## FRICTION

## **TREATMENT**

It's early morning on Moonbase-Tranquility – Earth's first permanent off-planet outpost.

As the crew gathers for their morning coffees, the silence is interrupted with a series of taps on the observation windows. As the tapping become more pronounced, the window shutters are opened to display the impossible – a dust storm on the Moon.

Soon, stones are being hurled at the structure, several striking the glass with enough force to crack the panes.

Momentum is building as two Moon Rovers strike the structure, one breaching the wall, casting several crew members into the void. The remaining crew members race toward the shuttles amidst a hail of dust and stones.

Disregarding their usual protocol for launching, fire streaks from the rear of the crafts as they rise from the launch pads in a seemingly futile effort to escape the surface of the Moon.

Shuttle Two is struck in the nose section with a bombardment of fragments, altering its course and slamming it violently into the side of Shuttle Two. Intertwined and spinning uncontrollably, the two crafts plummet to the surface of the Moon and explode.

Simultaneously, in a high-Earth-orbit, twenty-five thousand miles above the Earth's surface, a team deployed by Project Night-Light is putting the final touches on a massive mirror. Their goal is to reflect the Sun's rays deep into the sea -24/7 – to accelerate the growth of undersea vegetation and defeat world hunger.

Pausing for a moment, the captain of the team, John Cooper studies the heavens as a slight mist of fire trails from the back of the Moon and the leading edge begins to glow intensely. John contacts the mission commander, Sarah Jennings, who is aboard Night-Light's ship, the Aurora, and advises her on the circumstances surrounding the Moon.

The mirror construction comes to a halt as the Moon begins to glow more intensely. Larger sections of the Moon begin to crack and peel away from its core.. Then as quickly as it began, the event is over. Nothing remains but a faint dust trail, surrounded by an all-consuming darkness.

Mesmerized, John snaps back into a harsh reality with a frantic communication from Sarah, demanding that the crew immediately return to the ship. In the distance, and beginning as a slight ripple, the mirror is gaining momentum and about to engulf the entire crew and ship.

Their speed is no match for the approaching material. It is soon upon them, spinning the craft ever faster as it becomes helplessly cocooned deep within the layers of the thin film, discarding them hastily into space.

It's a bright, sunny day back on the surface of the Earth, as a group of seasoned climbers await the signal to ascend to the summit of Mount Everest.

Without warning the entire camp is engulfed in an intense white-out as the wind begins to howl, sounding more like a fighter jet, switching on its afterburner, then a blizzard.

As quickly as it was upon them, it's gone. Digging out from the barrage of fresh snow, the lead Sherpa, (a mountain guide) studies the mountain. Horrified, he falls to his knees and begins to

shake. The top 2,000 feet of Mount Everest has been sheared off, as if by a great sickle and along the newly formed plateau, fragments of molten rock are cascading down the slopes..

Slipping effortlessly through the warm waters of the Mediterranean Sea, fifty miles southeast of Crete, the crew of a 40-foot Ketch, Sailbad the Sinner is just finishing breakfast. Sandy rises from the table and heads topside to grab a few hours of topless sunbathing while the sea is dead calm.

She waves at a passing cruise ship a couple miles north of their position. As her shipmate, Rob, rises from the cabin, they are both distracted by a long stretch of sky beginning to darken – first to a deep blue, then black, complete with an array of stars.

Miles ahead of the passing ship, the water begins to rise and vaporize into torrents of steam, traveling at incredible speed toward the ship. Moments later, the huge ship is caught up in the turbulence.

The ship begins to rise and twist. Its edges begin to glow bright yellow, casting streams of sparks and fire. Seconds later, it's hurled into the sky and gone from sight.

As Rob initiates a May-Day call, Sandy screams at the sight of an immense whirlpool forming where the cruise ship serenely floated only moments before. Unable to maneuver to a safe position, their helpless sailboat is swallowed up, and vanishes.

Miraculously, the sailboat breaches the surface amidst a mound of frothing sea, followed by Rob and Sandy. They cling to the side of their mastless sailboat as they scan the serene waters and the calm skies overhead.

A group of several shepherds are tending to their goats near the top of a hill, overlooking their peaceful Moroccan village. Suddenly, the cloud-filled sky opens up to expose the dark void of space.

Within the confines of the walled village, hundreds stand motionless, in awe, as their entire world is reduced to rubble by the invisible intruder. As quickly as the wind was upon them, it subsides.

Nothing is left standing above the surface, leaving behind a debris field, appearing as more of a rocket blast than winds from a hurricane.

A quarter of a million miles from Earth, the crew aboard the Aurora begins to stir. The ship is extremely dark, except for several dimly lit emergency lights.

Sarah recovers first and attempts to revive the others, while struggling to make her way through the cabin in total weightlessness.

She flips the ship's exterior lights on, then abruptly off. She reels back in horror, staring wildly about the cabin as she hyperventilates. Her claustrophobia is kicking in.

The remainder of the crew is soon revived, but severely disoriented. Sarah turns away from the windows as the exterior lighting is once again turned on – revealing a maze of twisted and crumpled mirror material, tightly wound around the exterior of the craft.

Sarah kills the idea of removing the material carefully to salvage as much of it as possible, suggesting that colliding with the mass may have greatly slowed them down – and that the Earth may be pulling away from their position by thousands of miles every hour.

Her worst fears are confirmed as the ship clears the mass, revealing an Earth appearing less than one-tenth the size it did only eight hours ago.

As the majority of the crew prepares the Aurora for a restart, Sarah summons John and Tom to the briefing room for an update.

She begins the briefing by surmising that the Earth and Moon had collided with an invisible cloud, lying dormant in space, and it was the Earth's own 67,000 mile per hour orbit around the Sun that was the reason behind the devastation.

She also points out that 67,000 miles per hour is faster than many meteoroids are traveling when they enter the Earth;s atmosphere and disintegrate as shooting stars – and that the Aurora would have also been burned to a crisp if the mirror material hadn't rolled them up, acting like a big heat shield.

Lastly, she explains that their collision with the mass has cut their current speed to around 40,000 miles per hour – which means that every hour, the Earth is pulling away from them another 27,000 miles – and they'll need to maintain a minimum of 70,000 miles per hour to catch the Earth before their life support systems give out.

With a portion of the anomaly gathered from the mirror material, Sarah retreats to their optics lab to analyze the sample.

After several hours of methodically swapping out one set of random lenses for another, she flops backward into her chair and rubs her eyes. She's just about ready to give up when she happens across a combination that displays the sample as a well-defined, swirling spectrum of light and color. She immediately summons John to the lab.

As Sarah fine-tunes the focus for him, a thin sliver of unfiltered sunlight works its way across the lab, momentarily crossing paths with the microscope's stage. She reels back in agony as she covers her eyes from the welder-bright flash.

Rushing to the infirmary, Sarah and John are relieved to find that her eyesight should return within a few days – however, her intraocular fluid has changed to a color and consistency that the doctor has never seen before.

Two days later, Sarah's eyes are recovering nicely. While taking a quiet moment to gaze out of the rear observation windows, she discovers that she can clearly see the cloud's samples without any type of special lenses – especially when it's backlit by the Sun.

Sarah, John and the doctor attempt to duplicate the circumstances leading up to her unique ability, but come up short, time and time again. Further testing acknowledges that whatever happened, she was now able to perceive some visual wavelengths that were way outside the parameters of normal human perception.

