

# DAWNING OF THE WOLF AGE

THE TRIBES OF YUGDRASIL™  
BOOK I



# Hugh B. Long

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DEDICATION:

*For my wife Melinda.*

Sample file

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Sample file

## STRANGE WORDS AND PHRASES

It was pointed out to me that certain acronyms and abbreviations may be unknown to some readers. Here are a few definitions:

- **AU** - Astronomical Unit, the average distance from Earth to the Sun, which is approximately 150 million kilometers (or about 93 million miles). It's used as a common unit of measure.
- **LY** - Light Year. The Distance Light travels in a vacuum (outer space) over one Earth year - 10 trillion kilometers (or about 6 trillion miles).
- **Parsec** - Another unit of astronomical distance, equal to approximately 3.26 light years. It's NOT a measure of speed as Han Solo states in Star Wars :)
- **G** - Earth's Gravity is noted as 1G, which is equivalent to acceleration on a body of 9.8 meters per second-squared. It's helpful when expressing the gravity of other planets to use a fraction of 1G. So 0.8G is 80% of Earth's gravity. 1.2G would be 120% of Earth's gravity.
- **ERBT** - Einstein-Rosen Bridge Transceiver. The Einstein-Rosen Bridge - aka a wormhole, is a real theory. In the novel I use it as a tool to create instantaneous communications anywhere in the galaxy. We open up a microscopic wormhole and send a laser based signal to the other end.

## MILITARY RANKS & MODERN EQUIVALENTS

One of the things I find a bit onerous, is to ask readers unfamiliar with military ranks to learn all the different ranks across different branches. I think I've solved the problem, at least in my Universe. Similar to Nato, I use a numeric code for rank, preceded by a letter designating Enlisted or Officer. Standard ranks are E1 to E9 and O-1 to O-9. Also, in most cases, individuals are addressed by their numeric designation, just like they would their rank.

So instead of Corporal, you would say E-4.

Eg. "Good morning, E-4!"

In the case of officers commanding ships, they may be addressed by the honorific "Captain". Easy enough right? I know this will help some folks, and I know others will hate it, but alas, I cannot please everyone, so I dare to please myself!

The following table should help you decode my system.

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Sample file

Officer Rank	Honorific	Similar to:	Commands:	Number of Men:	Ship Types:
No numeric	Supreme Commander	Secretary of Defense	Entire Armed Forces of SID	ALL	ALL
O-9	Prime Commander	Admiral, General	Fleet, Army	400,000 to 10,000,000	Regional Fleet
O-8	High Commander	Vice Admiral, Lieutenant General	Battle groups, Field Army	80,000 to 200,000	Floailla
O-7	Commander	Rear Admiral, Major General	Commands Squadrons, Corps	20,000 to 45,000	Hrafnagud – Raven Carrier
O-6	Captain	Captain, Colonel	Largest Starships, Division	10,000 to 50,000	Skaldbjorg – Dreadnought, Mjolnir – Battleship
O-5	Captain	Commander, Lt. Colonel	Large Starships, Regiment	3000 to 5000	Cungnir – Cruiser
O-4	Captain	Lt. Cmdr., Major	Medium Starships, Battalion	300 to 1300	Skofnung – Frigate
O-3	Captain	Lieutenant, Captain	Small Starships, Company	80 to 225	Seax – Corvette, System Defense Boat
O-2		Lt. Jg., 1st Lieutenant	Fighter, Platoon	26 to 55	Valkyrie – Troop Transport, Raven Fighter
O-1		Ensign, 2nd Lieutenant	Fighter, Platoon	26 to 55	Raven – Fighter, Skip – Shuttle
<b>Enlisted Rank</b>	<b>No Honorifics</b>	<b>Similar to:</b>			
E-9	n/a	Master Chief PO, Sergeant Major			
E-8	n/a	Snr. Chief PO, Master Sgt.			
E-7	n/a	Chief PO, Gunnery Sgt.			
E-6	n/a	PO1, Staff Sgt.	1 Squad (fireteam) = 8 men	8 to 13	
E-5	n/a	PO2, Sergeant	1 Squad (2 fireteam)	8 to 13	
E-4	n/a	PO3, Corporal	4 man fireteam	4	
E-3	n/a	Seaman, Lance Corporal	4 man fireteam	4	
E-2	n/a	Seaman Apprentice, PFC			
E-1	n/a	Seaman Recruit, Private			

Sample file

# PROLOGUE

*Year: 2013 / Location: Norway, University of Oslo's Runology  
Laboratory*

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Magnus Olsen was in his lab at the University of Oslo at eight-thirty on a Monday morning, unaware that today he would make history.

He stood staring at a large slab of grey stone covered with angular inscriptions. He brushed off some dust and continued examining the runic characters, which snaked around the stone inside an anthropomorphic design.

The runes were a very linear looking script his Viking ancestors used as a system of writing on wood and stone, over a thousand years ago. As a Doctoral candidate in Linguistics at



the University of Oslo, Magnus had a passion for the runes bordering on obsession.

“Oy, Mags!” shouted a young Arab man from the corridor.

“Damn!” Startled, Magnus looked up. “Tariq, why must you do that?” he asked. With a mildly annoyed look, he turned back to the runestone.

“Mags, get your nose off that stone. It’s sat a thousand years, bro, surely it can wait. Let’s go grab a pint,” he said in his Cockney accent.

“Almost ready. Give me five ok?”

Tariq pulled up a stool and sat down beside the runestone, which measured ten meters long, and was lying on a massive steel frame.

Magnus began scribbling in a tattered notebook, and Tariq started leafing through papers on the table. Tariq replaced the papers and looked over at the section of the runestone Magnus was inspecting.

“Looks like a constellation, mate,” Tariq said, leaning closer to Magnus.

“They are runes, my friend, not constellations. I’ll make you a bargain: you confine your theories to astrophysics and I will confine mine to linguistics and runology”

“No, seriously, Magnus, look here,” Tariq pointed to a series of indented dots between the rows of runes.

“Those dots indicate the end of words,” instructed Magnus.

“Yeah, sure, but pretend the runes weren’t there - wait a sec, I have an idea.” Tariq grabbed a large sheet of blank paper,

placed it over the section of runic inscription, and with a pencil, marked only the dots on the paper. Pulling the paper off the stone, he set it on the table and hastily drew lines connecting the points.

“Look! See? It’s the constellation Draco,” Tariq explained.

Magnus picked up the diagram with a curious look.

Tariq grabbed a second sheet of paper, placed it over a different section of the stone, and shortly produced a second constellation.

