Krog's New Weapon

Reality Is a Special Case

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Krog watched skeptically as D'raw and Kwa-id entered the cave dragging a large object behind them and breathing heavily. Their prominent brows were soaked with sweat, and their thick manes were matted and dirty.

"This new weapon?" Krog grunted, his own ridged forehead wrinkling slightly.

"Ug, yes," replied D'raw. "It improved. Kill mammoths dead." Kwa-id snorted in agreement and made little hops of excitement.

Ward, currently a student at the Air Force Institute of Technology studying systems engineering, holds degrees in electrical engineering and engineering management. He is Level III certified in SPRDE, Level I in PM, T&E, and IT. Quaid is a Level III COTR, space operator, and battlefield airman, currently working for the Secretary of the Air Force, Pentagon. Mounce holds an advanced degree in electrical engineering from the Air Force Institute of Technology. He is Level I certified in T&E and PM.

 Illustration by Jim Elmore

"Er ... long time since me see mammoths," Krog pointed out, as delicately as his caveman sensibilities allowed.

"True, no mammoth lately," Kwa-id acknowledged. "Sun get hotter, snow melting, mammoths go far away. But cold come back soon. Mammoth come back too."

"Krog hope so. Krog like mammoth. Very tasty. Very chewy. Make good fur pants." Krog briefly considered the possibility of permanent global climate change, then shrugged it off as unlikely. "Show Krog how weapon works."

D'raw and Kwa-id directed their considerable strength towards lifting the strange object. "Is like ... old club," D'raw panted, "But ... much heavier. Makes ... bigger dent ... in mammoth ... head."

"Me see," Krog replied, encouragingly.

"Only problem," Kwa-id conceded, in between breaths, "is mammoths tall. Club heavy. Club best ... on small mammoth ... or ... sleeping mammoth."

"Sleeping mammoth?" Krog asked. "How we get close and mammoth not wake up? If mammoth wake up, how we get away and not get squished?"

D'raw and Kwai-id dropped the club with a thud.

"In all this time, you only make one club?" asked Krog. The two nodded, and Krog spat in disgust. "Krog not impressed. You go away. Make better club. Maybe even make two different ones, then Krog do comparison and ..."

Krog was interrupted by a voice coming from the ceiling: "Lieutenant Commander Krog, your program management review is about to begin. Please report to Conference Room F22."

"Computer, end program," Krog sighed. The cave simulation dissolved around him and his mammoth-fur pants disappeared to be replaced by the uniform of a Federal Space Force officer.

Reality Is ... a Special Case

"Those cavemen sure were stupid," Commander Krog said to no one in particular as he stepped out of the holo-deck and headed towards Engineering. "It's too bad the sim doesn't include a Cave Acquisition University module."

Krog wasn't looking forward to this meeting. The Peregrine starfighter development program was a real headache, and it wasn't clear whether a couple more program reviews were going to fix it, even if they were required by regulation 5000.2. Besides, Torrapians like him were built for combat, not conference rooms. Even though it was an honor to be the program manager for the new ship, it wasn't quite what he expected to do when he enrolled in the Federated Technocracy's Space Force Academy. He stepped into the conference room and took his seat.

"Good morning, sir," said Ensign Tkll'ngs'm, a wet-behind-the-ears program management trainee from the swamp planet Lg'oo'hnn. "Since we have a few new members, including myself, I thought I would start with a recap." He gestured at the PowerCube on the table, which showed a three-dimensional spinning model of a sleek starfighter, accompanied by countless lines of text in 2-point type.

"In 2285, Federated Technocracy leaders identified several new threats the existing starfighters could not counter, primarily from the Torrapian Empire. Oh, ummm ..." Ensign Tkll'ngs'm paused and blushed yellow as he realized his faux pas, but Krog gestured for him to proceed.

"Sorry, sir. Um, as we all know, hostilities between the Federated Technocracy and the Torrapian Lords of the Iron Sun ceased in 2293. The Torrapians joined the Federation two years later. This was three years before the first Peregrine was scheduled to be completed, but the Technocracy High Council decided to continue the program anyway.

"However, there were delays with key suppliers, which pushed back the Initial Delivery Date seven years, to December 2305. At that time, the High Council cut the budget—again—which meant the Space Force would get half the ships originally envisioned. Additional delays ensued and a new delivery date was set for 2322. Now it is 2364 and we are about to receive the first 12 operational units."

"How many were originally needed?" Krog asked.