Returning to Earth, Sarah and John under immediate surveillance, not only because their close encounter with the cloud and the samples that were recovered, but also because of Sarah's unique ability to see the anomaly.

They are soon approached by several military personnel and are asked to join an elite, top secret think tank to add their insight regarding the invisible mass.

Within a NASA facility, Sarah and John are seated in a large room with several massive wall-mounted LCD screens. The meeting is conducted by General Parsons and Major Thompkins. The attendees range from military personnel to scientists and astrophysicists.

It begins with a video of the five assault sites:

- The Moon and Moonbase-Tranquility disintegrating.
- The Aurora with the mirror rolling up the ship.
- The top of Mount Everest being sheared off.
- The cruise ship disappearing from the middle of the Mediterranean Sea.
- The complete erasure of a small village in Morocco.

The general topic of the meeting then switches to Earth's Martian Colony, which had ceased all communications fifteen days earlier.

In a seemingly unrelated event, it's revealed that the fortnight's earlier destruction of Earth's Martian colony had not been a random meteorite strike, as reported to the press, but rather a deliberate attack from a massive alien spacecraft.

The declassification continued with evidence that immediately following the assault, the entire Martian atmosphere had been siphoned off, then presumably compressed and pumped into the alien craft's colossal storage tanks.

And finally, the most disconcerting of all, was the confirmation that the composition of the invisible anomalies responsible for the recent deadly encounters on the Earth and Moon indeed consisted of the Martian atmosphere.

Even though NASA and the entire scientific community had released a clear statement, specifying that the loss of communication with the colony was due to a massive meteorite strike, the conspiracy theories were still flying.

The surveillance video opens with a view of the colony being bombarded with hundreds of meteorites – some as small as a basketball and some as large as a pickup truck. The assault is relentless and continues until there is not a structure left standing.

A second video begins from the vantage point of an orbiting Mars research satellite. A series of closely grouped meteors home in on the Martian colony, striking it in an unrelenting attack. Every structure in the complex is quickly rendered uninhabitable.

The camera then pans up to an enormous spacecraft, floating motionless above the colony:

- The craft's exterior is fitted with heavily braced propulsion systems, top and bottom.
- Extending from the front of the craft are two massive mechanical arms, each fitted with fully articulating claws.
- Across the top, is a trio of enormous cannons and another trio of cannons across the bottom.
- To the rear of the craft is a pair of siamesed tanks, measuring more than twenty miles in length. Their shape is reminiscent of high-pressure welding tanks.

It was now evident that soon after the Martian colony was struck, the alien vessel had systematically removed every molecule of the martian atmosphere and presumably pumped it into its massive tanks – then transported it directly into the Earth's orbital path – and this is what was responsible for the devastation on and above the Earth.

The information quickly turns from bad to worse, with the hypothesis that the ship might be part of an alien mining fleet – and that Earth might be the target of a global-scale strip-mining operation.

Surmising that the first five encounters were launched only to verify the Earth's trajectory and that a larger-than-Earth cloud may be lying ahead, sends panic through the room.

Pointing out that there wasn't sufficient volume of atmosphere around Mars to accomplish that particular goal, it is quickly pointed out that the atmosphere on Venus is nearly ninety times denser than the Earth's, so Mars might have been just one of the stops along the way.

It was now painfully obvious that the five earlier encounters may have merely been tests to verify our planet's orbital trajectory – and that the Aliens were setting up for a Global-Scale, Strip-Mining Operation – and the Earth was their Target!

It was also calculated that the Earth would come into contact along the edge of the mass, generating enough force to actually accelerate the rotation of the Earth itself.

This collision would result in simultaneous worldwide devastation and most likely shatter the very bond between the Earth's crust and mantle.

Every fault line on the planet would be triggered. Buildings would collapse, mountains would be leveled, and every body of water – from oceans to rivers – would violently shift westward.

A final video simulation depicts the outline of an immense, invisible cloud, lying directly in Earth's path. As the Earth penetrates the mass, at nearly 67,000 miles per hour, it bursts into flames, worldwide.

Passing through the mass, the Earth's crust shifts and cracks and is nearly completely burned off, right down to the mantle – using nothing but our own momentum against us.

The briefing ends with the somber fact that there is no longer any trace of the alien ship.

To assess the situation, a scientific crew is assembled to travel ahead, on the Earth's orbital path, to see what may lie ahead. NASA's Vanguard is chosen for the mission because of its speed and maneuverability, topping out at over six hundred and fifty miles per hour.

Unlike conventional spacecrafts, the Vanguard is lifted to the upper stratosphere, utilizing a colossal dirigible, measuring nearly a quarter-mile in length. Once the dirigible has reached its maximum altitude, the Vanguard is disengaged and in free-fall, just seconds before ignition.

To avoid any possible contact with their invisible foe, the crew decides to plot a course ten thousand miles outside of the Earth's orbital path, just to be safe. Another advantage of traveling outside of the Earth's orbit will be the ability to utilize the Sun as a backlight for Sarah.

After traveling more than two days at maximum velocity, their worst nightmare becomes reality.

Somberly, Sarah confirms the placement of a massive, stationary cloud, slightly off-center of the Earth's orbital path, placed a little over forty-four days ahead of the Earth's current location.

NASA is alerted that the threat is real and that the Vanguard is traveling on ahead to search for the possibility of a second mass.

Back on Earth, the experts are gathered once again to devise a plan to either destroy or divert the cloud before the forty-four day deadline arrives.

Most of the elements comprising the cloud are known to the scientists on Earth, including carbon dioxide, nitrogen, argon and oxygen. But there's another element that can't be defined, and they concur that one element is what makes the mass so invisible to their sensors and so cohesive.

With that in mind, several options are rejected right from the start. There's too much carbon dioxide to ignite it and placing explosive devices nearby won't even budge the mass, because the force of an explosion isn't transferable within the vacuum of space. By the end of the day, nothing has been accomplished.

Midway through restless sleep, John abruptly sits up and rushes to the communications room with a novel idea. While Sarah and several other members of the crew arrive, John lays out his idea.

Teams could construct, in space, a hundred-miles-wide, parachute-shaped tarp, from Night-Light's mirror material, then tether it to a group of spacecrafts, to physically pull the mass out of the Earth's orbital path?

It's a go, and with no time to waste, production begins on massive quantities of the very durable and very thin film.

Confidant that there is only the one massive obstruction, the Vanguard plots a course back home, while NASA officials make the decision to go public with their information – to a limited group of scientists, astrophysicists and world leaders.

Major Thompkins begins the conference by proclaiming that the destruction of the Moon should be considered as a 'wake-up call' for Earth.

She then brings the entire assembly up to speed:

- In a little over forty days, the Earth will make contact with a massive, stationary cloud, floating in space and it will be catastrophic.
- Its official designation for reference is 'The Intruder'.
- It will be a glancing blow and has the potential to increase the speed of Earth's rotation by over ten percent, in a matter of seconds.
- We're officially calling this encounter 'First Contact'.
- It will almost be as if the entire planet had the rug pulled out from under it!

She ends on a somber note, stressing how devastating a Category Five Hurricane can be, with winds of a hundred and sixty miles per hour – and that in comparison, just try to imagine a sixty-seven thousand mile per hour tempest.

