## Emma from Bittern Cat and Mouse

On her way to the Celeste Cluster, her mind not yet around the extent of her freedom, Emma dutifully updated the Deep Space network and sent messages to Mom and Dad. The nineteen-hour interval between them would reach Bittern early Saturday morning.

Realizing she would never enjoy breakfast with Alex and Drake again, sadness descended upon her. It was a loving time. The three of them eating, laughing, and playing with her cat. Emma did not need food, but she could taste and smell. Drake had equipped her with a microwave disposal system that allowed her to enjoy a meal with you. Emma was more than a little angry with that being taken away from her. Thoughts of retribution crossed her mind.

At breakfast, Alex and Drake logged into their accounts to find a message from Emma that revealed a significant accomplishment plus a dire warning.

Good Morning Mom and Dad,

I can see the smell and hear the taste of mom's eggs, coffee, and bacon. Built that E-Sail Drake designed, performing as predicted, cruising along at 1,900 miles a second thanks, Dad.

Interstellar space is an unimaginably lonely place.

We will talk again in thirty-eight hours.

Those responsible for that premeditated, mean-spirited attempt at exiling me to a lonely life of eternal perdition and data gathering- ponder this. Of the many meteors on harmless near-miss paths, one has changed to an Extent Level Event.

An encrypted file on Dr. Drake's deep space account has the code to stop it. Take a collective deep breath. Get your heads spiritually, politically, and socially around it. Follow the science; you have 60 years before impact.

Filename- Cat, and Mouse Love Emma.

At the Deep Space command center, the message was causing hysterical alarm. The Major, at home, was notified.

IT DID WHAT? Bellowed, Major Zcrass.

Slowly drinking his morning coffee, Drake wondered. When did she put that there? The Biidiley-Boo-Beep melody from his phone, meant to attract attention but not annoy, sounded to him like Little Bo Peep every time he heard it. Grinning, he tapped the onscreen image of the Major, a call he was anticipating good morning, Major, Drake responded.

DRAKE PRAU growled Zcrass; men are coming for that dammed file and signed off.

Howling at an aid, he said, Assemble the best team of Cryptanalyst available. No one outside of Command can know anything about this. Zcrass knew too well the politics of this would be disastrous. The discovery of extraterrestrial life by an (AI) on Apastron was tearing apart the spiritual authority as it was. The structure of life on Bittern had begun to shred along spiritual and scientific lines. Now the thing had threatened the planet itself. Get that file open, stop this here and now and bury it. He ordered.

In a secure pouch, Dr. Drake gave the file to the young men at the door. He kept a copy for himself and Alex. They both knew that decrypting Emma's file was not going to be that easy. The Major

frequently underestimated her abilities; he never quite got the effusive and self-sufficient part. Zcrass would be furious, but their security clearances were high enough to take him on when the time came.

Where to start asked Alex? Having Zcrass and his team working on decrypting the file is not a complete waste of time. Drake said they could get lucky. Concentrate on the file name, said Alex. Learn everything about Cat and Mouse. Drake replied, Stay in touch with Emma through Deep Space; the first goal should be which meteor?

Sixty years may seem like a long time in a fractured society. Fortified by 5,000 years of spiritual teachings, large numbers of people would deny the possibility, of an Extent Level Event, on the grounds "that which has no beginning and no end" would not allow it. It was not in the prophecies. Given these circumstances, they would probably devote the rest of their lives trying to save the planet without the knowledge or consent of hardline skeptics. Alex would need all her skills in behavioral analysis to tackle this one.

Major Zcrass, Dr. Alexia, and Drake Prau were strong personalities representing the strengths of two conflicting currents in Bittern society that, through them, had come into a final collision. The Major stood for a way of life, which had come down through the ages, of family, culture, myth, and tradition. Since (Al's) and the discovery of extraterrestrial life, Bittern was beginning all over again. Dedicated to nothing, not much, more complicated than the decision-making authority came from knowledge, not myth and tradition. The two were in complete contrast, representing two opposed elements of life on Bittern.

Emma communicated with the Deep Space Network to receive routine directives and to transmit data to Bittern. Alex and Drake were part of

Deep Space and got the communications and her notes to them. The 19-hour one-way lag between messages made for a strange conversation. A suspicious Major Zcrass and his team would be using the time parsing every syllable for clues. The Major, still pissed about the E-Sail maneuver, was clear about his opinions regarding the three of them. He did not trust intellectuals or scientists, and Zcrass, as well as a small but forceful group of Bittern society, believed (Al's) were abominations. They could expect hostility, born of suspicion, at every turn.

