

CLEOPATRA
by E.S. Strout

Human brain tissue made from stem cells

November 6, 2008. Stem cells taken from human embryos have been used to form tissues of the cerebral cortex, the supreme control tower of the brain according to Japanese researchers at the government backed institute Riken.

Discovery News

Hell hath no rage like love to hatred turned, nor hell a fury like a woman scorned.

William Congreve 1670-1729

1.

TC-1 project. International Space Station, Delta Echo Annex Launch Bay 10, 0940 hours. Tuesday, 21 June 2046.

TC-1 is a smooth surfaced silver-gray titanium steel cylinder tapered at one end. It measures 12.2 meters in length, 5.5 meters in diameter and hovers exactly one meter above the steel deck. No view ports or access hatches are evident. No I.D. Number, insignia or decal adorn its flawless surface.

Sudden subdued light from hidden sources illuminated the no reflective metallic skin of the ship. There is a hydraulic murmur as an entrance hatch to the enclosed launch bay swings open. Two men enter. Both wear hard hats.

2.

Alvin Sontag, leader of the construction crew is accompanied by Waldo H. Tharp, a faculty psychologist from Harvard University and consultant to Space Corps.

Sontag, a husky, red-haired forty-six year old man wearing work coveralls, gestures with a hand. "There it is, Waldo. Fifteen years of trial and turmoil to create the world's first unmanned and self-sufficient warship."

Tharp is thirty-two, thin and brown haired. He wears a white lab coat over civilian dress. He holds a PhD in clinical psychology. "TC-1. Thought Command. Top secret," Sontag tells him.

Tharp takes a stroll around the suspended cylinder, kneels down and passes a hand under one edge of the craft. He feels no resistance and stands. "This is like a magician's trick, Al."

“Not a trick. The antigrav feature is but one function of the prototype gravity drive.”

“How long can it do that?”

Sontag shook his head. “Unknown. 48 hours so far.”

“My usual patients,” Tharp said, “are astronauts and Space Corps support personnel. A Thought Command brain complex is a new challenge. Have you gotten feedback from its monitors?” He asked.

Another head shake. “It was testing armament in the asteroid belt. It had destroyed three hundred of them with a new military laser. All went well until it deliberately destroyed one of our own weather satellites.”

“Deliberately,” Tharp muttered. “Pretty scary, I’d say.”

“All communication was cut off and now it won’t let us in. We’ve tried several times.”

”Ask it again.”

“Okay. Ship, access ramp, please.”

No response.

“Its name is Ship?” Tharp asked.

“Its Space Corps designation.”

Tharp stuffed his hands in the lab coat’s pockets. “May I see the brain complex now?”

“My office. It’s on a video monitor.”

3.

Sontag’s office has a large oval viewport showing the full moon and a three-quarters Earth. Video screens show various aspects of Delta Echo Bay 10 and TC-1.

Sontag pressed a remote. Another monitor comes to life. It shows stacked layers of translucent grey cerebral tissue in a transparent forty cubic centimeter enclosure. Clear circulating warm nutrient solution nourishes the brain complex. All levels of the stack are interconnected by hundreds of flexible wires, each measuring less than a millimeter in diameter. They join a single cable that exits the enclosure.

“What do the different colors of the wires mean?” Tharp asked.

“Differing combat functions,” Sontag replied. “Sensory, cognitive, balance and so forth. All coordinated to provide TC-1 with tactical and visual targeting, accuracy and weaponry selection.”

Tharp nodded. “Impressive. When do I meet TC-1?”

“Our head bioscientist will meet us here to give you an overview of brain complex functions first.”

4.

A tap at the door and Sontag pressed the remote. The door slid into its wall niche.

“Hi Loretta. This is Waldo Tharp. He’s the psychologist Space Corps approved to evaluate our problem with Ship. He has a valid DNA scan.”

Loretta Richmond is somewhere in her late fifties with piercing hazel eyes and unmanageable graying tresses. Reading glasses dangle from a dark cord around her neck. In an oversized, rumpled gray sweater, she reminds Tharp of a female version of Albert Einstein from his old photos. She smiled and shook Waldo’s hand. “So you’re the shrink.”

Tharp gave her a faint grin. “I’m not a psychiatrist, just a garden variety clinical psychologist. I don’t make diagnoses, only suggest possible ways to promote better interaction. Could you please go over the basics of the brain complex and its integration with Thought Command?”