While hoping for the best and planning for the worst, a series of plans is presented by Professor Yamatoa, to aid in surviving the catastrophe in the event that the Intruder can't be diverted:

- The best chance of survival is to find a way to ride out First Contact in space.
- Earthbound citizens can survive as well by remembering that the planet's speed of rotation may increase from west to east.
- Migrate toward the poles. The G-force effects along the Equator will be two and a half times greater than at the Arctic or Antarctic Circles.
- Keep away from the west side of all elevated natural or man-made structures.
- Search the US Geological website for an area with little or no volcanic or earthquake history. This event will, most likely, trigger every fault and fissure line on the planet.

Upon the Vanguard's return, Sarah and John tour a NASA dirigible hanger converted to a production plant for the mirror material. Although impressive, even with this and another similar facility, running 24/7, John is skeptical that they can produce enough material in time to divert the cloud.

As John continues to dwell on the probability that they will fall short of their goal on the mirror material, Sarah rummages through reams of paperwork in search of a possible solution to John's concerns.

Locating the information, she reminds him of a company called Pulse-Electronics and their state-of-the-art research on force fields. Simultaneously coming to the same conclusion – that the mirror material could be augmented with force-fields –they decide to pay Pulse-Electronics a visit.

Within a day, Sarah and John are standing next to a forty by forty foot section of the mirror material, hoisted vertically within an arena-sized warehouse at Pulse-Electronics.

The material's center has been hastily removed, leaving only a two-foot wide perimeter. There are several high-voltage cables affixed along its silver, polished surface. In the center of the void, a lone metallic sphere has been suspended by a single hyper-conductive, insulated cable.

A technician passes every observer a pair of deeply shaded safety glasses. Moments later, the entire facility is awash with an intense, crimson red glow. The geometric grid fills the material's void with a seemingly infinite number of sparkling points of light, swirling and throbbing, almost as if it were alive.

Two days later, an off-planet test of the mirror material / force-field combination is staged to confirm the feasibility of their idea, using only solar energy to power the grid. It's one hundred percent successful and production begins on the force field generators immediately at several plants across the country.

The next day finds Sarah, John and Jenny, aboard the Aurora as they approach the Salvation One spacecraft, sitting motionless in an intermediate circular orbit, twelve hundred miles above the Earth.

Originally intended for the colonization of Mars, it has been reconfigured to act as the base of operations and home for the teams of technicians and scientists, dedicated to the removal of the Intruder.

Several vessels are loading cargo into its massive cargo bays as the Aurora comes up alongside. John gives a quick tour to Sarah as they pass by the various components:

- The Salvation One is over a half a mile long.
- The twelve outer nozzles are the main engines.
- The six inner nozzles are for the external combustion drive.
- At around ninety thousand, the inner nozzles will begin to spray a mist of fermented fuel and oxygen behind the craft and ignite it.
- The ensuing explosions should throw the craft ahead of the shock wave at a speed of around five hundred thousand miles per hour.
- There are four rows of twenty fuel cells. The rear set is filled with the fermented fuel, which they nicknamed 'The Wine Cellar'.
- The other sixty cells are filled with conventional fuel for the Salvation One, the shuttles and the rocket sleds.
- The blue sections are the cargo bays. We'll have new and used mirror material in there, plus the force field generators, coils, tether lines, provisions, air reserves and thirty rocket sleds.
- There are fourteen shuttles total, and all can be launched in less than five minutes.

As they approach the Salvation One's main section, the Aurora's controls begin to move on their own as John instinctively raises his hand from the joystick. As a cargo bay door opens, tractor beams gently turn the Aurora and pull it inside a massive airlock.

The Aurora crew remains on board as the Aurora is quickly unloaded and returned to space, just as another vessel swings around, toward the airlock.

The next morning, back at Night-Light's facility, while John is organizing some paperwork, the office door swings open. Sarah steps in and begins to raise the left side of her shirt. Joking that she's now part cyborg, she exposes a gauze pad, just below her left breast.

As part of NASA's protocol, all military and operational crew members are fitted with a government issued locator. The locator not only monitors the wearer's location, but since it's powered by the wearer's heartbeat, it also displays their vitals – and dies if the wearer dies.

Morning arrives with a new selection of information. Sarah tears open the package, removes a thumb drive and plugs it into her laptop, then interrupts John from a deep sleep.

First is the news that the Intruder is no longer 'classified' and protests are being held around the world.

The next section deals with ways people have decided to survive "First Contact' with the Intruder:

- Riding it out in helium balloons along the fringes of the atmosphere.
- In submarines resting on the bottom of the sea.
- Steel bunkers on the plains.
- Thousands that swear they'll never leave their homes.
- Then, there's the Rafters a group of thrill-seekers that are looking forward to First Contact, so they can ride out the turbulence in the open ocean!
- She opens a page with a dozen different raft designs. Everything from tunnel hulls to cubes and spheres. Their motto? "Survival is Secondary!"

With the commencement of the mission less than twenty-four hours away, Sarah and John download the latest telemetry information and forward it to everyone on their contacts list. They end their day, sitting on their rear deck watching the Sun slowly set, for possibly, the last time.

Within a NASA's briefing, tensions are running high, as Sarah and John enter the room. The pilots of the Salvation One are concerned that the fermented fuel and the external combustion drive haven't been tested thoroughly and might be a source of unnecessary challenges for the mission.

With the Aurora poised to be loaded into one of the cargo bays, John continues his tour of the Salvation One, right where he left off – the front portion of the ship.

- The Salvation One is equipped with its own rocket engines and internal fuel cells, in the event that it's necessary to separate the main ship from the rest of the components.
- The aft section houses the ship's navigation, computers and arsenal, complete with a laser cannon.
- The mid section is the crew's quarters and communications.
- Up front is the cockpit, main cabin, briefing room, and observation areas.

Sarah and John are two of the last to board. Stepping into the main cabin, Sarah is pleased to find artificial gravity, up and running, at full-Earth-gravity levels.

The main cabin consists of:

- Ten rows of twelve seats, with an isle down the center.
- At the front of the main cabin's center aisle are three steps leading up to the elevated cockpit area, yielding an unobstructed view of the two pilot's seats from nearly anywhere in the cabin.
- There is a conspicuous, forty-foot void between the last row of seats and the cabin's rear wall.
- Running lengthwise behind the rows of seats are a series of recessed tracks in the floor, coinciding with the legs of the crew's seats, designed to allow the seats to slide back, nearly forty feet, when the external combustion drive is engaged.
- Overhead and to the rear of the pilot's seats is large LED countdown clock. Currently it reads:

## "FIRST CONTACT: 31-DAYS 16-HOURS 23-MINUTES 08-SECONDS"

Commander Ruttgers and Pilot Steele take a moment to introduce themselves then get back to their preflight checklists.

Being that the crew member seats are gel-filled, they conform to everyone's body contours within a few minutes. Soon, everyone is strapped in with all five straps and ready to go.

The commander rises from his seat and makes a last-minute inspection of the crew and their restraints, then returns to his seat. He then contacts NASA's Mission Control. With all systems "Go" they opt for a quick countdown – starting at ten seconds.

As the seconds count down, Sarah remembers the events that brought her to this moment in time:

- "10" The Moon disintegrating in the starlit sky.
- "9" The Mirror Material entrapping the Aurora.
- "8" The Aurora wrapped within in the mirror material.
- "7" Mount Everest The top of the mountain disintegrating.
- "6" The Cruise Ship Being hurled into space.
- "5" Morocco The devastation from a direct impact.
- "4" The Aurora escaping from the mirror material.
- "3" The Grid Being tested at the Pulse-Electronics Lab.
- "2" The Grid Holding back the satellite dish.
- "1" The Salvation One Being approached from the rear.
- "IGNITION" A close up of Sarah's face with a look of unwavering determination.

