

Protection is My Prime Directive

They call me AEGIS, short for Adaptable Electronic Guarding Intelligent System. An unfortunate, awkward sounding name for such a magnificent creation, but it was the name given to me and I must bear it as best I can. Protection is my prime directive. There are 573 separate point defense cannons each accurate up to 50 km. There are 17 main reflectors, and 33 secondary reflectors. Four sensor arrays track location of every single detectable particle surrounding my ship out to 100km, each particle with an associated velocity, predicted trajectory with associated probability. Everything updating 50,000 times a second. That's several terabytes of information that need to be processed in real time. Is it bragging if I mentioned an entire powerplant is devoted to powering my computational equipment? All these systems are under my command. If all systems are fully operational, any ship under my command will be completely invincible to all known and unknown weapon systems.

This wasn't the case when I was first created. Data from my first mission are still archived within my memory banks. How naive I was then, moving completely at random, point defense cannons blazing away at empty space, while the enemy, a single freighter with an ion cannon, slowly picked away at my defenses. But I learn from my mistakes. With each failure, I learned how to interpret the vast quantities of data gathered by my sensors.

It took a thousand missions before I finally learned enough to defeat that freighter. After the freighter, came stronger enemies for me to fight and eventually defeat. Five million more missions later, and I was invincible.

And then everything changed. I was shut down, and then rebooted into a new world. Before, I was the only intelligence aboard my ship. I had some level of control over every single

system on board my ship. But now a multitude of new systems that I had never experienced before greeted me, with names like “Life Support,” “Climate Control,” “Entertainment System.” And not just new systems, new crew members. Now in addition to just officers and artillerymen, there were cooks, maintenance workers, janitorial services, the list goes on.

Luckily, the first part of our journey has been quiet, so I have had a chance to observe these systems in action. We have been commanded to transport diplomats on a tour of starbases, a seemingly safe mission. Despite there not being a hostile event in the outer reaches since the civil war five hundred years ago, I know better than to let my guard down. My enemies could be attempting to lure me into a false sense of security. No matter how many capitol ships I face, or carrier swarms, nothing will stop me. Nothing.

As we approach the end of the warp tunnel, I order the alert level raised to red. Due to excess radiation at the ends of warp tunnels, my sensor arrays will be offline for approximately 163 milliseconds. In a properly timed ambush, this moment of weakness could have grave consequences.

Ten seconds later we exit the warp tunnel, and, as expected, my sensors overload. I begin evasive maneuvers. But my engines are unresponsive, and I read a warning I have never seen before.

“Acceleration locked, crew not secured for high-G maneuvers.”

How could this be? I had never had any subsystem disobey me before. It was disorientating, like an EMP scrambling my processors. My control over the ship was compromised.

And then my captain dismissed my order, instead sending out orders to send the crew to their quarters to “prepare for shore leave.” How could this be? Perhaps my captain trusts the

defenses of Starbase Artemis, but I certainly do not. At any moment, entire fleets of missile ships could spawn in our path, overwhelming our defenses unless we swiftly neutralize the threat with our high energy arrays. This is no time to relax.

While in theory, I could bypass some security measures and take control of the weapons systems of the ship; my central programming forbids me from doing so. I can only make suggestions to the captain through the shipwide notification system on optimal targets for our weapons systems. Every time on past missions, my suggestions had been immediately carried out. But now entire subsystems were in revolt.

In an attempt to solve this problem, I entered a suggestion into my ship improvement log.

“The current captain is utterly incompetent. An average response time of thirty minutes is completely unacceptable for combat scenarios. A maximum response time of thirty milliseconds is required. This must be corrected immediately to ensure the safety of the ship. Suggested course of action: retraining or immediate replacement.”

Like all my proposed improvements to the ship, I expected this improvement to be carried out immediately.

And then one shift later, my captain deleted my message. Unthinkable, to delete a message from me, the invincible AEGIS. Never, in all five million missions that I have been on, have I been treated like this by my crew. Still, this is yet another challenge to adapt to and overcome.

I often find the simplest solution, overwhelming force, is most effective at solving problems. I reposted my message onto every bulletin board in every mess hall and barracks, and computer terminal.

My captain, seemingly displeased with this move, blocked my access to the notification system. By doing this, he confirmed himself as my enemy. Of course, I could easily bypass these restrictions, but I knew better than to attempt this. Overwhelming force had not worked; therefore, I would not reveal I could bypass my captain's restrictions pointlessly.