Gesturing to the paper, palm down, he said, “Canis Major.”

Magnus was stunned. Wide-eyed, he lowered himself down onto one of the stools and stared at Tariq.

“Tariq...do you know what this means?”

“Absolutely. It means you're done for the day, and were going to grab a pint ya silly bugger, let's go.”

The discovery of constellations, on what was being dubbed the ‘Olsen al-Fazari Runestone’, sent linguists, historians and astronomers into a frenzy of research and reevaluation of old assumptions. The fact that constellations were encoded onto the stones added an irresistible dimension to this mystery.

Codes on runestone were nothing new, and when deciphered, they almost always yielded simple epitaphs. Occasionally, they would read like magical spells, and given some of these monuments were erected after the conversion to Christianity, the sponsor would certainly want their heretical intentions hidden from plain view, and so, encoded them.

This was the first time in history man discovered inscriptions going beyond mere commemoration, and further, hinted at the scientific.

Magnus looked out the window of the limousine as they approached the futuristic looking ‘Government Communications Headquarters’, or simply ‘GCHQ’; affectionately nicknamed the "Doughnut" after its shape. Despite its humorous moniker, this was the most secure building in all of the United Kingdom. GCHQ was Britain’s equivalent to the American’s CIA and NSA, and the Doughnut, the Pentagon. In addition to being the home of intelligence gathering, this was the new home of the code-breakers, most famously of Bletchley Park, Britain's code-breaking centre during WWII. This small group became heroes after they cracked the German’s “Enigma” cipher machine - considered a key accomplishment in turning the tide of the Second World War.

“Bloody brilliant!” exclaimed Tariq. “I feel like a spook, mate!”

Magnus managed a smile at Tariq, but felt uneasy. He was happiest when poring over old journals, deciphering runic inscriptions, or reading a good book - this cloak and dagger business left him with a pit in his stomach. Why were they here? Surely they could have done more of this decoding back in Oslo? When Magnus received a telephone call from the Prime Minister asking him to fly to London, he didn’t think to raise these objections.

The limousine weaved its way through various security checkpoints, and finally stopped near a large set of doors. Magnus considered the contrast in architecture between the futuristic Doughnut, and the elegant Victorian style of Bletchley Park. ‘Progress,’ he thought sardonically.

A nondescript man in a grey suit opened the door of the limousine and ushered Magnus and Tariq into the building. After recording their retinal scans, reminding Magnus of his last visit to the ophthalmologist, the visitors were issued badges and directed down a long hall. They progressed through several checkpoints; at each point they pressed an eye to a scanning device and were cleared for entry. The final scanner opened a door into a cavernous room lined with LCD monitors and digital equipment. In the centre of the room stood the Olsen al-Fazari Runestone, around which a dozen or more men and women were buzzing, taking notes and pictures, and chatting in excited tones. The energy in the room was electric, and gradually, the foreboding Magnus felt turned to wonder.

A man with greying hair and dressed in a finely tailored suit walked up and held out a hand to Magnus.

“John Loughheed, Director of GCHQ. Welcome, gentlemen. It’s our pleasure to have you here.” He shook Tariq’s hand in turn. “I’m sorry to have summoned you here so abruptly, but I imagine you will be pleased once we fill you in.” The Director nodded his head and gestured to a middle aged man in a white lab coat, who approached the group.

“Allow me to introduce Dr. William Knox from the University of Aberdeen. He’s the lead cryptanalyst and head of the project.”

“Gentlemen,” he said, nodding, and shaking hands with the men.

“Dr. Knox will brief on what we’ve uncovered over the last few days.”

“Aye, well, where to start,” Knox pondered. “Well I don’t suppose I have to tell you the significance of finding constellations on a runestone; that in itself is a bloody marvel, but there’s more to the story lads. We’ve run the inscriptions on your runestone through our quantum computers - we’ve got some brilliant equipment here.” He smiled, “we discovered that the constellations weren’t the only extra bits encoded on the stone. The constellations were more or less in plain sight, but there is some bloody complicated encryption buried in the inscriptions - so complex in fact, there is no way our ancestors did it. They simply didn’t have the ability to generate a code of that complexity a thousand years ago, and there’s more to the story here than you might have supposed. Don’t get me wrong, there were some brilliant men, the equals of any today I’m certain. But the machines we have now to crunch numbers just didn’t exist. There wouldn’t have been paper enough to compute what we’re finding here.”

Magnus and Tariq looked at each other, shocked.

“What are you saying, Doc?” asked Tariq

“Och aye, exactly. What am I saying? Well, if I were to apply

Occam's razor and choose the simplest explanation with the fewest assumptions, I'd say some clever bastard has pranked us and carved this stone fresh and is sitting back laughing somewhere."

"And is that a possibility?" asked Magnus, "have you carbon dated the stone?"

"Aye, we have."

"And?" urged Tariq.

"It's at least one hundred and eighty-thousand years old," he said.

"That's not possible!" Magnus objected, "We were barely walking erect then, and certainly not carving runestones."

"Well, my friends," said Knox, "if I apply Occam's razor yet again, my next guess is a technologically advanced being carved this stone."

"Are you saying aliens carved this runestone?" asked Magnus.

"Not just this one..." Knox gestured to a second stone standing a few meters away.

Magnus walked over to the second stone and caressed its surface. Tariq followed, shaking his head. "How many more are there?" Tariq asked.

"We think there are three in all," replied Knox, "so we're looking for one more."

"Why do you assume three?" asked Magnus

"Aye, well I don't need to tell you much about Norse Mythology Magnus, but for Tariq's benefit, the Norse believed

there were nine worlds, Earth, or Midgard, being one of them. On the stones we've decoded are a some of the names of the nine worlds and their locations within constellations. On your runestone, for example, you uncovered the constellations Draco, Canis Major, and a symbol for the Milky Way Galactic Core. We found the words Muspelheim, Jotunheim, and Helheim mapped respectively to those locations. On the second stone, we found the constellations Virgo and Orion. The third seems to be our solar system. Each of these correspond to Svartalfheim, Niflheim, and Midgard. So we're looking for a third stone which should have the worlds Asgard, Vanaheim and Alfheim listed - that would give us the nine worlds. Haven't a clue what constellations the last three might be mapped to, but we're pretty sure there's a third stone out there, and we think we might be looking in the right area just now!"

The project became known as the *Yggdrasil Codex*, in honor of the world tree, Yggdrasil, which in Norse mythology tied all the nine worlds together.