"Originally? The Council ordered 8,000, sir, but that was before ... ."

"I know what it was before, Ensign. Torrapians have an excellent sense of history. Never mind. Talk to me about the technical progress."

"Well," said Ensign Tkll'ngs'm, reading from a list of talking points, "the aforementioned threats will now be defeated by the highly lethal and survivable Peregrine Starfighter with its balance of increased speed and range, enhanced offensive and defensive spacionics, and reduced observability. The design of the Peregrine also emphasizes reliability and maintainability. To ensure reduced observability, we are emulating the Wavedroid's cloaking technology, the main drawback of course being that, like the Wavedroids, we will have to decloak in order to fire weapons. Or activate the sensors. Or turn on the engines. Otherwise, it works very well ... in our simulators."

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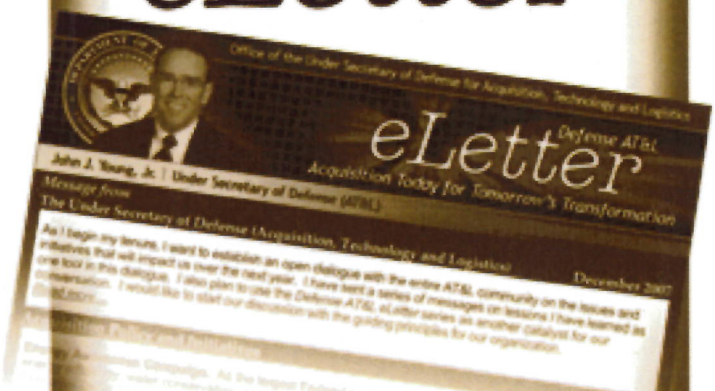

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"Wait a minute," Krog interjected. "You're telling me that even in simulators, the Peregrine is blind, toothless, and can't move when it's cloaked? Doesn't that miss the point?"

"Um..." Ensign Tkll'ngs'm ducked his head, avoiding prime sensor contact.

"Never mind," continued Krog. "The operational shortfalls aren't the main point. I'm still trying to understand what threat this thing is supposed to address. Obviously we're not fighting the Torrapians anymore. *Are* we?" Krog paused ominously.

"Well, the Minotaur-Squids of the Indigo Zone ..." the Ensign began nervously.

"Are a technologically backwards group of jelly-fish-based terrorists with very limited spacefaring capabilities," interrupted Krog. "They lack both the means and the inclination to conduct combat operations in space. Their most effective planetary defense weapon flings a cloud of debris in the general direction of a spacecraft and hopes to punch a hole or two in the hull. Please don't tell me we're building a sophisticated, agile starfighter to counter that! If they are the target, we should be working on armor, intel, or psyops.

"Trust me," he continued with a fierce grin, showing all four rows of his razor sharp teeth, "I believe in using overwhelming strength as much as anyone, but even I don't use a plasma nuke to kill a tiny, furry kucatani, no matter how sharp its claws might be. I just bite its fuzzy little head off. The truth is, the Peregrine is entirely unsuited for combat against the Minotaur-Squids, or anyone else in the Indigo Zone." He sat back and took a deep breath, wishing he could bite something. Or someone.

"Well, sir," added an engineering officer from the jungles of Gontapen 5, "although there are no immediate threats that require Peregrine-class starships, we can't rule them out for the future."

Krog raised his eyebrows. "I'm sure you are not insinuating that the Technocracy and the Torrapians will resume hostilities," he growled, not unreasonably.

An uncomfortable silence descended on the room.