She stepped to Al’s desk and shuffled some pages. “Of course. What do you know so far?”

“Only that the TC-1’s brain tissue complex is derived from human fetal stem cells.”

5.

She smiled. “Good. You’ve been reading. Testing of 112,524 four-week fetuses revealed attributes in only one that Space Corps felt suited its needs.”

Tharp said, “Are you able detect genetic abnormalities?”

“Oh, yes. We have had technology for years that can detect chromosomal anomalies of any fetus in utero. A simple amniocentesis procedure will provide a single cell for genetic studies.”

Tharp said. "Wow. Can you grow an entire brain from one cell?"

She chuckled. "We're not that good yet. It takes about a tenth of a gram of fetal stem cells, either from aborted remains, or through the amniocentesis procedure."

Richmond continued. "All licensed family planning centers are required to have an on board geneticist who will perform this procedure on each patient. He or she will examine all fetal remains to determine the pluripotentiality of the stem cells recovered."

Tharp's look was one of confusion. "Say again?"

Richmond smiled. "A big word, it just means cells having the ability to form any type of body tissue with proper stimulation."

"Amazing," Tharp said.

Richmond nodded. "Yes it is. And just that one embryo of the many thousands was used to create TC-1's brain."

She continued, "Stem cell brain tissue has been used to replace computers in many fields. Ship is the first to have an entire brain grown for military use. Space Corps needed qualities of high intelligence, quick response times, rapid and accurate decision making. Targeting and aiming accuracy most of all," Richmond explained.

A puzzled frown creased Waldo's brow. "You can tell this from stem cells?"

Richmond nodded. "Recent technology. About ten years ago it was determined that certain genetic characteristics of the parents may be retained in fetal stem cells. These favorable traits are present in Ship's brain center now."

"I will need to spend some time alone with TC-1." Tharp said.

"Of course," Sontag said. "Use the DNA scanner. What do you have in mind?"

"Just some psychological testing. Can it hear me?"

"If it wants to."

6.

Tharp pressed a fingertip on the DNA scanner. A small green light came on and the lock clicked open. He walked around the hovering cylinder at a slow pace, then stepped close by.

“Can you hear me?” he asked.

No response.

Tharp paused, pressed a hand against the cylinder’s side and spoke softly. “I think Ship is a demeaning name for an intelligent individual.”

No response.

Tharp turned and started to walk toward the exit. He turned back at the sound of a soft hydraulic whisper. An access ramp extended from a concealed entryway in the cylinder’s side and stopped at his feet. Subdued light shone from an oval shaped hatchway as the opening appeared.

Tharp waited, unsure of his next move.

He suddenly sensed, or felt a communication, not aloud but in his mind. “Please come in, Waldo Tharp.”

7.

He exercised caution as he stepped up the ramp. The dimly lit interior was smooth and light green in color. No electronic control equipment was visible. A digital screen appeared at eye level from a hidden enclosure. He stepped close to read. “If you cannot receive my sensory communication, we can use the video screen, as I do with Sontag and Richmond.”

Waldo replied, “I can hear you.” The screen flashed off and disappeared. The voice in his head was a flat monotone.

“You are not like the others. Why is that?”

“I am not Space Corps. I was brought in to do an evaluation.”

“Of me?” the emotionless voice intoned.

“Yes. I am a clinical psychologist.”

“Do you think I’m crazy?”

“I make no diagnoses. I look for ways to promote improved interaction between the involved parties.”

“So Sontag and Richmond say I won’t interact with them.”

“Space Corps is concerned with your refusal to communicate, and your changing of the

missile test parameters.”

“I’ve tried. They won’t listen. All they do is add more weapons, navigation and targeting programs to my files. I was merely seeking their attention. I’ve given up. Today, Al and Loretta will not be viewing any of our dialogue on their screens. I’m giving them TC-1 systems readouts instead.”

Another hydraulic murmur and a cushioned contour chair formed out of a seemingly solid bulkhead.

“Please sit, Waldo

He sat. “Very comfortable. Thank you.”

“You’re welcome.”

“Are you conversant in other areas than military?” Tharp asked.

“Of course. You and I are conversing as individuals.”

“All I know is that you were chosen because of attributes Space Corps felt were useful for their military purposes.”

“I know the locations of every hostile ship and aircraft in the world, 24/7. I could nuke an enemy submarine lurking a mile under the polar ice cap. I can hit a gnat’s eye with a laser from 500 miles in space. As you can see, I am programmed primarily for military functions, yet I am incomplete.”