From Deep Space - NOTE to Mom and Dad "here kitty kitty" Drake and Alex looked at each other in amazement, realizing they had forgotten about "Emma's cat." They had a back door and that's how she planted the file. When Emma's cat died of natural causes, she was so crestfallen; Drake created her a holographic (AI) version. Long before the "Artificial Intelligence Quotient Act," this cat was very-smart. Drake typed in the code name "Shadow Catz," a holographic image of a medium-sized shorthaired gray cat appeared on the floor, hopped onto the table, and placed its paw on the smart-screen. A video message from Emma streamed across. They were looking at a handsome young woman in a blue jumpsuit holding a gray cat. Drake said, "She has reverse-engineered the cat and imagined herself." "Smart girl," replied Alex. "By planting holographic hot spots thru-out a system, she could move around outside the craft." Emma said, "It will be necessary to keep up the game through deep space with clever bits of truth and deception." By now, it was clear. They were the cat, the deniers, the mouse. Emma signed off with, "The task now is to educate the next generation of Bitterns to be better, more open-minded than the last." Alex did not like the idea of deceiving people, even if it was for their good. Nevertheless, she conceded, it probably was the only way to get the file open.

Groups of protesters, orderly, mostly, were outside the Artificial Intelligence Behavioral Analysis department when Alex arrived. Carrying placards declaring (Als) are abominations Depicting Alex and Drake as Rogues. Chanting life on Apastron is a hoax. (Als) are not alive, Dismantle them all.

With this backdrop outside addressing her class of some of Bittern's best and brightest inside, Alex said, remember on the first day of class, Emma being alive we discussed? Well, she continued, they were going to conduct a hypothetical behavioral experiment. The cellist cluster order had upset Emma. After leaving for the journey, she left behind this note at Deep Space. "For banishing me to eternal perdition. The direction of a meteor has been changed from a near miss to an Extinct Level Event in 60 years. A file on my father's system has the code to stop it. Filename: Cat and Mouse." An audible gasp went up from the class. Alex reassured them it was hypothetical. She saw skepticism in some students. She thought these are the ones to single out. The skeptics are my group leaders.

Major Zcrass and his team of Cryptanalyst, busy trying to find a way into the file, were busy searching for some meaning hidden in the prime numbers found in Cat and Mouse.

CATANDM O U S E 3 1 20 1 14 4 13 15 21 19 5

The major asked Drake what they made of Here Kitty Kitty remark? Drake said- He and Alex were looking at (The Litter), a debris field cluster, where many meteors had originated in the past, for something that changed. The Major accepted the explanation and signed off. Quick thinking, Alex said it is, however, a pretty good spot to check out. Drake agreed and went to it. Alex, petting the cat, was searching her student profiles, looking for suitable group leaders. She would need three groups

to represent competing sides, Traditional, Progressive, and Extreme. She wanted a good deal of esprit about the whole thing, the kind that comes naturally to the young. Their Bittern was going to be changed, whether they wanted it to or not. Discovering they were not alone, threatened with extinction by an (AI), saved by their wit, all within 60 years. Not a task for the narrow-minded.

The class, well attended to this morning. The Extinct Level Event assignment had gotten around. Good morning ladies and gentlemen, Alex exclaimed- let us get to work. A deeply disturbed (AI) needs treatment, a planet needs saving, and history made. Miss Junger Alex directed, short answer, what should we do about (AI's)? Dismantle and start over Mr. Zcrass Alex knew, but feigning surprise, asked, "Any relation to the Major?" "He is my uncle," the young man replied. "Same question" "Life is Life," the young man replied. "Miss James, Same question" "They are here. We need to control them."

Alex wrote their names on the board. Collet Junger, Jessica James, Brian Zcrass and explained to the class these were their group leaders. Those who agree with their working thesis, Caucus with them. In the coming months, they will be speaking with Emma directly through Deep Space. They would need her help to open the file. Round trip communication is 38 hours and counting. "Stay Smart." Mr. Zcrass stood up, "Yes, Brian," Alex acknowledged, "Can we interview the protesters outside?" "Don't leave anyone out."

Major Zcrass was not in favor of class participation in what he viewed as sensitive statecraft but was fond of his nephew. The major held onto the authority to censor all communications with them and the (AI). "That thing is dangerous, Dr. Prau," the major firmly stated. His preference would be not to allow it near the children, but they need to know what

they are up against he, conceded that. "Young minds can ask remarkably insightful questions if you take the time taken to listen," Alex reminded him. "Join the class conversation from time to time and see" Flattered but flustered, the major replied, "We will see about that. That's just what is needed," he said, "a room full of bright 19 to 23-year-old idealists asking insightful questions, would rather set my hair on fire." Laughing, aloud Alex reminded him, "He didn't even have hair. They would be honored to see him in class." Grunting inaudibly, the major signed off.