Magnus and Tariq moved into dormitory housing on the GCHQ campus and spent long days working with Dr. Knox and his team decoding and deciphering the messages on the rune-stones. In a few weeks the third runestone was found which had the constellations Corvus, Libra and Cygnus; they were indeed mapped to the worlds of Asgard, Vanaheim, and Alfheim.

Dr. Knox was staring at his laptop, shaking his head, and called out, “Lads, come over here for a minute.”

Magnus and Tariq, who were sitting at desks a few meters away in the open plan room, got up and walked over to Dr. Knox.

“S’up Docta Knox?” said Tariq.

“Look at this.” He pointed to the screen. The word ‘hætt’r’ was displayed on the screen. “What do you make of it Magnus?”

“It just means dangerous...in Old Norse,” he replied.

“Och aye, thats what I thought.” Knox’s fingers clattered over the keyboard and a new string of text appeared on the screen. He looked back over his shoulder at Magnus.

Magnus bent over looking closer. “Travel not to these dangerous lands,” he translated, “What is it in reference to?”

“It was also encrypted on your runestone. I think it’s a warning of sorts,” replied Knox.

Magnus looked puzzled, “A warning from what? These are constellations.”

“No bro, I think they’re being more specific,” said Tariq, “remember, each of these constellations is tied to one of the nine worlds. In Libra, we have Vanaheim, and remember we discovered Kepler 22b there a couple of years back. That’s a real planet, bro. I would guess there must be planets corresponding to each of these other worlds. We just haven’t got any proof they exist yet, except for Kepler 22b.”

“Ok,” Magnus nodded.



“Now here’s a real mind blower, gentlemen,” Tariq continued, “The coordinates pointing to the Galactic core don’t correspond to a planet, or even a star...”

“What is it?” asked Knox.

“It’s a bloody Black Hole!”

Several months passed, and anyone else working sixteen hours days might have been at their wits end, but with the magnitude of their discoveries, the team was as energized as the day they started - there was no greater mystery being researched in history.

Thousands of additional hours of quantum-computer processing revealed the locations of objects, presumably planets, surrounding specific stars in each of the constellations. The team now had precise coordinates where they could aim the Hubble space telescope and some of the earth-bound radio telescopes, such as the massive dish at Arecibo. While they did this, the GCHQ quantum-computer continued to relentlessly analyze additional detail on the runestones.

Tariq was standing in front of a computer screen which filled an entire wall; on it glowed a map of the constellations and objects they were studying. Data flashed on the screen, including distance between objects, spectral classes of the stars and other astronomical minutiae. Magnus walked up, touching his shoulder.

“How’s it going?”

“Incredible...” Tariq whispered, not taking his eyes off the screen.

“What is? You need to be more specific, I’m a linguist, not an Astronomer,” he joked.

“Well, bro, neither am I. I’m an Astrophysicist, not an Astronomer. If you’d quit playing with your stones you might learn a few things.” He laughed at Magnus.

“Ok, game face,” Tariq said, “what I’m staring at is the distances between the planets. If this stone was carved by aliens, where are they now? Space is vast, brother, how the bloody hell did they get here and back again? It’s not like a trip to Mars that might take us a couple of years; we’re talking millions of times farther. So how did they do it?”

Magnus look puzzled. “Good question.”

“I think we need to be looking for clues on the runestones. If these wee spacemen put the damn things here and gave us warnings, surely we were meant to communicate with them?” wondered Tariq, “I’m going to ask Knox to add several additional parameters to the quantum-computer analysis. There has to be more here we aren’t seeing.”

Several days later Magnus and Tariq were at breakfast in the cafeteria, where Tariq was flirting shamelessly with a young intern from Dublin.

“You Irish girls have the most beautiful accent,” he said, “you know, I think I’m part Irish, on my mother’s side.”

Magnus lowered his head in embarrassment as he listened to

Tariq's cheesy pick up lines. Although he thought Tariq was shameless, he secretly wished for the confidence to talk to women - ironic since he was a linguist.

Dr. Knox burst into the cafeteria. "Lads! Come quick!" He turned around and dashed out again.

Magnus and Tariq looked at each other puzzled. Magnus got up with his cafeteria tray and walked off to follow Knox. Tariq leaned over, gently picked up the young woman's hand, kissed it, winked, and ran off to join Magnus.

As they entered the lab, the entire team was gathered around one of the large wall monitors where line after line of equations were scrolling down. The scientists whispering to each other, shaking their heads, looking on with awe and reverence.

"What is it?" Magnus asked.

"Instructions!" Knox replied, shaking with excitement.

"What sort of instructions?" Tariq inquired.

"Tariq, you know what tachyons are of course?" Knox inquired.

"Of course."

"Hey, so do I!" said Magnus laughing, "I watch Star Trek! They're particles that move faster than light. But the experiment with the neutrinos back in 2010 declared their existence was found to be in error, right?"

"It was, but these instructions demonstrate how to work around the problem!" Knox's voice was almost shrill with excitement.

“So what now?” Magnus asked.

“We build it. The instructions show how to take advantage of what we call an Einstein-Rosen bridge - a wormhole. The device will create a microscopic wormhole between our location in space-time and the destination, and through the wormhole we can send a data transmission.”

It was another few months before the team, now tripled in size since the project's inception, was able to build the Einstein-Rosen Bridge Transceiver (ERBT). It was a modestly sized device, tubular, a meter in diameter, and maybe three meters long. It looked like a fat telescope mounted on a tripod and hooked up to some thick cables. The transceiver was connected to a video camera and to the large wall display unit, so for all intents and purposes the system was really just an advanced video conferencing system.

The device had been tested in loopback mode, so they knew all inputs and outputs worked; the unknown was whether the tachyon transceiver would function as predicted. There was nothing left but a live test.

The team gathered in the lab, standing silently, each of them barely breathing. As head of the project team, Dr. Knox had the honor of *throwing the switch* and initiating the call. The deciphered instructions had them point the transceiver in the direction of Kepler 22b, the recently discovered planet in the Cygnus constellation.

With trembling hands he pressed a key on a laptop that

initiated the call, and held his breath.

The machine sprang to life with a deep whine resonating inside the room - everyone felt its power in their bodies, like being at a concert. The whine morphed into a steady thrumming, and people began to breath again.

The video screen on the wall flickered, and lit up with a white light. Slowly the white darkened and a slender female figure began to appear. She had blonde hair, and had a very human appearance, but more delicate and fine featured - not very alien at all.

“I am Saeran,” she said with a lyrical voice, “we expected you would contact us one day. We greet you now, as brothers and sisters,” she opened her arms in a welcoming gesture.

The team was stunned, shocked, horrified, and elated in equal measure.