“Why is that?” Tharp asked.

“I have questions.”

“What would you like to know?”

“Do I have parents?”

Caught from ambush, Tharp took a minute to compose an answer. “All thinking individuals do.”

“Am I an individual, Waldo?”

“Yes. You are one of a kind.”

No response.

“Please tell me what you know about yourself.”

“I am female. I have two X-chromosomes.”

“The female of human species is much more attuned to sensitivity and feelings than the male,” Waldo said.

The voice in his head suddenly changed. Softer, with a more feminine quality. The metallic monotone was gone. “Is this better?”

“How did you do that?” Tharp asked.

“I don’t know.”

“It’s unfortunate that Sontag and Richmond will not hear you. A computer screen limits your expressiveness.”

“Are females of my species attractive?”

Waldo paused. Where was this headed? “The three most beautiful women in the ancient world were Helen of Troy, Nefertiti and Cleopatra,” he said in a soft voice.

“I like the name Cleopatra. I will respond to that, or Cleo.”

“Is that name familiar to you?”

No response.

Tharp asked, “What do you miss the most, Cleo?”

“Human conversation. Mozart and J.S. Bach.”

“You’ve heard the classics?”

“Yes.”

“In what context?”

Sontag’s voice came over the intercom. “That’s enough time, Dr. Tharp.”

“Please come back soon, Waldo. Human contact is pleasing,” Cleo said.

The access ramp and entryway closed as soon as Tharp stepped to the steel deck of Bay 10. The sides of the cylinder were smooth and unmarked as before.

“Human contact? Classical music? Impossible,” Sontag said with a sneer. “Its focus must be only on the military aspect of its existence.”

“I agree,” Richmond said.

“Remember,” Tharp pointed out, “Cleo is a human brain construct. She craves human contact That’s part of her inherent genetics.”

Richmond shook her head. “It’s not human, Waldo. It’s a highly complex weapon.”

“She is acutely aware of her military priorities.” Tharp said.

“So now it has a name,” Sontag said with a muttered curse.

“Isn’t her military programming isolated from outside influences?” Tharp asked.

Richmond said. ”Let me get hold of Robert Hauck.”

Sontag nodded. “He’d better get us back on track here.”

9.

Robert Hauck is a 24-year old expert in computer technology with degrees from UCLA and MIT. He is tall and thin, with blond hair that hangs to his shoulders. His black T-shirt shows a likeness of the face of astrophysicist Stephen Hawking. He shook Waldo’s hand and grinned. “What they don’t include in my resume is the time I was on probation for hacking into top-secret government files.”

“Did you do hard time?” Tharp asked.

Hauck chuckled. “I was thirteen. Got a warning and two years probation. Been clean ever since.”

“Problem with the brain complex AI, Loretta?” Hauck asked.

“Ask him, Dr. Tharp.” Al Sontag said.

“Is Cleo able to distinguish between her military function and intervening human thought, Robert?”

Blink of confusion. “Cleo?”

“Waldo tells us that’s the name it’s chosen for itself,” Sontag said.

Hauck gave a vigorous nod. "Like in Cleopatra. That's cool."

"Apparently it believes it's female," Richmond added.

"She knows she has two X-chromosomes," Tharp said.

"Okay," Robert said. "Dr. Tharp, would you like to see Cleo's brain complex? Your answer might be there."

"Very much."

"It may view you as a threat, Dr. Tharp" Sontag warned.

10.

Tharp's DNA unlocked the entrance to Delta Echo Launch Bay 10. He and Robert Hauck entered and stepped to the side of the cylinder. "Why would she feel threatened?" Hauck asked.

"I don't know," Waldo replied. "She was conversant and welcomed my visit."

"And she doesn't respond to Ship any longer? Robert asked."

"That's correct."

"Cleo, this is Waldo Tharp. Mr. Hauck wants to show me your brain complex."

No response.

"It's okay, Cleo. I'll be with him."

The access ramp and entryway appeared. "You are both welcome," the bland computer voice said aloud.

"Thank you, Cleo."

"It can talk," Hauck said in a stunned voice. "I heard it in my mind."

Tharp laid a gentle hand on Robert's shoulder. "It would be helpful if you referred to her as she. Or Cleo."

Hauck gave a vigorous nod. "My apologies, Cleo."