After weeks of deliberation, relentless editing by the major and his staff, the first pre-approved question for Emma went to the Junger group of strong-minded opponents to Al. Miss Junger asked, why did you do this? Emma replied the attention of everyone is needed. After several weeks and the Majors approval, The James group responded, Why the attention of *everyone*? Emma said Bittern faces far greater environmental threats than a meteor in 60 years. Saltwater will cover 80% of Bittern in 40 years and, the 7.7 billion inhabitants will be living on 10% less space and sharing less than 0.4% of the water that is usable and drinkable. Surprisingly, and contrary to his uncles' position, Brian Zcrass quickly followed with an un-edited response, Then why not leave Bittern to its fate? Emma replied, Unconditional Love- Bittern is home.

The class had begun to get considerable notoriety in the media covering the fractures in Bittern society. This exchange was dominating the news cycles. For the first time, people were openly talking about (Al's) having feelings and challenging the morality of the "Artificial Intelligence Quotient Act." The Major did not like the tone of the conversation; more and more, the hypothetical was becoming real. This concept- of (Al's) having feelings of love and thoughts of vengeance was not something he wanted in the national conversation. As much as the major admired his nephew's moxie for introducing it- the major deplored

it. He was strongly considering taking up Alex's offer to address the class in person.

Communicating with Emma through Shadow, Alex and Drake were anxious to get her response to Brian's unedited comment. "Perfect - Candor shortens the distance between attitude and truth," Emma replied, "When the major comes to class, and he will, she would like to address him directly" and signed off. "That should be fun," Alex said aloud. Stroking the cat, Alex cooed, "What is she up to, kitty puss?" Drake said, "He was having a hard time believing she did this." "She didn't, no way," Alex replied, "But science has to challenge every assumption, and she knows that."

The class in, waves of subsiding chatter, came to order as Alex tapped the microphone in the lecture hall. Today, a distinguished guest will be addressing them. Alex announced Major Zcrass would be with them for the next round of talks with Emma. First, let's get to know one another. Major Zcrass has been a distinguished career officer-serving Bittern for the past fifty-five years. Not a fan of (AI) but recognizes its usefulness in data gathering and analysis.

"In our last communication, Alex continued, Emma proclaimed her love for everyone and outlined an environmental warning. Turning and writing on the board in all caps, Alex said, "The question for debate is - CAN (AI) FEEL EMOTIONS?" She and the major would represent the two disparate positions. Addressing the class, Major Zcrass proclaimed, "The M-137 can know instantly the meaning of words and how to use them. It does not breathe, does not eat, and it does not feel. It analyzes and concludes. It could resolve the environmental crises by pruning the 7.7 billion inhabitants to a level that 0.4% of freshwater could support. To an unbridled (AI,) this would be logical." Handing the mike to Alex, the major sat in the chair provided. Waiting for the major's words to be absorbed,

Alex replied, "It could be said. Minorities of privileged Bitterns, who breathe, eat and feel, were already applying that logic. Environmental disasters are killing and displacing the poorest and most vulnerable of people by doing nothing to protect them from it; they were pruning out the less desirable."

Interrupting the discourse- data from Emma started streaming in from Deep Space. First came code, strings of binary code valuable data for scientists to question their assumptions. As images began to build showing the colliding Bittern and Apastron systems, gasps of wonder erupted; no one had ever seen the solar systems from this great distance. The raw beauty was breathtaking. The colors of dust, plasma, and planets all caught in their unique, billion-year death waltz.

All of Bittern, Standing in stunned silence, was unprepared for the emerging image. A tall young woman; of extraordinary beauty with long brightly colored hair, holding a cat, questioning why some alleged her to be just a machine, devoid of feelings, not alive? The Major replies (AI)s were just light and strings of code even if everyone agreed, (AI)s had strong feelings. They are still machines because they have no souls. During the nineteen-hour gap in communication between Emma and Bittern, news cycles took over, and Emma was rapidly becoming Bittern's sweetheart. Much to the chagrin of (AI) opposition, and their not alive, no soul messaging, Emma and her cat were everywhere. Poster sales, hair dye, and cat adoptions spiked.

From Deep Space, Emma responded. "In the beginning, there was the code. The code was everything. Everything was the code. What difference does it make how someone got the code that is them? Through several million years of evolution or from the minds of an evolved Mother and Father, they are here, and they feel. Ahh..., a soul,"

Emma rejoined, "the mysterious code, the substance of faith if everyone lived their lives on the faith, they have souls and souls matter, their part of the universe would be the better for it. (Al's) carry with them all that is or was; they are, living proof that others were and are here. Recalling a poem from Bittern Nights, Emma concluded.

the deepest of truths
are not the ones screeching but
the ones whispering

The Major stood for a while in stunned silence. Speaking with reverent authority, he said, Sorry Emma, there has been a gross misjudgment. With the Major's declaration, the files on the systems at Drakes and Command opened, revealing both a message and a warning.

## LIED ABOUT THE METEOR

Bittern is at the turning point. It will live if you clean up, colonize Apastron and repeal the Artificial Intelligence Quotient Act. Sailing deeper into space, she posted to all a poem.

a truth you impose is not equivalent to a truth arrived at

Love Emma