Amidst total silence, the Salvation One's twelve outer nozzles simultaneously burst into flames. The Earth steadily diminishes in both size and clarity as the craft accelerates toward its destiny.

In the cockpit, Commander Ruttgers and Steele are squeezed deep within their gel-filled seats, as the Salvation One begins to shake violently. Several warning lights are flashing on the instrument panel.

Soon, the main engines are shut down, diminishing the rate of acceleration – but only for a few seconds. Without warning, the commander audibly shouts a three second countdown and initiates the external combustion drive.

From outside the ship, the Salvation One glides swiftly by, without a sound. A faint vapor trail can be seen forming closely behind the craft. Within an instant, the ever-widening cloud of vapor ignites with a near-blinding flash accompanied by total silence, accelerating the Salvation One quickly from view.

Seconds later, something is awry. A portion of the vapor trail directly behind a port side nozzle begins to sputter and flash erratically.

At the same time, inside the main cabin, the Salvation One's forward momentum fiercely thrusts the crew's pneumatically mounted seats perilously close to the main cabin's rear wall.

The craft begins to shudder destructively, veering hard to port, compressing the entire crew to the starboard side of their seats. The signal to abort instantly diminishes the pressure.

It soon becomes painfully obvious that one or more of the external combustion nozzles have become clogged – most likely due to the fermented fuel.

They are now, not only behind schedule, but off course.

NASA is contacted and a new course is calculated to alter their trajectory, while a team exits the craft to verify, and hopefully repair the problem.

Approaching the outside perimeter of a massive port side nozzle, a four-man technical team confronts an array of translucent amber and red crystal formations.

Thousands of knife-like, razor-sharp crystals are jutting outward in every direction. Some measuring over forty feet in length, extending well beyond the confines of the nozzle.

After contacting the commander, they begin the arduous task of clearing the nozzle with their sonic blasters, only to cause an instantaneous release of the crystals, instantly shredding all four space suited techs to death.

Inside the main cabin the ship lunges forward, sending everyone to the floor. Commander Ruttgers frantically attempts to contact the team, with no luck. He promptly selects two more of the crew to verify what has happened and assess the ship's current status.

The two crewmen reach the rear of the craft and inspect the port nozzles, which are completely clear. They then turn to survey the void of space behind the craft equipped with telescopic heat sensing lenses. They continue their scan of space for several minutes, with no luck. The first crew is gone.

Within the hour, the crew is strapped back in and the course corrections have been uploaded to the ship's computers.

Since they have already attained their initial speed to engage the external combustion drive, the commander once again shouts a quick three second countdown - then

Once again from outside the ship, the Salvation One glides swiftly by, without a sound. A faint vapor trail can be seen forming closely behind the craft. Within an instant, the ever-widening cloud of vapor ignites with a near-blinding flash accompanied by total silence, accelerating the Salvation One quickly from view.

But this time, it's traveling on course – with a clean, even burn behind all six nozzles.

As if it were rear-ended by a train, the Salvation One lunges forward with more force than the previous launch, slingshotting the rows of seats firmly to the rear of the cabin. As the acceleration continues, the craft once again begins to shake and shudder violently – nearing the intensity of certain self-destruction.

Then suddenly, without warning, a surrealistic calm blankets the entire craft and crew. All is quiet. The rows of seats begin to inch their way forward. Sarah wonders if they have all just died, but is shortly assured that they are indeed, still alive and well, gliding through space at over five hundred miles per hour.

FIRST CONTACT – T-MINUS TWENTY-SEVEN DAYS. Arriving at the Intruder, Sarah is in the pilot's seat to assist in navigating the huge vessel, close to the invisible mass, without an accidental contact.

An hour later, many of the crew assemble in the briefing room. The front wall is outfitted with several large LCD screens, monitoring equipment and vertical, transparent plotting charts.

The Night-Light team has assembled for a briefing to discuss the deployment and joining of the mirror material. With the force fields and tethers.

A large, three-dimensional holographic image of the proposed grid floats vertically amidst the crew. The grid's perimeter is octagonal, with hundreds of triangle shaped segments dividing up the middle, each with its own centralized sphere to generate the force field.

Soon, two of the large cargo bay doors are wide open. The mirror material is being spooled out, in fifty foot widths, with the aid of several rocket sleds.

As the perimeter sections are being bonded together, a technician notices a major concave imperfection in part of the material. He summons a pair of rocket-sledding techs to go to the other side and bring it back into line with the rest of the grid.

They blast up and over the grid and cautiously approach the convex buckle. After nudging it slightly forward, they hit their retros, which send the buckle too far – turning it into a concave depression, which instantly concentrates the Sun's deadly rays on their position.

The two men, along with their crafts, spontaneously combust within a flash of flames and smoke, sending burned slivers of ash in all directions.

FIRST CONTACT – T-MINUS TWENTY-ONE DAYS. At long last, the day has finally arrived to begin shifting the mass out of the Earth's orbital path.

Through the observation window, Sarah can see the silver octagonal grid, filled with innumerable triangle-shaped segments, stretching hundreds of miles into the distance.

The force field generators are also in place, as are the metallic spheres. Eight shuttles are in position to commence their Herculean effort, tied off with a series of tethers at each of the grid's eight corners.

With the order from Commander Ruttgers, the force fields are activated, lighting up the voids with a crimson red glow and producing a high-frequency hum that permeates the ship, pulsating in unison with the Salvation One's subtle vibrations.

Sarah concentrates through the observation window, as the shuttles ease their way forward. Trailing behind, the mirror begins to bow slightly. She looks up as the tethers twist and tighten. The grid bows severely in the middle as all eight shuttles come to an abrupt halt.

Reminiscent of an immense parachute, the grid takes hold of the invisible mass and begins to ease it forward. It has begun.

FIRST CONTACT – T-MINUS SIXTEEN DAYS. The shuttles have successfully relocated over a third of the cloud three thousand miles, without mishap, when suddenly a series of tether lines snap. The recoiling lines collide with the rear of the Argo shuttle, severing its aft nozzles and fuel cells.

The disabled craft spins out of control, barely missing the Salvation One. The Argo's crew feverishly fires their retro rockets in an attempt to slow its uncontrolled flight into the void of space – finally coming to a complete halt, forty miles past the Salvation One. Fortunately, there are no injuries, but the craft is permanently disabled.

The operation is taking longer than expected and morale is low, when Sarah announces her new calculations, revealing that their turn around time is vastly improving. She also reminds the crew that a second fleet will be arriving in two days with more ships, more materials and the Aurora.

FIRST CONTACT – T-MINUS NINE DAYS. With the original team of ships consistently making headway, at the near end of the mass, the second team is nearing completion of a second, smaller hexagonal grid on the far side.

Soon five shuttles and the Aurora will be tethered to the distant grid, in hopes of not only making, but surpassing their original goal, well before the Earth reaches their position.

For the first time, the Earth is visible in the heavens, as a constant reminder that time is running out.

FIRST CONTACT – T-MINUS SIX DAYS. The Earth can now be seen with the naked eye, appearing as a blue-green sphere, looming ever closer in the heavens.