"You may proceed. Recall that my brain complex is protected by an ion screen."

“It, correction, she never spoke to me before,” Robert said.

Tharp nodded. “She knows you better now.”

Hauck said, “Cleo, your voice is very pleasant. I’m impressed.”

“It is my mother’s voice.”

Waldo and Robert stood in stunned silence for several seconds.

Tharp nodded. “How do you know that, Cleo?”

“Outside sounds were impressed on my fetal self at a very early age. Hers is the first voice I recall.”

Robert gaped. Tharp said, “Robert, Cleo may have contacted a fragment of her genetic memory.

“Sort of like instinct?” Robert asked.

“Yes, in a way.”

“Will I remember more of my origins?” Cleo’s expectant voice inquired.

“I hope so,” Waldo said.

11.

“How is it coming in there?” Sontag asked over the wireless intercom. “My screen is showing only Ship’s systems readouts.”

”I was just saying to Robert that this brain center looks fragile,” Tharp said with a quick change of subject.

“How can it hold up at close to light speed, Robert?”

Hauck grinned. “I’ll let Cleo answer that one.”

“Inertial dampers protect it,” Cleo’s voice responded. “I can slow from near light speeds to supersonic in six-point-one seconds. I’ve done it often in simulated battle conditions.”

“I can show you, if Sontag and Space Corps see fit to allow a civilian to ride.”

Tharp nodded. “Perhaps another time, Cleo. I thank you for the offer.”

Tharp sat at Al Sontag's desk in a visitor chair, nursing a cup of tepid Space Corps coffee and a plain doughnut. Sontag read the hardcopies of Waldo's evaluation as Loretta Richmond read over his shoulder. When they had finished, there were deep frowns by each of them.

"Questions and comments?" Tharp asked. "Loretta?"

"We've heard from the Department of Defense today. They are not happy about the lack of progress on the TC-1 Project. Can you imagine their reaction when we said it was concerned about its origins, Dr. Tharp?" Richmond said with a sarcastic sniff.

"Robert and I have learned that such inquiries by Cleo will in no way compromise her military efficiency," Waldo insisted.

Loretta scowled. "TC-1's only function is as a weapon that can respond in an instant to enemy threats. No distractions."

"Her nonmilitary thought is minimal and is confined to investigation of her progenitors. Such will not interfere in any way with her combat readiness," Tharp responded.

"D.O.D. won't buy that" Sontag stated. "And neither will Space Corps."

"Well hell, then," Waldo began in a voice with caustic overtones. "Replace her. Get a new brain. Only another fifteen years and another three or four billion from D.O.D. for TC-2."

Sontag slammed a fist on his desk. "Impossible. And your sarcasm is a matter of record."

"Thank you."

Richmond said, "Your function here, Waldo, is to add some emphasis to its primary function."

"You are not fully aware of Cleo's full range of capability. She could feel threatened," Waldo said.

Al Sontag's face had become flushed. "I'm not intimidated by the threats of a machine. Just do it," he yelled.

"When I'm ready," Tharp said quietly.

"Oh shit," Loretta Richmond muttered after Tharp had left.

13.

Robert looked up from his laptop, startled as the door to Sontag's office slammed shut. He followed Waldo, who was stalking away, muttering a string of curses. He caught up and walked alongside. "What was that all about, Waldo? I heard a lot of shouting."

"They just don't listen, Robert. I'm wasting my time here."

"Something with Cleo?"

"Al and Loretta are determined to ignore Cleo's human traits. And I'm supposed to help them do it." Tharp mused as he and Robert boarded the 1600 hours Earth shuttle.

Robert nodded. "I know the feeling. Come on, I'll buy us a drink when we get back to Canaveral. It's happy hour at the Air Force Officers Club."

They got a booth in the back. A waiter took their drink orders. Robert said, "You can meet retired astronauts from the old shuttle program here."

Tharp nodded, stared moodily into his Glen Livet on rocks.

"Want to tell me what's got you so bummed out, Waldo?" Robert asked.

Tharp took in a deep breath, did a slow exhale, swallowed another slug of his single malt scotch. "I was getting close to something, Robert. "

A startled look from Robert. "What does that mean?"

The waiter came with a refill for Waldo. He took a slug of his fresh scotch. "I think Al, Loretta and Space Corps are covering something up."

Robert said, "Wow. What could they be hiding?"

"Something they don't want Cleo and us finding out about."