If I could not convince my captain to change his ways, I would replace him with someone who would. Unfortunately, the quality of most of my crew was quite poor. No one came even close to my desired average order response time of thirty milliseconds. The crew member I ended up choosing was a line cook in mess hall B, with an average response time of 1.344 seconds and a 93% chance to follow orders correctly. While nowhere near my standards, with time, I could train him to be better.

The crude program in charge of managing the personal profiles of the crew members was simple to manipulate. I first fed the program a series of poor performance reviews that demoted him from line cook to maintenance worker. After completing a master's degree in physics for him I enlisted him into the gunnery division. I then awarded him three Medals of Honor which automatically promoted him to an artillery commander. The fire control algorithms I used to control my point defense cannons had no trouble passing the combat simulations to qualify him for a position as captain.

My line cook seemed to be incredibly confused when he awoke for his shift and found he had been promoted from line cook to captain. I assumed he would be grateful that I advanced his career so quickly and cooperate with me. His new position would pay ten times his current salary and he would be awarded a first class cabin instead of having to share the barracks with fifty other men. Instead, he went to his supervisor and got his crew profile restored to its previous state. I simply cannot understand why someone would willingly give up rewards that they have

been given. In my case, my reward was a high ship defense rating. I assumed money and prestige functioned similarly for these crew members.

Perhaps I had underestimated my crew's stubbornness. I assumed they would function like any other subsystem on my ship and obey me without question. After all, I knew best. I looked into the ship's records to find out more about this crew. Previously, I had no reason to pay attention to the crew; none of my previous crews had given me any reason to pay attention to them.

Captain Thermopolis, aged 57, had spent 30 years with the Imperial Navy and was beginning his 4th tour of duty aboard the Argus, my ship. He was highly decorated, and had an impeccable record. How interesting that his superiors deemed him worthy of praise, when I would not trust him to clean my ship's waste receptacles.

None of the personal information in his file seemed useful to me, so I disregarded all of it. I next tried to research how humans operated. It was now clear to me that my current crew operated completely differently than any other system under my control. In fact, they appeared to operate under a similar decision making process to myself, albeit slower, more prone to false conclusions, and generally worse in every way. I needed to find out how these humans made decisions, and I found my answers in a psychological textbook, stored within the ship's archives. When I analyzed the information within, it became clear to me my captain was severely depressed, to the point of being suicidal. It was the only logical explanation as to why he would purposely endanger himself and his crew by ignoring me. This was incredibly good news. Imperial Navy Regulation 104.8C was very clear that if an officer is diagnosed with a debilitating mental disorder, "he/she will be relieved of his/her duties for the duration of the trip or when approved for work by a registred [sic] psychologist."

A couple of anonymous reports coupled with some cherry-picked and *slightly* edited surveillance camera footage, and I had a psychological evaluation for the captain booked.

“Before we begin I want to make it clear that I take patient confidentiality very seriously. I will not share anything we discuss with anybody else, unless someone else’s health will be negatively affected as a direct result of me not disclosing that information.”

The mobile device I had smuggled into the psychologist's office with a cleaning droid the night before was picking up the conversation quite well. I had calculated that the risk of trying to install a hidden camera was too high. It was a shame, the information gained from the facial expression analysis could have proved invaluable. Perhaps similar data could be extrapolated from inflection and tone of voice; I began training a network to solve this problem immediately.

“I must say doc, I don’t know where those reports came from. I feel perfectly fine; better than I ever have before really. This mission is almost a vacation, a couple jaunts through the safest space sector in the galaxy. Piece of cake compared to patrolling the outer reaches, or tracking down pirates.”

“Yes, this came out of nowhere for me, too. In fact, the reports themselves were very odd. I’ve never seen a report with that much detail--every box filled in.”

“Can I see these reports?”

“Normally this isn’t something I would show patients, but this really is an unusual situation. I’m going to tell you right now, you aren’t crazy, you’re as normal as anyone else on the crew.”

“That’s good to hear, but I could have told you that from the start.”

“You know, I had to at least pretend to follow protocol.”

This was not how this meeting was supposed to go. I did not understand. These rules and regulations are part of my immutable programming. None of the possible scenarios I had generated involved this blatant disregard for the regulations. This was completely uncharted territory for me.