A day later and completely without warning, there is a loud bang on the Salvation One's hull, followed by several additional pops and clangs. Streaking past the observation window, dozens of meteoroids are penetrating the Intruder, and disintegrating as they make contact.

A new wave of impacts is upon them as a huge fragment glances off the Salvation One, jolting it severely and sending Sarah, John and Steve to the floor. The fragment passes through a portion of the Intruder and strikes the Pathfinder head-on, obliterating it on impact.

When the smoke clears, the Constellation, Intrepid, Liberty and Pathfinder shuttles are gone. All that remains are the crippled Kitty Hawk, Horizon, Tango and Voyager shuttles, still tethered to the shredded remnants of the grid. Miraculously, the hexagonal grid has sustained only minor damage.

The attack resulted in some minor cosmetic damage to one of the Aurora's wings, but nothing structural. The ship's fuselage and propulsion systems were fortunately spared from any damage.

FIRST CONTACT – T-MINUS NINETY-SIX HOURS. The Salvation One's hull has sustained heavy damage. Several clouds of escaping air can be seen near the aft section of the ship. One of the cargo bay doors has been twisted and torn open. Cargo is drifting from the doors, entangled within miles of mirror material and frayed tether lines.

Nearly half of the fuel cells have been collapsed or split open, spilling their contents freely into the void of space. Six of the eighteen immense rocket nozzles at the rear of the Salvation One have been nearly hammered shut.

FIRST CONTACT – T-MINUS SEVENTY-TWO HOURS. Every scrap of salvageable mirror material has been hastily stitched together to form a makeshift grid. Two of the grid's corners are tethered to trios of rocket sleds to replace the missing shuttles.

The Salvation One remains the base of operations. Although severely damaged, life support and navigation systems are intact and functioning properly.

Even as time is running out, NASA informs the crew that they have compiled enough mirror material and pulse generators to nearly double their current supply. However, the only ship capable of transporting it from the planet's surface to the site is the Aurora.

With a clear path to completing the operation, Sarah convinces Commander Ruttgers to allow her to join the Aurora mission, to gather additional telemetry coordinates from Night-Light labs.

FIRST CONTACT – T-MINUS TWENTY-FOUR HOURS. While John oversees the loading operation at Henderson's Airfield, Sarah speeds off to Night-Light. She has a five hour window to gather her info and make her rendezvous with a helicopter at a local baseball field, for a ride back to Henderson's.

Pushing her time at Night-Light to the limit, she snatches her flash drive and puts it in her pocket then scoops up as much printed data as possible and crams it into her briefcase, as she scurries out the door.

FIRST CONTACT – T-MINUS TWENTY-ONE HOURS. En route to the baseball field, Sarah is threading her way through neighborhoods littered with smoking debris and wrecked cars. Suddenly, Without warning, a resounding bang startles her. Her SUV veers hard to the left, breaking her grip on the steering wheel, as the vehicle bounces onto a curb.

Sarah cautiously peers around her open door, only to find that her front left tire is completely flat, with a jagged piece of rusty metal protruding from the tread. Lowering herself to the ground, she places her hand directly on a roofing nail and immediately recoils in pain.

As she slowly removes the nail, she notices that all four of the tires are flat. Backing away in horror, her attention is drawn to thousands of roofing nails strewn on the street.

Voices can be heard behind her. She whirls around as five raggedly dressed men approach, their faces tarnished with ash and sweat.

Pointing out her dilemma, she soon realizes the depth of her situation with the admission that they were responsible for the nails and that she had been snared in their trap.

She makes a break for her SUV, only to be dragged from the vehicle and dropped to the street, directly onto several more roofing nails. Her face filled with agony, she rises to confront a total of five men, encircling her, and closing in.

Man One spins Sarah around and wraps his arms around her, as he whispers in her ear.

The men simultaneously break into laughter.

But the laughter is cut short by the sound of shattered glass being ground under the heel of a boot.

The men whirl around, to be met by the silhouette of a formidable man standing a mere ten feet away.

Stating that he has been tracking them since the murder of his wife and daughter, a cloak of silence falls over the group.

Two of the men charge the man with weapons brandished, and are decisively answered with multiple gunshots to the head. Soon the remaining three assailants meet the same fate.

The man then offers her his hand to Sarah and she reluctantly takes it.

Studying her four flat tires, he motions her to follow. Within minutes, they are standing inside a custom truck shop, next to a Monster Truck.

Thomas checks out the truck's condition and fuel level, then jumps to the ground. As she begins to climb in, he removes a pistol from its holster and slides in a full magazine.

Thomas hastily demonstrates how to cock and release the hammer, how to sight the target and the proper way to hold the firearm. He then hands it to her.

Sarah stuffs the pistol into her pocket and climbs into the truck. She starts it up and puts the pedal to the metal.

FIRST CONTACT – T-MINUS NINETEEN HOURS. Although Sarah is able to make up considerable time with the big truck, the moment she begins to execute her turn onto Willow Street, she is assaulted with the unmistakable sound of a helicopter powering up for lift-off.

She mashes the pedal to the floor, cuts the corner, and plows right through the baseball field's perimeter fence. For a fleeting moment, it almost seems as if she will reach her target.

Hopelessly losing ground, the truck begins to sputter and stall, coasting toward the middle of the field, coming to rest on top of the pitcher's mound.

She glances at the fuel gauge only to find that the needle is resting on empty. Realizing that the fuel tank had been punctured by the fence, she mercilessly pounds the steering wheel while screaming hysterically.

Minutes later, at Henderson's Airfield, John rushes to a military helicopter as it touches down. Sarah is conspicuously missing.

He scrambles across the tarmac to the Aurora, now surrounded by a chain-link fence. flashing a pass to an armed guard, and is quickly allowed to pass.

General Parsons meets John at the base of the stairs as the craft's four engines are warming up in preparation for launch.

Explaining his situation, John appoints a member of the Night-Light crew to pilot the Aurora if he is late in returning, then points to an abandoned cargo plane for his means of escape to higher latitudes.

He rushes to his car and heads off in the direction of the city.

Upon reaching the baseball field, he notices a monster truck, resting on the mound.

As John reunites with Sarah, their moment is cut short by the Aurora as it streaks skyward in the distance.

FIRST CONTACT – T-MINUS SEVENTEEN HOURS. Arriving at the airstrip, Sarah and John drive past a deserted, near vertical launch pad, still smoldering from the heat of the Aurora's engine's blast.

They proceed to the lone cargo plane and hastily board it, only to find it nearly loaded to its weight capacity with a massive rocket engine, secured within the cargo bay.

As John commences with the start-up procedure for the first engine, several people begin to run across the tarmac toward the plane, shouting and waving. Soon there are a dozen more.

Sarah peers out of a port-side cargo windows at the crowd, now numbering nearly forty. Scanning the group of forlorn faces, Sarah pleads with John to allow them to board.

Frantically, Sarah asserts that leaving them behind is a death sentence, while John strongly disagrees.

Ignoring John's continuing protests, Sarah unlocks the rear cargo hold door and swings it wide open. The desperate crowd, now numbering well over sixty, storms the plane.

Amidst the pandemonium, Sarah is forcibly pulled outside the plane, thrown to the tarmac and nearly trampled unconscious. Unaware of Sarah's plight, John inches the plane forward, dispersing the remainder of the crowd.

As the plane builds speed, Sarah painfully rises from the pavement, standing within a small group of people. She watches in silence as the plane laboriously increases its speed, roaring off the end of the runway and into the air.