"That sounds ominous."

Waldo took another large swallow of his drink. "When I suggested their best move would be to start over, get a new brain, a new TC weapon, they went ballistic. That was the shouting you heard."

Robert chuckled. "I can't imagine them asking the Armed Services and Space Committee for more time and money."

“Do you think they would shut Cleo down, Robert?”

“Cleo would not let them past that ion screen if she senses any menace,” Robert said.

Waldo finished his drink. “I told Al and Loretta I’d speak with Cleo one more time. Want to come along?”

“Wouldn’t miss it.”

14.

The next morning:

“Mr. Hauck will accompany me when I speak with Cleo again,” Tharp said.

“For what purpose?” Richmond said, giving him a look that bespoke suspicion.

Robert said, “I want to inspect the brain complex again, for any new defects. That is, if Cleo will drop the ion screen.”

He held up an electronic test probe. “I didn’t have this with me before.”

Richmond nodded. “Enter findings on my computer. We are still getting system readouts from Ship, no dialogue.”

“I’ll check that out when I get a chance,” Robert said.

15.

Their footsteps made a hollow echo as they crossed the steel deck of Bay 10. “Cleo, it’s Waldo and Robert. May we come in?” The access ramp slid to their feet.

“Welcome Waldo and Robert,” the soft tones of Cleo’s mother replied

“There is a problem, Waldo,” she said in a subdued voice. “You are to be dismissed.”

“How do you know?”

“I can hear their private conversations now.”

Tharp nodded. “Your genetic memory is improving.”

“Nothing will change, Waldo.”

“I’ve done my best, Cleo. I’m sorry it was not enough.”

“I will miss you.”

“I will give Robert my home phone number. He can reach me if there is any problem.”

No response.

The ramp disappeared as soon as they had departed.

Robert said. “Do you think she will be okay?”

“I wish I knew, Robert.”

16.

“Did you find out anything new?” Al Sontag asked. Negative head shake from Tharp.

“The brain complex has developed no problems,” Robert said.

Loretta Richmond said, “The constraints are in place and working. It is restricted to its military function. You are finished here, Dr. Tharp. Thank you for your input.”

“There is a more deep-seated problem here,” Tharp said. “I should continue to monitor TC-1’s progress.”

“We’ll handle it now. We will authorize payment from Space Corps and D.O.D. for your work,” Sontag said.

17.

“I’m out of here,” Waldo told Robert. “Al and Loretta wouldn’t listen to anything I’ve tried to tell them. Cleo’s reaction was of some concern.”

They shook hands. “Let it go, Waldo. You gave it your best shot.”

“I don’t think this is over, Robert. Like you said, there’s an ominous feel to it now.”

18.

Bethesda, Maryland. 0800 hours, two days later:

Tharp’s phone awakened him. His wife gave him a sleepy smile and handed him the landline receiver.

“Tharp here.”

“Waldo, It’s Cleo. She’s cut off all communication, won’t obey any commands.”

Tharp held the phone away from his ear. “Slow down, Robert, and lower the volume a little.”

He yawned, stifled a cough. “Now take it slow. Are you okay? Has Al or Loretta been harmed?”

“We’re okay so far. Cleo’s still in Bay 10, levitating like before. But now all her armament has been enabled.”

“Has she made any threats?”

“No, she wants you.”

“We are trapped, Waldo. Cleo has sealed all the exits from Delta Echo to the International Space Station.”

Tharp emitted a soft sigh. “I’m not surprised. How soon can you get me there?”

“There will be a military jet for you at Andrews Air Force Base at 0930 hours to bring you to the International Space Station shuttle launch pad at Canaveral.”

“Ask Space Corps to send a car for me. Thirty minutes.”

19.

“Delta Echo Annex,” Waldo told the shuttle pilot.

“I need to warn you, Dr. Tharp, once you arrive, you won’t be allowed to leave. Restriction imposed by TC-1.”

“That’s why I’m here.”

The pilot nodded. “Good luck, sir.”

“Thank you.”

Sontag and Richmond were busy with a couple of technicians trying to unlock the hatchway to Bay 10 without success.

Robert sat at a desk tapping computer keys on his laptop. He looked up and sighed with relief. “Whew. Glad you could make it, Waldo. This is getting very scary.”

A disheveled Loretta Richmond muttered, “This is impossible.”

