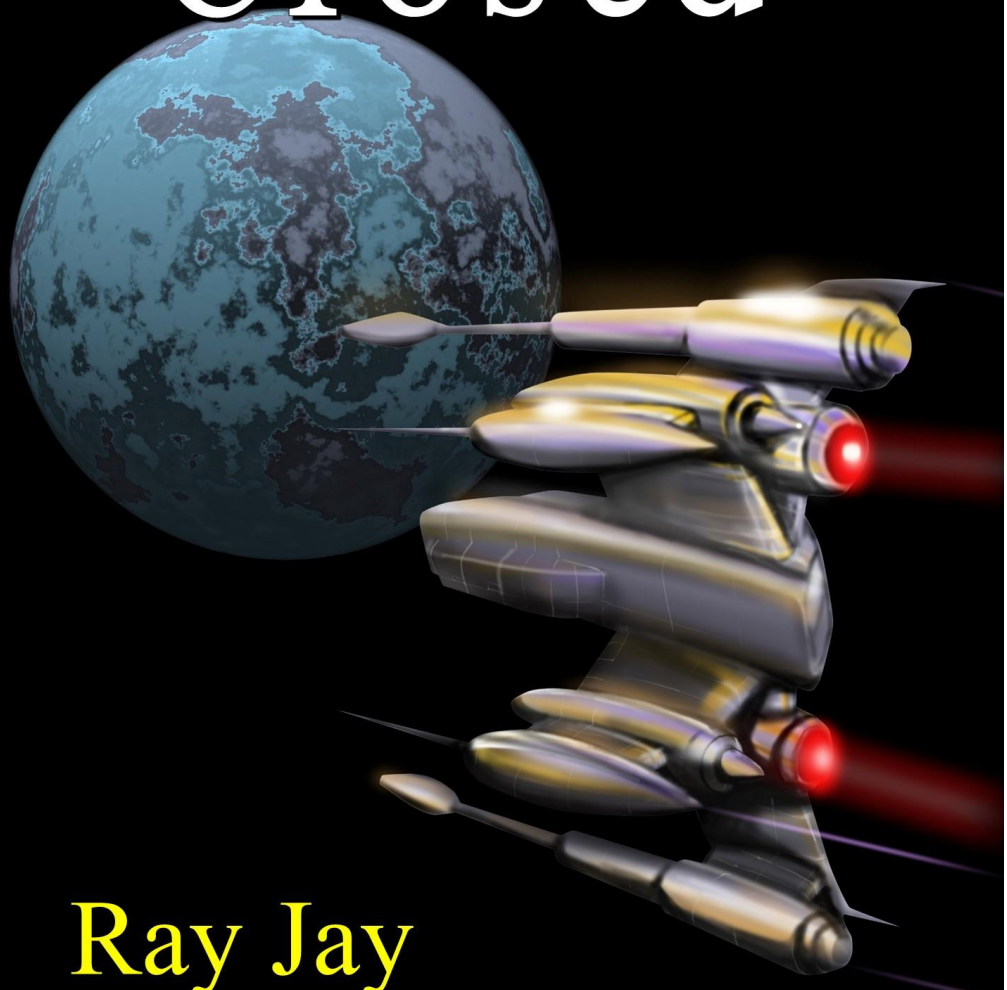
# Circle is Closed



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SMASHWORDS Edition

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## Part 1 HSV#2

Commander Leopold Harnesy was standing on the bridge of the HSV#2. He was nervous in fact he was scared. The fate of HSV#1 was fresh in his mind. His ship's predecessor was sitting in the same exact location 5 years ago and when its commander; Roberta Jenkins engaged the faster than light drive, the ship disintegrated into trillions of molecules. It was obvious what had happened, the calculations were a little off.