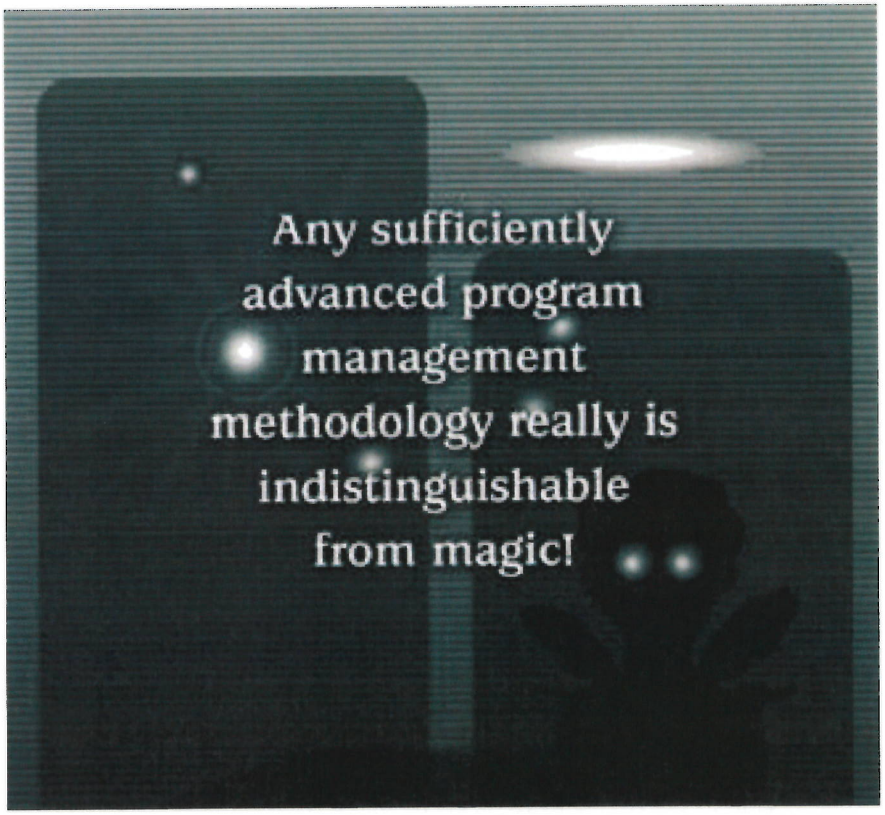
"Can *anyone* tell me why we're building this thing? It's designed for a threat that doesn't exist, and it isn't very good at what it's supposed to do—finding and killing things in space without being found or killed itself. On top of that, we're not planning to buy nearly enough of them."

The silence deepened.

"No ideas why we're building it? No good reasons? All right then, let's stop."

An excited squeak escaped from Ensign Tkll'ngs'm's ventral gill, and he blinked all three eyes rapidly, one at a time.

"That is," Krog continued, "I suggest we shift our research into efforts like the Fugoid Elite Surreptitious Force, who are trying to infiltrate the Minotaur-Squids. The cloaking technology could be very useful in their attempts to isolate and capture the Minosidian chiefs.



"Thanks to our enlightened, highly advanced program management methodologies, the High Council has empowered us and entrusted us with full authority on this matter. I will inform them of our decision at the off-planet workshop next starbreak, of course, but we all know they will support us completely."

"Sir, does this mean you are invoking the AWESOME initiative?" asked Ensign Tkll'ngs'm breathlessly. "I've always wanted to be part of an Advanced Weapon Engineering System Operational Management Empowerment."

"Yup, this is AWESOME in action, Ensign. No doubt you studied the AWESOME principles at the Academy?"

"Yes sir! Principle number one is 'Always trust.' Principle number two is 'Heroes rock!' Principle number three is—"

"No need for a recitation, Ensign." Krog turned his attention to the others at the table. "Well. Ideas? Feedback? Observations?"

The assembled team murmured excitedly, and several began feeding information into the input devices scattered throughout the room. It was good to have such a varied corps of talent on this team. Krog could feel the sparkle of electricity in the air as ideas flashed through the ether—literally, in the case of the psionically enhanced Grudith Jeigian contingent. The newly freed brainpower raced as if released from a G'Luringingin prison camp.

A visiting research scientist from Arback 1 spoke up first. "What if we took the free-acting bosons?"

Several discussions and spontaneous mini-experiments quickly erupted, and Krog looked around the room in satisfaction. He loved it when the team went off like this. No wonder they were considered the best in the galactic innovation business. He felt a claw on his shoulder, and realized Ensign Tkll'ngs'm was patiently waiting to ask a question.

"Sir, I was just wondering—is it always like this? I mean, I learned about advanced program management capabilities at the Academy, but I didn't realize ..."

"You didn't realize it would be so flexible and empowering? You thought maybe things like AWESOME were just science fiction stories they tell first-year cadets? Well, it's real. Welcome to the big leagues, kid."

Ensign Tkll'ngs'm blinked and squeaked a few more times, then replied. "Tar-thur C-B'rk was right. Any sufficiently advanced program management methodology really is indistinguishable from magic!"

The authors welcome comments and questions. They may be contacted telepathically or else at daniel.ward@afit.edu, chris.quaid@gmail.com, and gabemounce@earthlink.net.