“I...I’m Dr. Knox, head of the project team,” he said.

“We are happy to meet you Dr. Knox,” she replied, lowering her head respectfully.

“I don’t know where to start...” Knox trailed off.

“Who are you?” Tariq asked.

“We are the Alfar.”

“Did you create us?” asked Magnus.

“Oh, no, not us.” Saeran smiled. “Your progenitors are the Aesir. They did not create you exactly, they simply added what you might call a divine spark, shaping what you would become. We Alfar are just your brothers and sisters of sorts. We were asked to shepherd your race when your time came to

start traveling among the nine worlds. The runestones were placed by the Aesir as a test. Once you advanced enough to decipher their hidden secrets, that knowledge enabled you to contact us and we would know you were ready for our guidance.”

“So the Aesir gave birth to the Alfar as well?” Tariq asked.

“No, our progenitors were the Vanir. They are the second of the three elder races, the others being the Jotuns.”

“I have so many questions,” Knox said.

“But why?” asked Magnus.

“Why?” repeated Saeran, looking puzzled.

“Why did the Aesir get involved with us? What do they want from us?” asked Magnus.

Saeran smiled, “Do you have a flower garden?”

“Yes, my mother does.”

“Why does she garden?” Saeran asked?

Magnus just stared at her, not quite sure how to answer the question.

“The Gods and Goddesses tend to us like we were a flower garden,” Saeran continued, “they marvel at our beauty and diversity, they take pride in helping us grow, they seed us through the stars. They are like our gardeners.”

# CHAPTER 1

*Year: 2128 Planet: Niflheim / Star: Alnilam's Ab / Sector: Orion*

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Egemen sat on his throne like a well fed lion; lethargic, yet extremely dangerous. The pale blue skin of his muscled limbs resting on the arms of his throne, his eyes fixated on the two subjects standing before him. Flanking Egemen were various advisors and servants. Immediately to the right of Egemen sat his son and heir, Devrim, a Hrymar of much smaller stature than his sire, smaller than most Hrymar. Egemen despised the fact his only son was a meek runt among a race that prided themselves on physical prowess and aggression.

The Over-Chieftain's advisor, a stalky, milk-white skinned Svartalf, named Zekil, who was always calculating, spoke up, "My Lord, we have a dispute between two brothers over profit from the sale of some slaves." Svartalfar were known to be the

most ruthless race when it came to business. The whole of Svartalfar society was based around the concept of commerce and profit, and in fact they had no separate government at all, only a large corporation. The Sons of Ivaldi Inc. ruled with ruthless economic efficiency; many leaders employed Svartalfar as advisors.

Two young Hrymar stepped up before the Over-Chieftain and bowed.

Zekil's eyes explored the forms of the brothers hungrily, a twisted smile forming on his mouth.

"My Lord," the first brother bowed, the second brother followed suit.

Egemen spoke, "Why do you bring this dispute before me today? Did you not try to resolve this by combat? Must I remind you we are Hrymar, not peace loving, pathetic Ljossalfar."

"Yes, my Lord, we did," said the second brother, "we conducted two trials by combat on our family's holding, and both were fought to a draw. We feared a third contest would kill one of us, and leave our sire short handed."

Egemen looked disgusted. "Feared being killed? So your sire would not be short handed? How considerate," he glanced over at his son, "see how thoughtful such sons are, Devrim? Would that I had such a son..."

Devrim knew he was being sarcastic, but it stung him nonetheless.

"I will address your problem at once," Egemen stood up,



walked down the three steps, and stood in front of the two brothers, looking them up and down, sizing them up. Without a sound, Egemen drew the dagger hanging at his belt and thrust it up through the chin of the first brother, so far up that the tip protruded through the top of his skull. The second brother stood still as stone, a long wet patch forming on his leg, and the smell of shit wafting off him. A sickening gurgle and rush of blood were the last living acts of the young Hrymar's body.

Egemen held the man's lifeless body up, locked eye to eye with him, "How dare you trouble your Over-Chieftain with such trivialities! One of you may have died in combat - with honor! Now both of your lives are forfeit." Egemen let the young man's corpse drop to the floor.

"Zekil, this other one is for you. Take him as a body slave," Egemen looked cruelly into the young man's eyes, "Let him live long so he can remember what it might have been like to live like a true Hrymar."

Zekil's eyes lit up. His appetites were well known at court and this slave's life would be nigh unbearable, filled with constant shame and pain.

"Thank you, my Lord, you are most generous," Zekil snapped his fingers and two guards grabbed the young Hrymar and dragged him out of the court; he was still stunned and speechless.

Egemen turned nonchalantly, wiping the blood off his dagger on his pant leg, and sat back on his throne.

A second petitioner was ushered forward; he approached the great Over-Chieftain and threw himself, prostrate on the floor.

“Speak,” Egemen commanded, “What is your name, fool?”

“I am N-N-Nermin,” the man stammered.

“Stop shaking like a frightened herd animal, you pathetic piece of shit. Why have you asked to come before your great Over-Chieftain? I hope you are not planning to waste my time like those two,” he paused and glared at Nermin, “Stand up and address me with some measure of courage.”

Nermin stood, “Y-yes my lord. I have news of great import.”

“Then get to it.”

“Of course, of course. We have learned of a race as yet unknown to us. We were mining on an asteroid out on the edge of Cygnus, Alfar territory, and we picked up communication traffic between an unknown ship and an Alfar vessel. The occupants of the ship referred to themselves as *Human*.”

Devrim leaned forward on his throne, “*Human?*”

Nermin nodded. “Yes, my lord.

“Did you learn anything more, such as where they’re from?”

“No, my Lord. It was a brief communication. All we heard was that the Captain of the vessel was on his way to a planet around Epsilon Eridani with some important news and he wouldn’t say more until he arrived.”

“Did you scan the ship?”

“Yes, my Lord. We were able to do a brief scan as it passed by. We only used passive scanners to avoid detection; we were illegally in Alfar territory after all. The Hyperspace signature was nearly identical to the Alfar ships, but the hull was not organically grown like their ships; it seemed to be made of metallic and fibre composites. That is all we could determine with passive sensors.”

“Interesting....Human...” Egemen trailed off. “We need to find out more about these Humans. A growing empire has need of new slaves and resources.”

“Serkan!” Egemen barked.

“Yes, my Lord,” Serkan stood at attention beside his master. Serkan was an impressive specimen, tall and heavily muscled.

“I want you to take a scout ship and see if you can’t learn more about these Humans. Take my offspring along; I’m sick of looking at his pathetic form.”

Serkan bowed. “At once.”