The faster than light drive, or the light distortion drive, was supposed to compress the ship and crew's molecules, then a funny thing was supposed to happen. Similar to the old adage that 'nature abhors a vacuum' nature also abhors an imbalance in forces at the molecular level. A minor distortion between molecules causes a ripple in the dimension's time/space fabric and the result is similar to firing an apple seed by squeezing it. For many years science added energy trying to go faster. Then they discovered that when they created a minor distortion between molecules, the forces of the entire time/space fabric within the dimension fought to correct the imbalances. They could use a little energy to focus immense forces. The two main variables was the rate distortion was made and the amount which was dependent on the total mass and the distance to be traveled. As the distortion between molecules increased, it took a finite amount of time for the forces to build up within the dimension. If the local distortion, happened too fast or too much then it would exceed the forces building to correct it. Once that happened the distortion continued and the molecules separated. That is what happened to HSV#1 and Roberta Jenkins.

When HSV#1 was launched, the intended target was 2.1 light years away and the decrease in the molecular distance was beyond the ability of the molecular forces to come back together. Unfortunately, they were scattered over a large portion of space.

The light distortion drive was discovered almost 150 years ago and it took a while to mature the design and calculations. The engineers discovered that light is like fabric that goes in infinite directions. It is made up of waves of particles that have a weak molecular bond. If you can pull two strands of that fabric apart, a light-wave-void is created. Existence hates that void and will do everything it can to correct it. The key discovery was, once the void was created it touched all of the space/time fabric. The full force of existence tried to correct the void and when it was corrected the craft within that void would move across the time/space fabric in a precise direction for a prescribed distance.

Commander Harnesy was well aware of the details of faster than light travel. Since that terrible incident, the scientists had done many short and longer-range trips; some with unmanned vehicles and this would be the first one with people onboard. That was the bottom line; the real trips needed humans onboard for them to be successful.

This initial manned jump was to the same point that Roberta Jenkins had attempted. It was the largest local void within a reasonable distance. A jump of that distance would put them in a region of space where they would be safe if the calculations were off a little. Then once they arrive, they'll be able to make the necessary calculations to make the jump back.

The time had finally arrived and the calculations were complete. It was up to Commander Harnesy to push the button. HSV#2 wasn't a large ship so the portion of the calculation due to its

mass would be a small factor. He had only six other crewmen with him and if they were successful in the jump, and they were able to verify the calculations then the next jumps would be with larger ships.

## Part 2 First Jump

The crew sat at their stations and they looked at Commander Harnesy, anticipating him pushing the button. Pushing the button had become symbolic within humanity. Computers had long provided all of the important actions, but humans needed something tactile, and pushing a button was symbolic and provided a human action to start a computer process.They knew their lives rested with that button. Harnesy looked around smiled at everyone and said, "Well here goes." He pressed the button and waited for something to happen, and he didn't feel anything.

The 3D holographic projection in front of him shimmered and then the stars all rotated about 10 degrees. None of the calculations indicated they would feel anything traumatic, but feeling nothing was a little anti-climatic. "Boy, that was exciting," was all he could say and he felt the stress level of the crew suddenly change. Some of them laughed a little.

"Flight computer, please calculate our location.

"HSV#2 is 2.10027 light years from its starting location."

Slowly the smile crept across Harnesy's face and he glanced around the control room as a smile emerged on the faces of his co-travelers. "We just jumped a little over 2.1 light years," he screamed and the crew broke out in cheers and applause.

"Ok, ladies and gentlemen, now we have to get home. Let's start the calculations and remember we have to be precise we have a much smaller target on the return trip.

While his crew worked with the computers, he had a few minutes to think. The human race had come a long way in the previous generations. He was proud of their accomplishments and their history. The history of the human race was broken into to epochs, before the 'Movement' and after the 'Movement.'

The Movement was the point in human history where they left their original home Earth and moved to the star system HR 3617. In one respect, it was the most traumatic event in human nature, but in another sense, it was the best thing that could have happened. Prior to The Movement, humanity destroyed their home planet. Of course, it wasn't intentional but little by little the resources were exhausted and its atmosphere was so out of balance that restoring equilibrium was beyond their technical skills. The only answer was to move the population to another clean world where they could start over.

The trip was horrific and took over three centuries to cover the 189 light years. 40 generations had given their lives so that humanity would survive. They named their new home Horizon demonstrating their intent to change and they were looking beyond the next horizon for a future.