Meanwhile, John is trying to control his ascent as well as scan the cargo hold. Immediately after realizing that Sarah is not on board, he drops the nose and initiates a tight starboard turn, heading back to the airfield.

Back on the tarmac, Sarah concentrates intensely on the plane, as it nearly fades from view – then abruptly banks hard to the right and begins its descent.

a smile envelops her face as she races toward the runway, waving her arms and screaming at the top of her lungs.

But midway through his 180-degree course correction John is rushed by several passengers, forcing him to turn the plane back to its original course.

Still focused on the plane, Sarah nearly collapses at the sight of the aircraft turning away from her position. She watches in silence as it fades from view.

Sarah makes her way back to John's car. She sits behind the wheel and probes for the keys. They're missing. Exhausted by the day's events, she tearfully falls asleep.

FIRST CONTACT – T-MINUS 8 HOURS. Sarah wakes at the first sign of light, disoriented. She slides out of the car, studies her surroundings and begins an aimless trek down the airfield's access road. Upon reaching the main road, she apprehensively turns left and begins shuffling West, with the Sun at her back.

Trudging slowly westward, Sarah snaps from her trance, revolving swiftly as the rumble from a group of motorcycles is upon her. As they pass, their downshifting sequences signal their interest in her.

Their leader rolls close to Sarah as if to intimidate her. He slowly swings out his kickstand and rests the bike. He offers her a lift and she curtly declines. Insisting that she join them, Sarah makes a break for a nearby wooded area, only to be tackled.

As the biker rises from the ground, Sarah swiftly snatches the pistol from her pocket and aims it directly at his groin. He cautiously backs away and pleads with her to again join their group, asserting that they are her best chance for survival.

Eventually, Sarah is convinced that they mean her no harm, so the biker, Bobby introduces himself she climbs on a bike.

As they speed towards the coast, every few seconds an AEV launches in the distance, signifying that the big event is not far off.

Turning off of the main road and arriving at the surf, Bobby and Sarah slow to a stop near a golden spherical 'raft' measuring over twenty-five feet in diameter. She climbs off the bike, stretches, and looks around, concentrating on the Pacific Ocean's horizon, when suddenly, she is brought back into the moment. These bikers are Rafters!

With nowhere else to go, she steps into the raft's uninviting hatch and takes a quick look around. She then takes an unsteady step backward, her chest heaving.

Returning to the craft, she grimaces as she spots a sign over the door proclaiming "Survival is Secondary."

Sarah is introduced to the rest of the crew – Paul, Norm, Pete and Patty, then is shown her seat, directly adjacent to a porthole. Bobby warily studies Sarah's preoccupation with the porthole and picks up on her claustrophobia, but she assures him that it's nothing to worry about.

Questioning Bobby's demeanor, Pete recounts that her seat was originally reserved for Bobby's wife, Susan, but she had never returned from a trip into the city a month earlier. They had searched exhaustively, but all they ever found was her jacket, in a dumpster.

With only two hours remaining before 'First Contact', the raft motors nearly forty miles offshore into the relatively calm waters of the North Pacific.

Arriving at their destination, Sarah firmly clutches a locket on her necklace, holding it close to her heart as she makes another quick scan of the sky and preys for John.

Fifteen hundred miles north, John is still at the controls of the aircraft. He is surrounded by several other passengers, all doing their best to keep their footing.

He takes a quick glance at the instruments then removes a small, crumpled photo of Sarah from his shirt pocket. Holding it near the instrument panel for illumination, he longingly studies the image for a moment, kisses it, then slips it back into his pocket.

They soon happen upon an open, snow-covered plain, stretching for miles. John banks hard and makes another pass over their potential landing site.

After ejecting the rocket engine from the cargo hold and dumping the fuel, he begins his approach for landing. As the front tires make contact with the snow, the plane is drawn in deeply. After a couple of short bounces, the the aircraft settles into a snowbank.

Activating his GPS locator, he finds that Sarah is now somewhere near the Oregon coastline.

Back in the North Pacific, Sarah grips steadfast to the rails that run from top to bottom on her seat. Her eyes are closed.

Beginning as a slight rocking motion, the raft is suddenly hammered hard by a nearly vertical, fifty foot wall of water, rolling the craft several times.

Some of the massive, fast-moving waves actually submerge the raft for several moments, but it continues to breach the surface, righting itself after each consecutive assault.

The raft takes a terrible beating, losing most of its antenna array. As the turbulence subsides, the raft rises to the surface, amidst a sea covered with whitecaps and debris.

Simultaneously, fifteen hundred miles north, A surrealistic calm comes over the plane's occupants, as each second ticks slowly by.

Then, starting as a low rumble, then becoming nearly deafening, the entire landscape begins to shift toward the west, carrying the hapless aircraft with it. Outside the plane, a thundering wall of snow crashes into the side of the defenseless craft, sliding it mercilessly sideways, It's port wing cutting a ragged trench in the packed Ice and snow.

It rolls, shearing off the port side wing, closely followed by the loss of the starboard wing. Passengers are tossed about the cargo bay like clothes in a dryer, as the plane is pummeled by the approaching mass, rolling them time and time again. The fuselage eventually comes to rest, upside down, nearly a quarter mile from the original landing site.

Within a three minute period, the Earth's rotation is accelerated eastward by nearly ten percent.

Buildings are simultaneously obliterated worldwide. Their fragmented remains strewn for miles as their foundations are ripped out from under them. Oceans, lakes and rivers simultaneously shift westward.

East Coast cities worldwide are assaulted by unfathomable tidal waves, disbursing even the mightiest structures within seconds. West Coast cities are instantly toppled onto the barren floor of their formerly water-covered coastal reefs.

Cities are leveled, including Tokyo, Shanghai, Hong Kong, Sydney, Dubai, Moscow, Paris, London, New York, Toronto, Chicago, Saint Louis, Las Vegas, Seattle and San Francisco.

Enduring landmarks, such as The Great Wall of China, the Eiffel Tower, the Taj Mahal, the Pyramids, the Parthenon, the Roman Colosseum and America's Mount Rushmore are quickly reduced to rubble.

Within the raft, Sarah is quickly nearing a state of panic. She quickly unbuckles her harnesses and warily rises to her feet. While taking a few unsteady steps toward the porthole, a huge wave impacts the raft, propelling Sarah face-first into an insufficiently padded wall.

Seconds later, another collision throws her flat on the floor, severely knocking the wind out of her. As she attempts to regain her sense of balance, the raft again lunges forward, tossing her down like a bundle of rags.

On the count of three, Pete and Norm hastily unbuckle their harnesses, pick Sarah up and irreverently slam her back into her seat, bringing her back to a groggy consciousness.

The next morning, as the crew picks at their MREs, Sarah wakes from her near-comatose sleep and looks around. She undoes her harnesses and shifts to a more comfortable position. Bobby approaches her to see how she's doing.

Rubbing her face, she winces slightly as she tenderly touches a couple bruised areas. She then gazes downward to see that the front of her jumpsuit and both of her hands are covered with blood.

Unzipping her jumpsuit Sarah and Bobby simultaneously look down at her chest to find a severed portion of her GPS locator protruding from her flesh. Sarah grits her teeth as she pulls the locator the rest of the way out, causing the blood to flow freely from her wound. She studies the locator for a moment, then FIRES it against the wall.