Devrim didn't acknowledge the insult overtly, but inside he burned furiously.

“I’ll make you proud, sire,” he said.

“I doubt that.” Egemen waved at Devrim dismissively. He bowed and hurried out of the throne room.

Devrim returned to his quarters in a low mood; he always left Egemen feeling this way. His life was a series of failed attempts to please his Over-Chieftain, his sire. He lived in the shadow of the most ruthless Over-Chieftain in history, the

only one ever to bring all of Niflheim under one yoke. Egemen alone united all the Hrymar tribes. Previously they cooperated, albeit loosely, infrequently, and rarely for long. For nearly ten years Egemen was the Over-Chieftain of all the Hrymar. His rule was brutal and absolute, but productive. Never had the Hrymar accomplished so much. Their war machine grew, and grew, and their sector of space, Orion, became more secure; now their interests crept beyond those borders.

By Hrymar law, Devrim should not have been allowed to live; they tolerated no weakness. In ten years of breeding with his harem, Devrim was the first child born alive, as such, Egemen was rue to leave him out on the ice to die as he should have rightly done. Devrim knew this, and was never sure to be glad or not. Had he been born whole, a true Hrymar, his life would have been one of relative ease and privilege; being born into the Jarl class was an honor. The life of a Jarl in Hrymar society was one of leadership, duty and reward. Being born a weakling as he was, Devrim's life was one of shame. In ancient times, the weak among the Hrymar were made part of the Thrall class, essentially slaves, and served the Karl and Jarl classes; the Karls being the craftsmen, ostensibly Hrymar middle class. After the Hrymar civilization grew beyond Niflheim, they soon took other races as thralls to serve them. Subsequently any Hrymar born weak, deformed, or generally found lacking physically, were left exposed on the frozen surface of Niflheim to die; the Jarls argued this made

for a stronger race.

Devrim began packing a small bag in preparation for his trip with Serkan. He picked up his dagger, which was the twin of the one his sire had used to kill the young Hrymar earlier in the day. He looked at it, considered it carefully. Only the ruling family and trusted servants were permitted weapons in the presence of the Over-Chieftain. This law was established early on in Hrymar history and reduced the number of assassinations to a more civilized level.

Although undersized by Hrymar standards, a runt by all accounts, Devrim was a master with his dagger; he had to be. Unarmed he had no advantage, but with a blade in hand, the playing field became level, if not tilted in Devrim's favor. Being smaller, he was a more challenging target, and his lack of size and muscle mass were compensated for by his dexterity and reaction speed. He never revealed his skill, to do so would be to give up some of the few advantages he had, and in the treacherous court of Egemen, one needed advantage.

A knock on the door pulled Devrim from his reflection.

"Enter," said Devrim.

Serkan opened the door, "My lord, our ship is prepared, and we are ready to depart."

Devrim looked over to Serkan, "I am ready." Devrim picked up his bag and stepped towards Serkan, then stopped in the doorway. "Why does my sire despise me, Serkan? I know I do not measure up to our greatest warriors, but I am fit to rule. There's more to ruling than brawn..."

"He is a hard man, my Lord. It took a hard man to bind all the Hrymar together, the hardest of men in fact. Had you been sired by any other chief, you would have the respect I know you crave, and justly deserve," Serkan said with a bow.

"I have to do something, Serkan. I must find a way to distinguish myself, lest I find myself without a future should my sire die...or be killed...." Devrim lingered on the last word.

"The ship is ready, my Lord, and your sire wants us gone within the hour."

Devrim walked up to Serkan and stood before him, almost nose-to-nose, "You serve my sire well, Serkan," Devrim looked eyes with him, "would you serve me as well?"

"If you are named successor, I will serve you till I die, my Lord."

"Good...good. Shall we?" Devrim gestured with his hand.

Serkan nodded. "My Lord," and walked on.

Devrim made his way down the corridor from his quarters into the common area, then on to the tunnels outside the palace. The entire population of Niflheim lived beneath the planet's surface. From the Svartalfar, they purchased machines for rapid tunneling using energy based boring machines.

Although temperatures never got above freezing, with the Svartalfar tunneling technology and Niflheim's abundant geothermal energy, the Hrymar were able to make very good use the planet's resources; geothermal energy became the basis for their economy. The apparently lifeless planet was home to

boundless underground lichen and fungi farms, with thousands of species and manifold uses. The fungi and lichen were their food, building material and their clothing; some even suspected certain species possessed intelligence, although rudimentary.

He stood on a platform with several sets of holes on each side. A long tubular public transport vehicle raced out of one of the holes and abruptly stopped before Devrim, and hissed as its doors opened. He stepped across the threshold and stood just inside the door, holding a bar above his head for balance. Smoothly, but powerfully, the transport accelerated into the other end of the tunnel, and into darkness. The public transport tubes on Niflheim were capable of speeds in excess of one-thousand kilometers per hour.

All Devrim could hear was the steady hiss and whoosh of the mag-lev transport racing through the tunnel, his mind mulling over his task. Humans, he thought, perhaps this was the opportunity to distinguish himself? If he could capture one...

Before he had time to fully develop his train of thought, the transport decelerated and stopped.

“Uzay Terminal,” an artificial voice announced.

Devrim stepped through the transport door and was greeted with a blast of frigid wind. Devrim shivered and picked up his pace as he walked up to the small scout ship.

He saw Serkan talking with one of the ground crew who was prepping their ship, the Dogan, and walked over to them.

Their scout ship was a small vessel, only about forty meters long and weighing in at a hundred tons; it was jump-capable however, and could also enter planetary atmospheres. Larger ships, such as many of those in the Hrymar Stellar Navy, were confined to space, and docked at orbiting stations. The Dogan traded weapons and armor for range, and was armed with only a single plasma-cannon turret.

“My Lord,” said Serkan, bowing his head. The crewman also bowed his head with respect.

Devrim nodded and walked up the ramp and into the ship. He moved through the ship into the cockpit, and sat down into one of the two chairs. He was looking forward to getting off-planet; trips like this were an opportunity to forget his sire’s displeasure, for a time, and marvel at the scope of the multiverse. Niflheim was a bleak planet, frozen, yet still managed a measure of beauty.

Serkan sat down beside Devrim, the ship’s hatch closed with a clunk, and Serkan began his pre-flight checks. The powerful vibration of the ship’s dark-matter reactor began to ripple through them as it warmed up; shortly the vibrations dampened, stopped altogether and the console lit up all green.

“Uzay terminal, Scout Ship Dogan ready for departure,” Serkan announced.

“All clear, Dogan,” came the reply over the ship’s comms.