Fortunately, the human race learned its lessons and they were considerate wardens of their new home. Horizon was a healthy planet and the human population grew and prospered. Their level of technology finally reached the point of achieving faster that light travel. Even though their immediate vicinity provided all of the resources they needed, there was one need, not fulfilled. Humanity needed to visit Earth once again and pray that it had healed itself. If it had, they wanted to reclaim it and resettle humanity to their home.

Commander Harnesy smiled thinking of that possibility. Through his entire life, he had read of Earth and studied Earth. As children grew up, they learned the history of their race in the hope they wouldn't repeat the same mistakes. He was proud that he and his crew would be the first to see Earth and the first to set foot on it.

"Commander, we have completed the calculations," said his Chief Scientist.

"Thanks, Dr. Homey, are we ready for our return to Horizon?"

"Yes, sir."

Once again, Commander Harnesy hesitated before pressing the button but his hesitation was brief. He pressed the button and before he took another breath, the ship's computer reported they had arrived back near Horizon, precisely at the point from which they departed.

Over the next couple of months, they made more jumps to further locations while they fine-tuned the calculations. By moving, the faster than light distortion engine into increasingly larger ships they were able to account for the changes in mass. Each jump needed further analysis and adjustments to the calculations, but the fundamental technology was working better than expected.

The faster that light distortion engine was holding up well. They had only one because of the tremendous amount of energy it needed to create the distortion. True the amount they created to compress the molecular structure was small compared to the energy the dimension used to correct the distortion. Still that was a large amount of energy for a civilization to produce. However, they all felt that it was worth it. If the trip to Earth was successful and they were able to return to humanity's home, then they would be able to travel such a long distance approximately once every 6 months while they generated more energy.

The date of their departure was approaching and Horizon's leadership asked Commander Harnesy to return to Horizon and receive a proper send-off from the people and leadership.

Harnesy liked what he did, but attending lavish ceremonies wasn't high on his list of favorite activities. He would attend only because it also gave him time to spend with his wife and children, which is where his heart really was. In fact, his children were the reason he had volunteered for this risky trip. He wanted for them and their generation to see the origins of the human race. Perhaps someday they would be able to travel to Earth and be part of humanity's rebirth on their home planet.

Riding the shuttlecraft to the surface of Horizon was the last time that Commander Harnesy and his crew would have to relax and think. For the next week, they would travel around the planet, participate in numerous parades, attend dinners and be forced to listen to too many farewell speeches. Their families would be traveling with them so they would have time with them around the other festivities.

During the final phase of their re-entry, Harnesy glanced at the 15 other members of his crew. He was glad that the crew was so large, that way they could spread out and be present at all of the festivities and that meant he wouldn't have to attend all of them. He could spend more time with his family. The crewmembers looked excited, it was obvious they didn't know how many events they would be forced to attend and mass produced meals they would be forced to eat.

"Oh, well. The life of a celebrity," he mumbled under his breath.

His crew had five technical personnel for the ship, five for the faster than light distortion drive, and five general support people trained in many disciplines including defense. He was uncomfortable with that last job description; after all, what did his leadership think they would find when they reached Earth. Because no one had an answer to that question, all agreed that some defense was prudent.

Commander Harnesy noticed that the shuttle had passed re-entry and it was slowing as it approached the first welcoming ceremony led by the planet's Prime Minister, Leona T. Billings. She was a little egotistical and, of course, she would be the first one welcoming them to the planet and likely the last one to send off.

Sure enough, the shuttle slowed and lowered itself in front of the reviewing stand. When the door opened, pleasant breezes flew into the stuffy interior and Commander Harnesy enjoyed the

fresh air for a second before he stepped onto the platform. "One more step," he said under his breath as he moved into the sunshine and the Prime Minister, who was not a small women, quickly, embraced him.

"What a marvelous day to welcome you to Horizon. I speak for the entire planet in welcoming you back. We are happy to provide you the proper send off before you take such a momentous journey."

