### 'MECH RECORD SHEET

### 'MECH DATA`

Type: Super-Griffin GRF-2N-X

Movement Points: Tonnage: RΠ

Walking: Tech Base: Inner Sphere (Experimental) Running: Succession Wars

Jumping:

#### Weapons & Equipment Inventory (hexes)

Qty	Туре	Loc	Ht	Dmg	Min	Sht	Med	Lng
1	Small Laser	CT	1	3 [DE]	_	1	2	3
1	LRM 10	RT	4	1 / Msl [M,C,S]	6	7	14	21
1	PPC	RA	10	10 (DE)	3	6	12	18
1	Medium Laser	LA	3	5 (DE)	_	3	6	9

## WARRIOR DATA

Name: Gunnery Skill: Piloting Skill: Hits Taken 1 2 3 4 5 Consciousness# 3 5 7 10 11 Dead



#### Left Torso Right Torso 0 O 0 0 O 00 , o 00 0 0 ,0, ٥٥ 0 0 0 0 o` 00 0 O` 00 00 O 00 0 000 00 0 0 0 0 0 00 0 00 0 0 00 0 0 0 0 $\bigcirc$ 0 $\bigcirc$ 0 0 0 ŏ 0 Ö 0 0 $\circ$ 0 0 0 0 0 0 0 Center 0 Left: Δrm Right Arm Torso 0 0 0 0 [14][14][24]0 0 00 0 0 0 0 00 0 0 Left Right 0 0 Lea Lea Center 0 0 [18](18) 0 0 Torso Rear(7) 0 Left Right Torso Rear Torso Rear (6) 0

ARMOR DIAGRAM

Head (9)

#### CRITICAL HIT TABLE

#### Left Arm

- 1. Shoulder
- Upper Arm Actuator Lower Arm Actuator
- 1-3
- 4. Hand Actuator
  - Medium Laser 5.
  - Roll Again
  - Roll Again
  - 2. Roll Again
- 3. Roll Again
- 4-6 4. Roll Again
  - 5. Roll Again
  - 6. Roll Again

#### Left Torso

- 1 Double Heat Sink
- Double Heat Sink
- 1-3 3. L Double Heat Sink 4. Double Heat Sink
- - Double Heat Sink
    - 6. Louble Heat Sink
  - Double Heat Sink 2. Double Heat Sink
- 3. L Double Heat Sink 4-6
- 4. Jump Jet
  - 5 Jump Jet
  - 6. Jump Jet

#### Left Leg

- 1. Hip
- Upper Leg Actuator
- Lower Leg Actuator 3.
- Foot Actuator Roll Again
- 5.
- Roll Again 6.

#### Head

- 1. Life Support
- Sensors Cockpit
- 3. Heat Sink 4.
- Sensors
- 6. Life Support

#### Center Torso

- 1. Fusion Engine
- 2. Fusion Engine 3. Fusion Engine
- 1-3 4 Gyro
  - - Gyro 5.
    - 6. Gyro
    - 1. Gyro
    - 2. Fusion Engine
- 3. Fusion Engine 4-6
  - 4. Fusion Engine 5. Small Laser
  - 6. Roll Again
  - Engine Hits OOO

Life Support O

Gyro Hits OO Sensor Hits OO

Damage Transfer

Diagram

- - Double Heat Sink
  - Double Heat Sink
- PPC 3.
- 5. Roll Again

#### Right Torso

- 1 Double Heat Sink
- 1-3 3. Double Heat Sink 4. Jump Jet
- - 6.
  - Jump Jet
- - 4. Ammo (LRM 10) 12
    - Roll Again
  - 6. Roll Again

## Right Leg

- Lower Leg Actuator
- 5. Roll Again
- 6.

## Right Arm

- 1. Shoulder
- Upper Arm Actuator
- 3 Lower Arm Actuator 1-3 4 Hand Actuator
- - Double Heat Sink 5

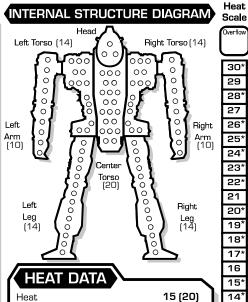
  - 2. PPC
- 4-6 4 L PPC

  - 6. Roll Again

- - Double Heat Sink
  - 5. Jump Jet

  - LRM 10
- 2.LLRM 10
- 3. Ammo (LRM 10) 12

- Upper Leg Actuator
- Foot Actuator
- Roll Again



25

24\*

23\*

22,

21

20

19

18'

17

9

8\*

7

6

5\*

4

3

2

1

16 15\* 15 (20) 14\* **Effects** Level\* Double 13\* 30 Shutdown 12 Ammo Exp. avoid on 8+ 28 Shutdown, avoid on 10+ 11 -5 Movement Points 25 10\* +4 Modifier to Fire 23 Ammo Exp. avoid on 6+ Shutdown, avoid on 8+ 4 Movement Points 20 Ammo Exp. avoid on 4+ 18 Shutdown, avoid on 6+ +3 Modifier to Fire -3 Movement Points Shutdown, avoid on 4+ 14 +2 Modifier to Fire 13 10 –2 Movement Points

+1 Modifier to Fire

-1 Movement Points

8