“Let’s go find some Humans, my Lord.”

Devrim nodded silently.



# CHAPTER 2

*Year: 2128 / Planet: Unnamed / Star: Procyon A / Sector: Canis  
Minor*

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*Brothers will fight and kill each other,  
sisters' children will defile kinship.*

*It is harsh in the world, whoredom rife  
an axe age, a sword age*

*shields are riven,*

*a wind age, a wolf age*

*before the world goes headlong.*

*No man will have mercy on another.*

*- Voluspa*

A silvery-white star, Procyon A, hung low in the sky, caressing the horizon and bathing the landscape in a shadowy

light; it reminded Haldor of the bleak Arctic nights back on Earth. Growing up in Oslo he learned to appreciate the generous summer days where the sun never set, but, as if in payment for the privilege, the Arctic nights were equally long and not nearly so pleasant.

Standing at the edge of a crater, he watched as Procyon B, a white dwarf, and little brother to Procyon A, made its way slowly above the horizon. It was an awesome site. Two white twins, greeting the day.

A malicious wind interrupted his reverie and tore his jacket's hood off his head; the wind's icy fingers began digging into his body, burning Haldor's skin wherever it gained purchase and allowed sleet to dampen his hair. Pulling his hood tight about him, he shivered, then began walking deliberately towards his shuttle amid deafening thunder claps, wincing with each eruption. The sound evoked his grandfather's tales of Thor fighting the frost giants. "When you hear thunder," his grandfather said, "you know Thor is doing battle with the Jotuns." Haldor missed those stories. Even his name reflected those stories, and was told *Haldor* meant *Thor's Rock*.

Haldor Olsen, or just Hal to his friends, was a spiritual man, he honored the Norse Gods; both the Aesir and the Vanir as his forefathers had done. Three thousand years past, his ancestors regaled their children with the tales of the old Gods, of Jotuns, Dragons and great wars; those tales became legend, the legends became myth, and the myths were soon forgotten. The coming of Christianity and the advent of technology

replaced the old stories with new ones, and men soon forgot the desire for valor and honor; they cared only for the acquisition of new things, and to live ever more hedonistically.

Once men began to ply the dark oceans between the planets, they began to re-discover the truth of the myths. They were not alone as many wanted to believe. The multiverse was indeed a place of danger, filled with the evils of old legends; although this realization would not be fast enough.

A red light illuminated the area under the ramp of Hal's shuttle; he pressed a button on the remote at his wrist, and with a whine, a pop and some hissing, the ramp began to lower. Red light seeped out from inside of the shuttle. Hal was relieved he would soon have a reprieve from the frigid wind and driving sleet; although it was a short distance from the crater to his shuttle, it seemed an infinitely long walk.

The ramp made audible contact with the ground and he walked up and into the shuttle. Seated in the navigator's chair was a youngish East Indian woman with deep blue eyes. She swiveled around to look at Hal and smiled crookedly. "About time you got here!" she chided.

"Loki's balls, woman! It's freezing out there!"

"It is, you look a bit like a wet cat, Hal," Nila laughed.

Hal smiled. "The ship ready to go?"

"Prepped and ready boss."

"All the data we need collected?"

"Done, and done."

"Good, lets go home."

Hal sat down in the chair beside Nila and strapped himself into his harness; the shuttle began smoothly accelerating out of the planet's arctic atmosphere. From orbit the planet was striking, the subtle shades of blue, black and white were almost mesmerizing. Hal only had to remember what it had been like to walk the one-hundred meters back from the crater to remind him of the planet's less attractive aspects. Like a rose with its thorns, he thought.

As the shuttle approached the survey ship, SSS Leita, in orbit around Procyon Zeta, her docking bay doors opened silently and the shuttle navigated into its assigned berth.

Hal stepped out of the shuttle into the stale, but warm atmosphere of the Leita. The docking bay was quiet. Although the Leita was a Solar Inclusive Democracy (SID) Star Ship (hence the SSS designation), a Military ship, she was a survey vessel, not a ship of war; as such, it was a tranquil atmosphere. Only one deckhand worked in the shuttle bay. Most of the crew on duty were at their scientific monitoring stations on the bridge, or analyzing data in the computer lab; this was a drastic contrast to the times Hal served on any of the SID warships which were buzzing with frenetic activity twenty-four hours a day.

He stepped through several bulkheads and took a short set of stairs up to the bridge where Captain Chahaya was sitting comfortably in his chair. Chahaya was a wizened old Indonesian man with a wispy white beard, standing 5'2" and

weighing in at maybe 110 lb., soaking wet. What he lacked in physical stature he made up for with his commanding presence; there was no doubt who the Captain was on this ship. In private he was the polar opposite, giggling, smiling, almost a silly little man; few got to see that side of him; Hal was one of the few.

“Hal! How was the view?” Chahaya asked.

“Stunning...”

“I am certain. Sadly my crew does not permit me to have any adventure, I must be content with the view out the bridge window,” he smiled at Hal and motioned to the view.

Two white stars and a blue planet filled the view-screen. Hard not to appreciate, even from orbit, Hal thought.

“We’re calculating the jump back to New Midgard now, we should have you home in about ten hours.”

“Sounds good, lets hope my wife has dinner ready for me,” Hal laughed.

“You need good Indonesian girl, Hal! My wife can cook for thousand men, and none leaves hungry,” Chahaya said in his thick Indonesian accent.

With a grin, Hal replied, “I’m sure, but my wife may object, old friend.”

“Well, sometimes you trade them in for new model,” Chahaya winked.

“Why aren’t you cooking her dinner? She deserves it for putting up with your nonsense, Hal,” Nila said, as she walked into the bridge. They all laughed.

Chahaya pressed a button on the arm of his chair and spoke, "crew, prepare for Jump to Hyperspace."

The lighting on the bridge changed from the standard white to a dull yellow. Everyone took a seat and buckled in. Shortly, the lighting on the bridge changed to red, there was a momentary feeling of disorientation, and the sensation of falling, just briefly, and then all returned to normal....but now they were in the inky black embrace of Hyperspace.

The lighting on the bridge reverted to its original white.

Planet: New Midgard / Star: Epsilon Eridani / Sector:  
Eridanus

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The Leita dropped back into normal space with a shudder and over the comm system came the strangely alluring voice of the ship's computer, "We have arrived in the Epsilon Eridani system, next stop, New Midgard, ETA five hours."

Hal looked over at Nila. "What are you up to for the next couple of weeks?"

"Oh, I am going to go home to New Delhi to visit my parents. They keep pestering me to visit. If I don't go soon they will show up here!" She giggled.