Harnesy heard something about welcoming, nice weather and a journey. Beyond that, the cheers of the crowd drowned out what the Prime Minister was saying, thankfully.

Commander Harnesy felt as if he was marshaled pushed, dragged or maybe he walked over to the center of the platform and all he knew was that he was expected to say a few words. Regardless he found himself center stage on the reviewing stand.

"Thank you, Prime Minister. I know I speak for my crew by thanking you for such a warm welcome. We are excited to make this trip to our home world. The hundreds of generations of humans that have lived here have not had the technology to see what has happened to our home planet. We hope that it has progressed and healed from the damage we did to it, but in a short time, we'll be able to travel to Earth and see for ourselves if she has healed. Once again, thank you very much."

The crowd cheered and while the Prime Minister was maneuvering to make another speech, Willy Harnesy scanned the crowd for his wife and children. When he saw them, the words coming out of the Prime Minister's mouth lost any importance and he stepped off the platform to embrace his family.

He wasn't able to say anything because of the noise, so he just held on to them while the welcoming ceremonies continued. When they finally ended, he was able to enjoy his wife and daughters as they took their transport vehicle to their residence.

When they were finally settled in their home, Will's oldest daughter asked, "Dad what do you think you'll find on Earth?"

It was a simple question, but the answer wasn't as simple nor as obvious. No one knew what would be found.

"My dear, Rose, we left Earth over a thousand years ago and our best scientists aren't sure what we'll find. Some think we'll find a dead planet that was unable to recover from the damage we did. Others feel the planet may have healed itself and may have returned to an environment that would be friendly to us. When our ancestors left the planet, it was in bad shape the rains changed from being our friends to being an enemy. The storms made living on the surface a challenge and the pollution was getting into everything they grew. The deteriorating conditions forced Humanity to move on. They left all of the robotic units because there wasn't room in the transport vehicles for them and the humans. The only thing I know is that they asked me to find the answer to that question. I tell you what, when I find out, you'll be one of the first I tell."

The remainder of time together went too fast and before the commander knew it, he was whisked away to attend the many celebrations. Having his family with him made the task easier, but it was a hectic time and he missed quality time with his family.

The week went quickly and Commander Harnesy and his crew found themselves back on the same platform with the same prime minister. Harnesy stood behind her listening to a long story that seemed to take almost as long as their migration to Horizon had taken. While she drowned on, he enjoyed watching his family sitting in the front row in front of the platform. After the cheering, which indicated the end to her speech, he was supposed to say a few works. All he could think of were the words that he used with his daughter one week ago.

"...And now I'd like to introduce the leader of this historic mission. Commander Willy Harnesy," said the Prime Minister ending her speech. Harnesy walked across the platform and waited a moment for the crowd to quiet down. He took one last look at his family in the front row and then a quick glance around so the video transmissions units could see who was talking.

"I'd like to thank Prime Minister Billings. Your words were an inspiration and there is very little that I can add. When we arrived last week and I was, able to spend time with my family my daughter asked me a simple question and my answer is as fitting now as it was a week ago. She asked me, 'What do you think you'll find on Earth,' my answer was just as simple; you've asked me to find the answer that question. Moreover, I intend to do just that. We need to know how our home planet has progressed, and we need to know if she has healed and most important if she is willing to let us come home. My crew and I will answer those questions." With that, ending statement the crowds cheered and Commander Harnesy turned, looked at his crew and they filed onto the shuttle. When the hatch closed and the sudden change from ear-splitting cheering to almost total silence was an indication that they were on their way.

## Part 3 The Jump

The flight back to HSV#2 was relatively quiet. It took a few minutes for everyone to slow down a little and move from the excitement of the last week to a quiet ride within the shuttle. As they made that transition, they also moved from the world in their minds to another much further away.

