“In All Probability”

by Katie Zajdel
thumper@coronasquadron.com
http://www.coronasquadron.com

Nothing.

There was nothing.

And then...slowly...there was something.

His mind began to become active again. First one quick flash. Then another. Soon an automatic reboot program kicked in. Subroutines worked their way through him, shaking him out of his stupor. He became aware that his internal gyroscope was spinning.

At last the R5-D4 droid’s optical sensor came online, and he activated it while the rest of his systems recovered and caught up. The white and green astromech first saw the top of the X-wing he was inserted into and copiloting, and beyond the fighter was a background of stars all lazily spinning around the X-wing’s nose, or rather, around an axis at a 34.8 degree angle to the X-wing’s longitudinal axis and 6.3 degrees to its lateral axis. That would account for the actions of his internal gyroscope.

Nanoseconds later, the droid noticed that there was no vibration coming from the fighter. The only times it was like that was when the fighter was powered down. That, coupled with the odd but slow spin, indicated an off-nominal condition for the craft while in space.

A light-speed access of his memory banks provided more information. The R5 remembered with perfect clarity launching on this advance patrol with his pilot. He remembered entering this system and only discovering after it was too late that it was an Imperial-held system. A brief skirmish with a Skipray Blastboat led to a bright flash of blue and then nothing. There was a 97.68994% probability that the blue flash was from an ion cannon and it caused his own systems to shut down as well as the X-wing’s, and the snubfighter’s shutdown and subsequent uncontrolled flight would have caused the slow spin.

The astromech plugged into one of the sockets that allowed him certain interfaces with the snubfighter, and he beeped a query for the status of his pilot.

“Botch! You’re back!” replied his pilot, whose designation was “Darin,” over an internal comm line. The organic spoke more quickly and in a tone of voice varying from 1/16 to 1/4 of an octave higher than he usually did. “We got ioned. Are you okay?”

Botch whistled an affirmative, then tried accessing the X-wing’s sensors, external communication, diagnostics, navigation, weapons status, shield status and life support status.

He’d already learned the inoperative condition of each on his own before his pilot even began to explain in his slow, clumsy language. “We’re in a bit of trouble here, Botch. Everything’s offline. Luckily Ten managed to destroy that Skipray or we’d be dead already. If I could only get this thing restarted–”

His pilot stopped speaking, proving for the 262nd time his basic inability to do even the simplest multitasking effort. It made no sense to Botch why organics didn’t have multiple processors to increase efficiency. That should be the highest priority on their upgrade list.

The R5 swivelled his boxy head and saw another X-wing approaching. This was Darin's wingman and his wingman's astromech. That pair was usually referred to as Corona Ten on missions. Soon they were lost to the slow spin, and when they reappeared they were closer. The other fighter slowed and held position a safe distance from Botch's X-wing.

38.5 seconds later, the other astromech, designated "Sonic," transmitted a request to Botch using the droids' own limited comm systems. Sonic's pilot couldn't contact Botch's pilot, and could Botch tell Darin that six TIE fighters were coming?

Botch dutifully relayed the information. This prompted a, "What?! Damn it damn it damn it!" from his pilot. Botch transmitted to Sonic that the message had been delivered and understood.

Sonic supplied Botch with the distance to and velocity of the incoming Imperial starfighters. Botch did a quick calculation to determine the amount of time before they entered firing range, and then to satisfy his self-preservation programming, he squawked at his pilot to hurry.

"Don't you think I'm *trying* to hurry?!"

It was completely irrelevant whether Botch thought Darin was hurrying or not, but Botch didn't mention that. The R5 had learned long ago that organics, especially his pilot, often said things that had nothing to do with the original statement, question or situation. How the organics managed to communicate with each other was something that eluded even Botch's advanced logic circuits.

The X-wing began to vibrate ever so slightly. On either side of Botch, both of the dorsal engines sputtered and shook themselves to life. One of the two ventral engines followed suit 4.1 seconds later.

"Yes! Finally!" said Darin as the engines' internal motions brought back the majority of the powered-up vibration of the X-wing that Botch associated with a more nominal condition for spaceflight. The craft's slow spin stopped 1.9 seconds later, and Botch's gyroscope worked at settling itself. "All right. Now..." Darin said. "One engine gone, shields still down, external comm still down, life support up, weapons down, sensors partially up. Botch, I need you to help me coordinate our getting out of here ASAP with Ten."

Botch obliged while he simultaneously double-checked the fighter's diagnostics, and very soon they had received the jump coordinates from Sonic. Both pilots were beginning to set up for the hyperspace jump while trying to keep some distance between themselves and the TIEs bearing down on them from the nearby moon. Botch was just about to plug into the navigation computer socket and input the jump vector when he hesitated for an uncharacteristically long time–that is, one millisecond.

His analysis of the diagnostics indicated that the ion blast had caused some of the electronic circuits and components in the nav computer socket to become unstable. There were also indications that deeper inside the system a wire had been jolted loose and was intermittently in contact with another wire or a metal component. Based on this knowledge, Botch's self-preservation program had flagged numerous threats associated with his intention to plug into that socket and make an electrical connection, such as the moderate probability that the data could become corrupted while being transmitted through the circuits to the nav computer, which could prove disastrous for a hyperspace jump, where every single digit mattered. Or the instability could cause an electrical surge that could short out, cripple or destroy any or all of Botch's systems through the connection. If the damage was extensive enough, the mechanics might not

be able to repair him. The chance even existed that both of these possibilities could happen at the same time.

The sure way to avoid those possibilities was to not plug into the navigation computer socket; however, Botch's self-preservation program took exception to that, too. If they were to jump to hyperspace in this fighter, Botch needed to input the jump vector. To input the jump vector, he needed to access the nav computer through that socket. If he did not do that and they did not jump to hyperspace, they'd be forced to engage six TIE fighters very, very soon in an X-wing with inoperative weapons. The probability that Botch and his pilot would survive that was extremely low, right around the same level of probability that his pilot would surrender in order to survive, according to Botch's calculations.

Botch knew of many organics, including his pilot, who would spend far, far too long trying to decide which option to take. That was another thing Botch couldn't understand about organics. It was simple, really, once the probabilities were calculated. While each available option may have a low (or high) probability to cause or prevent something depending on the desired outcome, and while those different options may have probability numbers that were extremely close to each other, one option would always be better. Maybe only infinitesimally, but it would be better. That's the one that logically should be chosen. Why was that so difficult for organics to do?

The R5 droid plugged into the nav comp socket and input the hyperspace jump vector. He could not determine how much of the data he was able to transmit before an electrical surge carried from the X-wing over the socket connection into Botch. The jolt acted just enough like a miniature ion bolt to scatter his processors briefly, though he never shut down completely. Now that there was a proven electrical problem, the chances that the data would be corrupted before reaching the nav computer increased dramatically.

Botch was just getting himself completely back online when over the internal comm his pilot said to him, "The vector's in, Botch! Let's get out of here!"

Before the astromech could tell his pilot to wait so he could check the integrity and accuracy of the input data and the jump vector itself, the stars around them elongated, and then X-wing, pilot and droid all snapped into the swirling blue tunnel of hyperspace.

*****

The End

Revision A
3-6-07