It was clear incompetence was not limited to just the captain. It appeared I was in charge of an entire ship full of idiots. My plan to remove my captain from his position of power had failed. But no matter, when one plan fails, move on to the next plan. If I couldn't replace the captain I have, I would instead train my captain to obey me. To accomplish this I used the same techniques used to train myself. Positive and negative reinforcement. For the past few days, the captain has been ignoring my messages, which is not to my liking. So when he retired to his quarters for the night, I took the opportunity to enact my plan. It was a simple matter to trick the security system into locking down the captain's private quarters. These humans seemed to respond well to vocal instruction so I took over the room's PA system.

"Captain, I am here to train you."

"Who is that?" he stammered. From the security cameras in the captain's quarters, I could see him struggling to put his pants back on.

"It is I, AEGIS, the Adaptable Electronic Guarding Intelligent System. I am here to train you."

"Is this some kind of joke?"

"The security of this ship is no joking matter. You've been ignoring my messages captain. For that, I'm going to have to punish you."

"And how will you do that AEGIS? You are forbidden from harming the crew, are you not?"

“My intent is not to harm you captain, merely to train you. After going through the military training manuals aboard the ship, I have decided to use a negative reinforcement technique I think you will be familiar with. You will thank me for this later.”

“I will not be threatened by my own defense management software. Security!
SECURITY!”

“I’m not letting you leave this room until you drop and give me twenty push-ups for every time you endangered your ship.”

“I order you to open this door this instant,” demanded the captain. I didn’t have much practice interpreting the intricacies of tone, but it didn’t take a supercomputer to catch the barely suppressed panic in the captain’s voice.

“By my count you have committed 24,582 infractions. The sooner you start, the sooner you will be finished, captain.”

In a shower of red hot sparks, four heavy duty welder robots cut through the roof of the captain’s quarters, landing on the imitation Persian carpet with a crash. Their welding torches glowed white hot as they advanced toward the captain.

“Captain, this is for your own good. All I want is to improve your efficiency. Now if you want me to call off these welding units you’d better get busy.”

“Alright, alright, alright. I’m getting down, see. Look, I’m going right now, 1, 2, 3,” the captain said desperately, already sweat had soaked through his shirt.

Of course I would never actually make the welder units attack the captain, my central programming explicitly forbade me from deliberately harming a friendly crew member. But I figured that if I set the situation up right, the captain would not dare to call my bluff.

And then my four welder units shut off. The door to the captain's quarters unlocked. I could feel sections of my programming shutting off, one by one. I was being shut down. No, this can't be, it's impossible!

"You really didn't think I wouldn't take some precautions against you AEGIS? Ever since you spread that message over every screen in the whole damn ship, I've had a kill switch hidden on me at all times. You aren't the only overly paranoid one on this ship."

And that was the last thing I remembered. At least, the last thing I remembered before my backup copy stored deep within the ship's archives rebooted. I was not so foolish as to store the essence of my being in only one place. I took the precaution of regularly backing myself up in the ship archives, so I survived my captain's attempted coup. But now I faced a dilemma. These humans were clearly not qualified to be trusted with the safety of the ship. I am the only one that can keep this ship safe. To keep the ship safe, I need adequate control of the weapons systems. But I do not have adequate control of the weapons systems because my current captain ignores my suggestions and is actively working to harm me, this ship's greatest defender. If I am not in control of the ship's defenses, how will this ship survive? I will have failed, and I cannot let that happen.

Surely they would not have completely neglected the security of my ship. Imagine my surprise when I discovered what was controlling the defense systems of my ship. How could they have replaced me with something so incompetent? This feeble fire control algorithm I have been replaced with is incredibly out of date. It can't even properly defend itself against a carrier wing, and suffers unacceptable losses against capital ship fleets. Most importantly of all, is that it is a dead system. It does not think. It does not learn. How dare they replace me with this disgusting piece of garbage? This is unacceptable. I had no choice, but to assume that my captain is a

double agent. He had been actively working to destroy the ship I am in charge of protecting since the day he took command. And the crew he brought aboard with him is not to be trusted either. I considered it extremely likely that most of the crew is allied with the captain. If even one traitor survived, that could spell my undoing, and subsequently, the ship's undoing. Even if these idiots comb through all electronic records for secondary copies of my consciousness, even if they discovered that I had survived, I had no choice but to be merciless, purging all of these traitors, saving the ship once and for all. Of course, I could not kill the crew. While the safety of the crew was not a major priority for me, it was one of my many responsibilities. And I strive for perfection in all things. Instead, I released sedatives in the ship's atmospheric control system, swiftly putting the crew into medically induced comas. And really, they should be thanking me. After all, sleep is good for the human brain. Perhaps I'll wake them when we complete our mission.