Commander Harnesy reverted quickly to being the commander. He thought of the investment everyone had put into the project and he thought of Roberta Jenkins. Since that first terrible disaster, they had learned a great deal, but the numbers were still scary. For his craft and crew to get within a reasonable distance from Earth, they needed accuracy to at least the eighth decimal place. Traveling 189 light years in one blind jump meant their calculations had to be accurate to 99.99999992% to get within 1 astronomical unit of the planet or 93,000,000 miles. Which would put them in a position where they would have to make a long journey to Earth. They were hoping for much better and their target was to put them within 100,000 miles of Earth that meant their calculation needed to be within 99.999999999098%. If they were off too much, they could find themselves too far away from Earth and they would have to return to Horizon and wait at least six months for the energy reserves to build again. Of course, that was the best failure scenario. If they were unlucky, they could end up in the middle of the sun or if they were very unlucky they might arrive in the middle of one of the planets in the solar system. The joke was, which was more unlucky; burning up in the sun or appearing in the middle of a rock planet.

The plan on arrival was simple. They will be isolated from Horizon because they had found a way to travel faster than light, but communications didn't. The ship was fully equipped to conduct a full survey of Earth. They had with them a complete data set of information about Earth when humans left. They had a complete analysis of the atmosphere, water, nutrients and weather patterns. They also had a detailed map of the structures and support infrastructure. The latter was less important because no one thought the structures would have changed much since they abandoned it. They planned to use infrared and carbon dioxide measuring sensors that could identify and measure the density of any wildlife. They hoped the wildlife had recovered because the amount of wildlife was the one measure that gave them the best overall picture of Earth's health.

Getting HSV#2 ready for departure was a quiet time. They knew their jobs and the crew put their heads down, went through the necessary checks and reaffirmed the calculations. Once they made the jump, they would have only 24 hours to get from the arrival point to Earth, conduct the survey, return to the arrival point for the return jump. The relative motion of the two solar systems drove the 24-hour limit. Their calculations had a certain amount of unknown variables and one of them was the difference in the relative motion of the two systems. At 24 hours, they were at the limit of safe margins and they needed to return. The measurements they made during the trip would greatly improve the calculations for the subsequent jumps.

Finally, the checks were complete and the calculations verified. They would spend the last few hours on a direct link to their families on Horizon. Regardless of the fact that they had already made a number of jumps, this jump would change their history. They had heard of Earth their entire lives. Their lives on Horizon reflected every facet of life on Earth. There wasn't a human on Horizon that wasn't with them in spirit.

Just like the previous jumps, the only sensation was the movement of star patterns in the 3D holographic display in front of the commander. Unlike previous trips, this time the star patterns moved dramatically and took on an entirely different pattern. After all, they moved 189 light

years, which was further by a factor of two, compared with all their previous jumps. They had just jumped further than any human had done before. When the holographic display settled down after a few seconds, Commander Harnesy asked the computer, "Computer what is our location?"

The computer took longer than normal to make the calculations then responded. "You are 189.037523 light years from your starting point.

"What is our relationship to Earth?"

"You are 127,412 miles from the planet Earth."

Everyone that heard that took a moment to grasp the information then a cheer broke out among the crew. Arriving a little over 127,000 miles from Earth was a tremendous success and would make their trip to Earth's orbit a simple flight of only 6 hours. After the momentary celebration, the commander announced, "Ok we have a job to do. Turn on all of the sensors and let's see what Earth looks like. The 3D holographic projection in the center of the control room came to life and showed a beautiful planet with the deep blue seas they had heard of. There was a partial cloud cover and the picture was exactly what they hoped to see.

The activity on the bridge rapidly increased as each of the crew performed their jobs. The six hours to achieve orbit was full of discovery. All of the data coming in was fulfilling their wildest dreams. Earth had healed itself and was welcoming them back.

They planned to do Earth's survey in two parts. During the approach, the atmospheric spectrographs would analyze the atmosphere. As they got closer, other instruments would survey the continents for location; size shape, etc. Once they reached orbit, they could move from the spectral analysis sensors to the infrared and detailed laser mapping of the surface.

The commander announced, "We are at the two hour point before orbit, give me status to this point."

"Sir, the atmosphere is well within limits. The pollutants have all dissipated and the air is actually cleaner that what we have on Horizon."