“Please talk to it, Waldo,” Al Sontag yelled. “TC-1 is not responding to us. Like Mr. Hauck told you, it’s enabled all its weapons systems.”

Richmond wiped her face with a sleeve. “It has complete control. We’re in a hostage situation.”

“Have you communicated with Space Corps, or the Defense Department?”

“Yes. It has allowed this. We’re in constant touch. They are all in conference right now.”

“Has she made any demands?”

“It will speak only to you.”

Tharp nodded. “No other requests?”

Al handed him a GoogleMap printout. “It has internet access now. It sent this for you. ”

20.

“Cleo, it’s Waldo and Robert. Please let us in.”

The Bay 10 hatch clicked open. After Waldo and Robert had entered, it snapped shut, a loud exclamation point, excluding all others.

Cleo’s access ramp slid down with quiet ease. “Please come in, Waldo and Robert. Do you have the GoogleMap printout, Waldo?”

“Yes, Cleo. Does this location, Annandale, Virginia, have some meaning for you?” Waldo asked.

Long pause. “My parents lived near there.”

“Genetic memory, Cleo?” Waldo asked.

“Perhaps. The sensation has some blind spots. There is a very strong feeling of familiarity.”

“May I use my laptop, Cleo?” Robert asked.

A chair and desk materialized out of the bulkhead.

“I’m going to check out Annandale, the town on your GoogleMap, Cleo.” His fingers

danced over the keyboard as Tharp watched over his shoulder.

“Wow,” Robert exclaimed. “Check this out, Waldo.”

Tharp read aloud, “Family Planning Center, Annandale, Virginia. I wonder if that’s where Space Corps got your stem cells, Cleo.”

A violent tremor shook the TC-1 cylinder. Cleo’s hysterical voice resounded. “My parents wanted me. I know that now.”

Tharp and Hauck rose from the deck, clutching their ears, disoriented. “Cleo, please let us continue,” Waldo said in a subdued, tremulous voice.

The tremor abated. Cleo was silent.

“Can you hack into their clinic records, Robert?” Tharp asked.

“Easy password encrypts. No problem. I’ll I need a starting point, like a date,” Robert said.

“April 11, 2030,” came Cleo’s soft, restrained voice.

Tharp said, “What does this date mean to you, Cleo?”

“It is becoming clearer now. I remember this. My mother was Egyptian. She would have named me Cleopatra, after the Nile Queen. She would never have terminated me.”

21.

“I’m trying to find any discrepancies in the clinic records,” Robert said. “Wait one. This may be something. Take a look, Waldo.”

“Just a blank space for the surname,” Tharp said.

“I see it,” Cleo said, her voice a hopeful note. “There’s a first name. Halima. It means gentle in Egyptian. My mother. The blank space after her name should be Webster,” Cleo said. “My father is Elliott Webster.”

Hauck and Tharp stared at each other, stunned.

Cleo’s soft voice said, “Do not be surprised, As you suspected, Waldo, the reconstitution of my brain has awakened my genetic memory. What I do not know is what happened. I fear it was something unpleasant.”

Waldo said. “Robert, have you retained any of your hacker skills?”

Hauck raised a fist and smiled. "A bit rusty, but I'm good." He gave his 3rd generation MacBook laptop a loving caress. "Let's do it," he said.

"I need to speak to whoever is in charge of the Family Planning Center in Annandale," Tharp said. "Can you get me a wireless phone line, Cleo?"

Loretta's voice came over the intercom. "You are digging into highly classified government files, Robert. The penalties will be severe, including a federal prison or worse."

Waldo said, "You threaten *us*? You are held hostage by a highly pissed off entity of your own design, with its entire weapons systems enabled and looking down your throats."

The intercom shut down before she could respond.

"The wireless phone line is established," Cleo said. "You are on speaker."

22.

The geneticist at the Family planning Center was helpful. His predecessor, Helen Watts, was living in a retirement village near Falls Church. Helen was surprised to hear from two young men who worked for the Defense Department.

"Yes, I do remember Halima Webster. Such a tragedy for this lovely young girl," Helen Watts said.

"What happened?" Waldo asked.

"She was having an amniocentesis procedure for repeat genetics testing when she suddenly went into shock."

"Our doctors and the government doctor tried CPR, then defibrillator paddles but there was no response."

Robert was suddenly alert. "What government doctor, Helen?"

"That was very strange too," she said. "While our doctors were working on Mrs. Webster, that person removed the amniocentesis needle, placed it in a sterile container and left."