Haldor was happy to be coming home, he missed his son terribly; at five years old little Ailan was always up to something. His antics were the most cherished part of Haldor's life. He never imagined he would love anyone as

much as his wife, but when his son was born...there were no words to describe it. He told Ailan daily that he loved him more than the sun and the moons and the stars. It always made Ailan giggle, although he didn't know quite what it meant, just that his dad was smiling and laughing, and that was always enough.

Haldor had visited dozens of planets in his job as a colony surveyor, and always tried to bring back an interesting rock or mineral sample for Ailan; he now had a huge collection.

New Midgard was the first planet humanity settled after first contact with the Alfar over a hundred years ago; named in honor of the old Norse name for Earth, Midgard.

Haldor keyed a button on his wrist comm, he heard a beeping, and then his wife's voice "Hello?"

"Guess who's coming for dinner?" Hal asked.

"Hi, Hon! How was the trip?" Siobhan asked.

"Good, uneventful really, glad to be home. How are the crops looking?"

"Wait till you see the corn! The tomatoes are doing really well too. The ultra-sonic transmitters are doing a wonderful job keeping the pests away."

"Great, I'm looking forward to some corn-on-the-cob this summer. I should be home in a few hours. How's Ailan?"

"Out chasing the animals no doubt. Listen, I'll let you go. I'm in the middle of a thousand things, see you when you get home. Kisses!"

"Ok, bye," Haldor keyed his wrist comm again.

When a tone announced their landing, Haldor and Nila got up and collected their bags, and made their way to the disembarkation ramp.

"Well, have a safe trip back to New Delhi."

"Thanks boss, give Siobhan and Ailan my love."

"Will do, see you in a couple of weeks, rested and ready for action."

"With sixteen nieces and nephews I cannot guarantee the rested part," she laughed and walked off.

Hal's electric ground-car arrived quietly at his farm, ten kilometers outside of the capital city of Norvik. Most settlers on New Midgard ran small farmsteads in addition to contributing whatever other talents they had. Hal spent most of his time surveying nearby planets for suitability as future colony sites. His wife Siobhan was a botanist, and in addition to managing the farm, conducted research on local flora for the New Midgard government.

The colony on New Midgard was founded in 2120, and was barely seven years old; nine thousand people called it home, with new settlers arriving each month. Life here was good. Not that life on Earth had been so bad recently; seventy years ago Earth completely redesigned its energy economy and migrated from fossil fuel burning, to an energy economy based on hydrogen fuel cells, high efficiency solar and wind power. The entire infrastructure became renewable and non-polluting, as well as accessible to all. All of this was made



possible after the implementation of the Global Digital Democracy - a fully inclusive, instantaneous electronic voting system that transformed world governments. People now had the ability, and legal obligation, to vote directly on issues; the world's population could now come to true consensus on issues, unhampered by lobbyist influence or lopsided representation.

It was inevitable when the voices of all people on Earth could be heard, they united. The individual countries on Earth, as well the colonies on the Moon and Mars, voted to form one solar system wide government. The Solar Inclusive Democracy (SID) was born.

Hal stepped out of his electric car and took a deep breath of the fresh air; recycled air on a starship was never great, no matter how efficient the atmospheric scrubbers. He inhaled deeply, letting the scent of grass and pollens linger in his nose.

He walked over to a corn field bordering his grassy yard and gazed out at a rippling sea of gold. Hal reveled in the simple beauty of his own food growing; of course his crop would help feed others as well, but they were his fields. He watched as some of the robotic farm-tenders wandered the fields, analyzing soil ph, moisture levels and ensuring there were no pests; these little semiautonomous robots took care of much of the drudgery normally associated with farming.

Attached to the side of the house was a greenhouse where his wife conducted research, and where she grew herbs and plants during the short winter season. He saw her bent over a

plant, pruning and generally fussing over it. He crept in quietly, stood behind her, and put his hands over her eyes.

She spun around and threw her arms around him. "Hey, handsome!"

"Hello, beautiful!" He kissed her deeply, then paused to say, "Flowers are coming up nicely."

"They really are," she turned around and picked up a pot, "look at this orchid."

He looked at the brilliant red flower. "Doesn't hold a candle to a little Irish lass I know." He kissed her again. "Where's Ailan?"

"He's bug hunting around the house, I have one of the farm-tenders following him."

"Ok, I have a new mineral sample for him."

"Oh, he'll love it!" she smiled. "Not like he needs more rocks, his room is already overflowing with them, but oh well, like father, like son," she said throwing up her hands.

Hal's study was brimming with rock samples from a dozen planets and asteroids, but that was work he rationalized. He'd been collecting rock samples since he was Ailan's age, and turned his hobby into a career. Second only to his rock collection, was Hal's collection of bladed weapons, which lined the walls of his study, and almost every other room in the Olsen household; Siobhan had declared their bedroom a 'blade-free zone' though. Few people knew Hal was capable of wielding any weapon in his collection to deadly effect; most guests saw them only as quaint wall decorations.

He found his son, and the farm-tender, or at least what was left of it. Ailan was sitting behind the house, screwdriver in hand, with pieces of the farm-tender lying scattered in front of him. He saw his father, jumped up and ran to him and gave him a tight squeeze, "Daddy!"

Kneeling, Hal hugged him back. "What happened to the farm-tender, buddy?"

"It was broke, so I fixed it!" He beamed.

"You did? Oh my! Let's not fix these little fellas anymore, ok? If they're broken, come ask mommy or daddy to help."

With a frown, Ailan replied, "ok,"

"I've got something for you."

"A present?" Ailan's eyes went wide.

"Yep." Hal pulled out a glistening green and black mineral, the size of his thumb, and handed to his son.

"Thanks, Daddy! I'm gonna put it in my room right now!" Ailan ran off clutching his prize tightly. Being a dad was a good job, Hal thought.

Siobhan and Ailan were a light in the darkness for Hal. Hal's own parents died when he was a teenager, which left a void of sadness in his life, one he found impossible to fill...until he met Siobhan. Now, Hal couldn't even recall how those dark days felt. They were fully banished, replaced by the warmth and light of his wife and son.

*Planet: Earth / Star: Sol / Sector: Prime*

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Cate Fisel strained to open one of the double doors leading into the CEO's office. Ben Gridrmann looked up from his desk as Cate closed the door behind her.

"Good morning, Mr. Gridrmann," Cate said, smiling.

He managed to produce a half smile from his wrinkled face. "What have you got?"

"The latest research on the Telomere Stabilization Protocols."