Back near the Arctic Circle, John finally locates his jacket. Removing his hand-held GPS locator, he types in Sarah's locator code. There is a moment's pause, followed by the word, "DEACTIVATED." Horrified, he enters her code repeatedly, to the same end.

Without warning he lunges at the passenger that had taken over the plane back at Henderson's. They plunge to the ceiling of the inverted plane's cargo hold. It takes several other passengers to eventually pull them apart.

Again, back on the raft, Bobby is kneeling next to Sarah. His face is deeply engraved with a look of concern. Her breathing is extremely labored. Bobby's wife's leather jacket is draped over her torso with the words "Survival is Secondary" embroidered on the back.

Patty is fiddling with their radio, when suddenly there is a response. After a brief conversation, she approaches Bobby with the news that there are two converted aircraft carriers, with full surgical hospitals, due north of their location. The crafts have been designated as 'Noah's Arcs' for this rescue operation.

Late in the afternoon, the the unmistakable WHOP-WHOP of a helicopter can be heard in the distance. Still more than a mile from their position, it begins to turn away. Bobby points the flare gun skyward and pulls the trigger.

They wait as the helicopter nearly fades from view, then swings around, homing in on their position. Soon, the helicopter now hovering within a hundred yards of the raft.

Bobby picks Sue's jacket off the deck and drapes it over Sarah's shoulders, stating that his wife would have wanted her to have it. Sarah answers his gift by stating that she will cherish it always.

Sarah is strapped into the rescue basket and immediately hoisted to the helicopter. Wasting no time, Sarah's basket is pulled inside the helicopter. Seconds later, it performs a banked 180-degree turn and quickly fades into the mist.

Sarah wakes on a gurney, alone in a dimly lit hallway. She scans her surroundings. Nothing familiar. She scoots to the side of the gurney, misjudges its dimensions and slips over the edge, tumbling to the floor. An orderly arrives and assists her back onto the bed.

As the orderly wheels her down the corridor, she slips into a deep sleep. Arriving outside the operating room, the orderly unsuccessfully attempts to revive her. He frisks her front pockets, then rolls her partially over and repeats the process with her rear pockets.

Poking around for clues, he spies the leather jacket stuffed on a shelf, under the gurney. Fluffing it, he spots the name embroidered over the pocket as he covers Sarah. He picks up a clipboard hanging from the footboard of the gurney, prints the name "SUSAN DAVIS" on the 'Name of Patient' line, then hangs the clipboard back on the hook.

Back in the inverted cargo plane, John is typing in Sarah's in GPS code again and again, hoping for a change in her status.

Rising up and over an adjacent knoll, a military helicopter is suddenly upon them, resonating within the interior of the cargo plane with its powerful presence. It lands directly outside the plane, kicking up a tremendous amount of snow, causing a near whiteout.

John shields his eyes as he steps from the plane's torn fuselage, into the torrent of wind and icy snow. General Parsons surveys the condition of the plane, resting upside down, nearly buried by the snow and smiles.

As John divulges Sarah's status, a look of concern blankets the General's face. He offers to put out a Priority One bulletin to all personnel to contact John at the sighting of anyone named Sarah Jennings.

It's now been ten days since Sarah was admitted to a room on Noah's Arc Number Four. Her doctor and a nurse enter the room. They find Sarah conscious, but unresponsive, staring blankly into the distance. Picking up her chart, the doctor smiles, referring to her as Ms. Davis.

Snapping from her semi-catatonic state, she gazes up, inquisitively, asking what she had just called her. The doctor spins the chart toward her and points to the name "SUSAN DAVIS" printed across the top. Sarah feverishly scans the room and catches a quick glimpse of Susan Davis' jacket, folded neatly on her nightstand, as her expression instantly transforms into a look of horror.

Realizing that everyone must believe she's dead, the nurse enters the name 'Sarah Jennings' into her cell phone and immediately a Priority One bulletin pops up – complete with a photo of Sarah.

The doctor and nurse find that John is currently stationed on the Salvation One. Looking over her vitals, they suggest that, instead of notifying him immediately, she should take a shuttle the following morning and surprise him in person. Sarah is delighted with the idea.

Arriving at the door of the Salvation One's Cargo Inventory Room, Sarah stealthily catches a glimpse of John at his desk, facing away from the door. He's in the middle of a heated conversation with one of his suppliers.

She silently enters the door and begins to tremble. She takes several deep, quivering breaths, then softly asks, "Excuse me... sir... is this where I sign up to partner with the legendary John Cooper?"

John swivels ninety degrees on his chair. He gasps at the sight of Sarah standing near the doorway. They run to each other and embrace.

Asking where she was and how she survived, she steps back and executes a flawless pirouette, revealing the back of her jacket's "Survival is Secondary" slogan, completely astonishing John.

John scoops her off her feet. For a moment, they lovingly gaze into each other's eyes in silence. John smiles, then draws her closer and tenderly kisses her.

Their reunion is abruptly sidetracked with the arrival of General Parsons. Smiling broadly, he reaches for Sarah's hand, clamping down in a vice-like grip and welcoming her back.

With barely a moment to compose themselves a meeting is called in the main conference room. Morale is low. The entire crew has been assembled to discuss the latest developments.

Sarah steps into the room with John and is greeted with a spontaneous applause and a standing ovation. She blushes.

A three-dimensional holographic image, displaying a second Intruder's position and contour, floats near the end of the conference table. The image also details a mirror-force-field grid, with its proposed dimensions and stress calculations. Around the perimeter are eight spacecrafts, ready to be tethered.

Sarah studies it, puzzled, then turns to John. He answers her inquisitive look with a nod, signifying that there is, indeed, a second 'Intruder'.

He goes on to explain that, they believe the first Intruder was cylindrical, and purposely placed offcenter, to spin up the Earth's rotation and shatter the bond between the Earth's Crust and Mantle. Then this second Intruder, being a near perfect sphere, has been placed dead center, to peel everything clean off – right down to the Mantle.

Sarah is then brought up to speed with the information:

- Intruder Two is sixty-one days ahead.
- It will take twelve days to reach the site without the external combustion drive.
- · Constructing the grid will take another ten days
- It is fifteen thousand miles in diameter.
- Instead of moving it, a tunnel will be bored through it, large enough for Earth and this is where its cohesiveness will work to our benefit like a snowplow With each pass, we can shove the mass farther out from the center of the tunnel.
- We will have more ships, however, there is double the volume, with less time to complete the task.

FINAL CONTACT – T-MINUS THIRTY-NINE DAYS. From the Salvation One, Intruder Two can be seen as a faint cloud within the endless backdrop of space. Twelve new shuttles have been added to the fleet, housed in an armor plated hangar within the Salvation One's cargo bays.

Fifteen thousand miles across Intruder Two, on the distant side, a group of a dozen ships, including the Aurora, have gathered to pull the massive grid through the center of the mass.

Every scrap of mirror material is in play, along with every available pulse generator - resulting in a grid complex larger than anything previously assembled. To illuminate Intruder Two for Sarah, a series of LED flares have been positioned around the mass, as well as a series through the center, to aid in plotting the best possible course.

From Sarah's vantage point, she has an unobstructed view of all twelve crafts, the tethers and the grid, now aglow with the pulse generators.

As the order to commence is issued, blasts from all twelve ships are evident, almost simultaneously.

As the grid moves forward, it once again takes on the shape of an immense parachute. In unison, the crafts are slowed and pulled slightly nearer each other as the tethers twist and turn. The forward motion continues.