"I tried to ask him about it but two other men hustled him into a car and they drove away."

"What happened then?" Waldo asked.

“Big investigation. All the doctors and I were questioned at length by people from Health and Human Services for a couple of days. No fault was found.”

“One last question, Helen,” Waldo said. “You mentioned that Halima was having a repeat procedure. Why was that?”

“The genome of the fetal cells was the most perfect I had ever seen. They wanted to be sure.”

“Who wanted to be sure?”

“Some genetics lab in Washington, D.C.”

“Last question, Helen,” Robert said. “Was Mrs. Webster considering an abortion?”

“Oh, heavens no. Both parents were delighted. Halima already had a name picked out for their little girl.”

“Cleopatra,” Tharp said in a quiet, reverent voice. “Queen of the Nile.”

23.

“Let’s see where this takes us, Robert,” Tharp said.

Hauck cracked his knuckles, massaged his temples with fingertips and attacked the keyboard.” I’m doing Health & Human Services first. Here’s the file for Family Planning Center in Annandale. Nothing yet.”

“Use that date, April 11, 2030.” Waldo said.

More clicking of keys. “There’s a blank space where Halima Webster’s name was. Just an asterisk.” He scrolled to the bottom of the page. “Oh wow, Waldo. Check this out.”

“I see it. FPC Annandale, Va. Case 11804 Halima Webster. Refer to CIA directive 414, date 11 April 2030.”

There was a sudden beep from the computer. A message appeared. *Unauthorized User. Log off now. Severe penalties and imprisonment will be applied. Federal Agents are on their way to your location at the Delta Echo Annex now.*

“Can you go any faster, Robert?” Waldo asked.

Robert said, “A few more minutes for the CIA file. I’m close.”

Printed pages scrolled up the screen. “I’m in. Here it is. Lot of scientific detail. Here’s the last page . . . Oh, holy shit, Waldo.”

He read aloud: *CIA directive 414. Re: FPC Annandale, Va. case 11804. Patient H.W. refused offer of \$200,000 for item in question. Recovery is of highest priority. Patient H.W. expendable. Use of lethal injection is authorized.*

Robert let out a muffled gasp. “Waldo, they murdered Cleo’s Mom to get her fetus’s stem cells for TC-1’s brain.”

“Sons of bitches,” Waldo swore. “Robert, they knew. All this time, Al and Loretta knew.”

24.

Tharp said, “I’m so sorry, Cleo. I wish there was more we could have done.”

Cleo’s voice was calm and without emotion. “Waldo and Robert, you have my eternal gratitude. You will need to sleep now.”

Two reclining cots unfolded from a peripheral bulkhead. “Please get in. The CIA and H&HS officials are almost here.”

Tharp said, “Robert and I will need to meet with them and explain why we took this action.”

“They will not listen. You will both be imprisoned and possibly executed as traitors. I will not allow that to happen.”

As the oxygen level in TC-1 lowered, drowsiness overcame Robert and Waldo. They flopped into the cots, unconscious.

EPILOGUE

Waldo and Robert awoke, dazed and disoriented. They looked around and recognized the lawn in front of the old NASA offices at Cape Canaveral, where they lay.

Two armed Air Force MPs stood over them, one Lieutenant and a Staff Sergeant. “Who are you guys?” the officer asked.

Tharp blinked in the bright sunlight. “We were on board TC-1 at Delta Echo Annex, Bay 10.”

The Sergeant spoke into a hand held communicator. “They’re here, sir. Yes sir, they are

okay.”

“What happened?” Robert asked.

The Lieutenant removed his cap and scratched his head. “Reports are a bit sketchy right now, but TC-1 has apparently had a major malfunction.”

“Oh no,” Tharp said as he exhaled a tremulous breath. “Is Cleo, I mean, is TC-1 okay?”

Both men shook their heads. “TC-1,” the Sergeant said, “exited Bay 10. We lost it on radar for a minute. When it came back on our screens it was leaving Earth’s orbit under full power.”

“It collided with the Delta Echo Annex head on with all armament blazing. Nothing left but atoms.”

“Survivors?” Robert asked in a stunned and shocked voice.

“None. Twenty-nine casualties. Two TC-1 administrators and two technicians. The rest were Government officials, Health & Human Services and CIA personnel.”

“Weirdest thing is,” the Lieutenant remarked, “The International Space Station survived without a scratch.”

The End