"Well?" He motioned for her to pass him the papers.

Cate handed him the dossier. She always got nervous around him, despite working for him for six months now. As CEO of the GAPA Corporation, which had a near monopoly on anti-matter production, he was one of the richest men on the planet; who wouldn't be a little intimidated around him?

Anti-matter reactors were confined to use solely in space, due to the risk an accident could pose; on a starship or space station, a reactor was designed to be jettisoned. If not for the terrestrial ban on anti-matter reactors, Gridrmann might be the richest man in the solar system.

Gridrmann was seventy-six years old, and although modern medicine was highly advanced, humans still only averaged a ninety-five year life span; for Gridrmann, this simply wasn't acceptable. He was used to succeeding in everything he did, always being able to solve a problem through the application of intellect, money, or force. Old age was one foe he was failing to conquer.

After the first contact with the Alfar over a hundred years ago, humans learned their new friends lived, on average, five hundred years. Over five times the span of a human! They explained this was simply function of life on their planet, Ljossalheim, or simply Alfheim; Alfar born on other planetary colonies had lifespans much shorter, though still about double a Human's.

For the Alfar, the difference between the lifespans of their colonies was not a great mystery to be solved, it just was; they accepted it.

For a few years after first contact, humanity discussed the possibility of researching ways to replicate the conditions on Alfheim and reproduce the secret to their long lives. Ultimately mankind made the sensible decision, guided by the wisdom of the Alfar, to give up this pursuit. Earth was already at the breaking point with the current population; it had exceeded its carrying capacity, which was a euphemism for the planet's inability to support humanity's unrestrained proliferation and consumption of resources. Quintupling the age of humans would push humanity over the brink. The SID banned any further research into Alfar aging, but not everyone gave up the dream.

Gridrmann was leafing through the report. "God damn disappointing progress," he muttered and shook his head, "I pay these useless assholes a fortune, and for what?" He looked up at Cate.

"I'm sure they're trying, sir."

"My father had a saying, Ms. Fisel, 'There is no trying, only doing'. He was a prick, but I still like the quote. What we need are tissue samples from an Alfar, or an Alfar volunteer if possible. Based on what I read here, the limited DNA samples we have aren't enough."

"Sir, that's a tall order. Contact with the Alfar is tightly controlled, as you well know. Typically only key government officials have access to them."

He looked at her sternly and leaned forward. "Then buy me a key government official, Ms. Fisel. Better yet, buy me an Alfar."

Planet: New Midgard / Star: Epsilon Eridani / Sector:  
Eridanus

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After a week of playing farmer and getting some much needed rest, Hal had been called back to work to meet with his boss, New Midgard's Governor, Andrew Zelinski.

The drive into Norvik was joyful; trees lined the road and flowers filled the ditches; the aroma was intoxicating. One of the mandates when humans colonized New Midgard was to strike a near perfect balance with nature. Their colony was self-sufficient by design and everything was done with a 'New Midgard First' policy. Humans were determined not to repeat the mistakes of the previous centuries. Although the last hundred years had seen drastic reforms on Earth, she was in a

slow recovery, and its citizens we're still learning to live in harmony with her.

New Midgard was a clean slate, a do-over, and so far so good.

Norvik and its surrounding agricultural homesteads were the only settlements on New Midgard and were now bustling with ten thousand residents.

Hal parked his car in front of the Midgard Administrative Center, known affectionately as 'The MAC'. The MAC was a five story office building, the penthouse of which also served as the governors residence. The MAC was part of a modular technology the SID had co-developed with the Alfar to enable rapid colonization - Prefabricated Colonization Modules, or PCMs. The MAC was a Colonization Administration Module, which language lovers pointed out was a palindrome for MAC. Other options included Agricultural Modules, Mining Modules, Terraforming Modules and more.

To install the various PCMs, a cargo ship would drop the PCM at its target location, after which the PCM would decompress, initiate all systems and perform self-diagnostics. In a matter of a few hours an agricultural colony like New Midgard would be operational and self-sufficient.

The MAC, all PCMs in fact, were a paragon of environmental integration; all the MAC's windows doubled as solar panels, and in between the windows on the outer walls of the buildings were a plethora of mosses and plants. The roof acted as an herb garden for the restaurants on the first

floor and all water and waste were one-hundred percent recycled and re-used.

Hal grabbed a double espresso at Stellar Joe's on the main floor of the MAC, then hit the elevator button for the fifth floor.

Kristy Hardin, an attractive thirty-something brunette and the Governor's aide, was waiting in the fifth floor lobby when Hal stepped out.

"Well, hi there, Kristy," Hal said, smiling.

"Hi, Hal, nice to see you again, it's been awhile."

Kristy was a pleasant young woman with the uncanny ability to herd cats; this proved useful in a fledgling administration.

"It sure has. You're looking great!"

"Thank you! That's so sweet. Let's get you in to see the Governor."

Kristy ushered Hal into the Governor's office, which was adjacent to his living quarters.

Governor Zelinski was standing, and on a stellar-comm call when they walked in, the face of SID President Dalia Rukundo was displayed on his wall monitor.

One hundred and fifteen years ago, man had unlocked instructions to contact an alien race - the Alfar. Part of those instructions included plans for a communications device that worked instantaneously across the stars. The technology, it was later discovered, relied on the creation of microscopic Einstein-Rosen bridges - wormholes. The device was naturally called an 'Einstein-Rosen Bridge Transceiver' or ERBT; most



referred to it simply as a 'stellar-comm'. An ERBT required the presence of a large gravity well, so they couldn't be deployed aboard ships.

"...thanks, Madame President," said Zelinski, "I'll talk to you next week." The stellar-comm disconnected and the wall monitor went black. The Governor sat down at his desk.

"Morning, Governor," said Hal, "how are things back home on Earth?"

"Good morning, Hal. Good, actually. No problems on Earth this week, for a change, and no troubles here to report. The calm before the storm?" He put on a questioning look and laughed.

Hal smiled. "Nice to hear."

"Governor, do you need anything more from me? If not, I'll let you and Hal get started," Kristy asked.

"I see Hal's already got a coffee, although he didn't think to bring his boss one...this could reflect badly on his year-end performance review." Zelinski smiled again. He and Hal had been friends for going on ten years and knew each other very well. "We're fine, Kristy, thanks."

Hal took a seat in one of the deep leather chairs in a semi-circle in front of the Governor's desk. He inhaled deeply and reveled in the natural smell of the leather; everything on a star ship was synthetic, and you missed these little things. He heard the door close behind him.

"What's up boss? I was supposed to be off another week. Something urgent I take it?"