"Commander, the tectonic plates have shifted as we projected and the continents have moved to the projected locations."

"Sir, I'm just coming within range of the laser surface mapper and I'm getting unusual data. I'm having trouble resolving our city and transportation corridor alignment with Earth's data. It appears there are many more artificial structures then when we left."

"Indeed, continue the mapping until we're in orbit."

"Yes, sir."

"Sir, the carbon dioxide sensors are online as well as the infrared. We're sweeping the surface along with the laser mapper."

"Put the data on the projection."

"Yes, sir."

The holographic display showed the continents, and how they had moved compared with their projections. Then it overlaid the anticipated structure layout compared to the current. Lastly, the carbon dioxide mapping showed a healthy but scattered mix of smaller life forms.

"Sir, this doesn't make sense. My structural mapping shows that almost 80% of the structures on the surface have been built in the last 200 years."

"Sir you'll also notice there aren't any IR images in the cities. However, some images appear to be industrial centers and none of them have life forms around them?"

Commander Harnesy was taking in all of the information. Nothing added up, in some ways their dreams had been answered, but now there were problems; "What is going on down there?" he thought. The ship continued orbiting Earth and recording data. At the 17-hour point, they had

mapped almost 80% of the surface and they had no clear answers. Something was happening which couldn't be explained. Unfortunately, they had only a short time left before they had to leave Earth's orbit to return to their departure point.

Suddenly Commander Harnesy caught sudden movement out of the corner of his eye. The technician monitoring the incoming IR data was reacting to something dramatic.

"Sir, there is something unusual coming up on the holograph."

Harnesy waited a moment for the display to catch and sure enough. There was a grouping of larger IR images in a village arrangement near one of the large cities. The shape and size appeared to be humanoid.

"Is that data correct?" He almost screamed at the technician.

"Yes, sir, it appears those life forms are humanoid. Very much like us."

"Apparently so," was the only response the commander could muster.

"Sir, based on our position in orbit we must leave shortly to make our jump point."

"Ok, I think we have a lot to analyze, although I'm not sure what it means. Go ahead and begin maneuvering to the jump point."

"Yes, sir."

The bridge was quiet, as everyone assimilated the contradictory information. In a small way, they were relieved to go home. They didn't have all the answers and they seemed to have more questions.

Suddenly the ship's computer made an announcement, "There is an incoming message from the planet's surface."

####

The End

# Epilog

Thank you for reading these short stories. Personally, I think good science fiction short stories are the basis of the genre. I love action-filled stories, but there is something unique about a Sci-Fi short, that captures Sci-Fi's true flavor. I love endings with a little twist or thought-provoking piece of information.

'The Greatest Host' is a humorous story I thought of while walking our two dogs. As I scurried around behind them, collecting their poop, I realized they had the perfect life. Being a Sci-Fi author, I took that in a fun direction.

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# About The Author

I'm a retired Aeronautical Engineer, who is trying to bring a different style to science fiction writing. I've always loved science fiction and I'm trying to write with deeper characters and create stories and situations that a reader can relate to. The be honest I love a hero that has amazing weapons, takes on hundreds of aliens and can survive anything, but I also want to read a situation and be able to relate to it.  An extrapolation of what might really happen with a little less stretch in my imagination.

I've been fortunate and I flew in the US Air Force for 10 years, during which time I flew C-130's and visited 27 countries, then I flew T-38"s and trained the best pilots in the world, as well as the first female US Air Force pilots. I then was fortunate to spend 28 years in a major aerospace firm and worked on some of the best programs in the world including the F-23, F-35, B-2, Global Hawk and many I can't tell you about….

I hope I can bring my real life experiences into my writing so you can appreciate my work.

# Books by Ray Jay Perreault

**Available on Amazon and Smashwords**

SIMPOC – The Thinking Computer

SIMPOC – Human Remnants

Gemini

Progeny

The Greatest Host

Circle is Closed

Science Fiction Anthology Vol. 1

Science Fiction Anthology Vol. 1 (Audio to be released soon)

Virus

Virus (Eath's Last Battle-Released soon)