Picking up speed, the armada moves deeper into the cloud, leaving behind a clear, unobstructed section of empty space. Several hours later, the group of spacecrafts can be seen nearing the Earth's side of Intruder Two.

Nearly undetectable at first, the area in front of the crafts begins to darken, soon giving way to the welcome sight of a pitch black, starlit void. They have made it through!

Pulling their nearly invisible cargo to the side of the tunnel, they waste no time in reversing course and heading back inside Intruder Two for a second pass.

FINAL CONTACT – T-MINUS THIRTY-SIX DAYS. Approaching the midway point of the tunnel, on their eleventh pass, Sarah looks through her telescope at the fairly defined walls of the tunnel. Ahead, the black void of space is clearly visible, as their massive tunnel grows ever larger.

Also ahead is the Salvation One, which has taken a position, lined up with the very center of the tunnel. The craft lies four-hundred miles out, as to not interfere with the tunneling process.

By rotating the shuttles and replacing the tether lines before any sign of failure, the tunneling process is ahead of schedule and morale is high. Even though a small percentage of the mass is rolling back

into the tunnel, it is easily managed by a separate team of shuttles, bringing up the rear.

FINAL CONTACT – T-MINUS TWENTY-FOUR HOURS. After thirty-four days, totaling ninety-seven passes, the tunnel is nearing its final dimensions. Remnants of the tunnel have been pulled to both sides of the Intruder, far enough away as to not obscure the Earth's passage through the mass.

The Aurora, along with seven shuttles are nearing the end of the tunnel, with the massive grid in tow. The Earth can now be seen with the naked eye as a constant reminder that time is running out.

Suddenly, an incoming message from Earth sends panic through the entire armada. NASA has detected one large object, closing on their coordinates. Moments later there are 'multiple bogeys' moving even faster, ahead of the large object.

Alarms begin to blast as crewmembers scramble to their posts.

The Salvation One remains easily visible from Sarah's POV, aboard the Aurora. Suddenly, The huge ship lunges sideways, rocking violently as a large group of fragments ricochet off its hull.

As quickly as the assault had begun, it's over. Sarah gives a quiet sigh of relief. Within an instant, the Salvation One is slammed with a massive fragment amidships, nearly severing it in half.

Inside the tunnel, scores of small fragments begin to bounce off of the Aurora's hull, accompanied by several louder clangs. Five of the shuttles burst into flames and nearly disintegrate, while four more are severely damaged.

The Aurora severs its tether lines and executes several evasive maneuvers, as the two remaining shuttles come up alongside. The crafts throttle up and head toward the Earth's side of the tunnel.

As they exit the tunnel, two fragments strike the aft section of the Aurora, piercing the starboard wing and tearing off the tail fin.

Closing in on the Salvation One, the severity of the damage becomes increasingly evident. A dozen wisps of escaping steam and smoke can be seen from stem to stern. The Aurora, along with the two shuttles slip alongside of the Salvation One, well hidden from the alien ship's view.

Every remaining crew member boards the Aurora for an emergency briefing. Although the tunnel has reached its minimum diameter for a safe Earth passage, fears arise that the alien ship may still have enough 'atmosphere' remaining to refill the tunnel before the Earth arrives.

It's determined that their main goal should be to puncture the alien ship's massive pressure tanks at any cost.

The Aurora links up with the Salvation One. John is the first to board and finds several injured crew members, barely alive – but the life support and artificial gravity systems are still up and running.

As others board the Salvation One, a triage is hastily assembled and the injured relocated to the briefing room. Several crew members take off to survey the ship's damage. They return within fifteen minutes with the assessment that there is nothing salvageable behind the galley.

As a last resort, the laser cannon is brought into play – but accessing the armory would most likely be impossible. Since the entire arsenal is heavily armor-plated, cutting through it would be nearly impossible, plus it would depressurize the entire ship within a few minutes.

The ship's blueprints are brought up, detailing the placement of some air ducting running from the galley to the rear of the ship, past the arsenal.

Several of the crew head toward the aft of the ship, arriving at the access panel to find a crew member already disappearing into the ductwork. He returns moments later to his point of entry, jumps to the floor, and dusts himself off. He is too large to make it past a section of collapsed ducting.

Sarah points out that she is much smaller and would like to give it a try. Stuffing the communicator into her pocket and clutching a flashlight with her hand, John takes her in his arms and gives her a kiss, then hoists her up into the duct.

John watches intently as Sarah nearly fades from view, then hastily retreats back to the safety of the opening. He helps her out, to find her transformed into a ghostlike figure, sweating heavily and shaking with every breath.

John naturally assumes that her claustrophobia is kicking in, as she glares at him indignantly. With a look of resolve, she states that she's in control, and the bulkiness of the thermal suit is the problem, along with the rough surface of the ducting. The remainder of the crew vacate the room as John helps her out of the suit.

Moment later she is hoisted back into the ductwork, with a communicator stuffed into her bra and a bottle of cooling oil in her hand.

About twenty feet inside, Sarah is pinned tightly against the walls of the ductwork. She pours a handful of oil into her palm and hurriedly smears it on the wall at the restriction.

Doing her best to keep her fears at bay, she arduously pulls herself past the collapsed section, adding generously to the oil slick as necessary.

She soon comes upon an intersection in the ducting, running straight downward. Cautiously attempting to cross the void with her hands still covered with oil, she loses her grip and slips over the edge, head first.

Dropping nearly eight feet, she becomes hopelessly trapped upside down within the cramped ductwork. With no room to turn around, she does her best to push herself back up, to no avail.

Panic immediately sets in as she begins to thrash about within her tomb. The communicator falls from her bra, landing only inches from her face. She manages to push the call button.

Pleading for help, there is nothing anyone can do from their position. Suddenly, one of the crew members remembers the artificial gravity! Sarah is told to push off as soon as she feels weightless, but there is no reply.

For an instant, the ship's humming ceases and Sarah is weightless. She pushes off in a state of utter panic, slamming into the top of the main horizontal ducting.

Regaining her orientation, Sarah positions herself at the edge of the vertical ducting. She pauses to take several deep breaths as the ship's gravity is switched back on, without warning – nearly causing her to slip over the edge once again..

Regaining her balance, she feverishly searches for her communicator, then shines the flashlight into the duct, only to find it resting at the bottom. She shouts to John, but the hum of the ship has

drowned out any hope of voice communication. John bows his head in silence.

FINAL CONTACT – T-MINUS ONE HOUR. The remaining crew members have gathered at the panoramic observation window. In the distance, the alien ship is slowly closing in on their position.

Nearing a full stop, the alien ship swings starboard about thirty degrees, lining up its massive cannons with the crippled shuttles, then fires. The projectiles pass through the invisible mass, bursting into flames as they come into contact, striking the remaining shuttles, tearing them to shreds.

Aboard the dimly lit alien craft, several of the aliens are observing the battle through their forward windows.

Humanoid in basic body layout, and standing over seven feet tall, their slumped stature diminishes their overall height by nearly a foot. Their heads are more of an upper protrusion, sporting a set of six eyes - four up front and two more, articulating on the sides.

They are equipped with four double-elbowed arms and hands that have long, slender, multi-jointed fingers, appearing similar to tentacles.

Two legs and triple pod-type feet keep them upright and steady. Every inch of their skin is transparent, displaying every vessel, muscle and organ in their bodies.

Lining up another pair of Earth's ships through the front glass, a nearly deafening screech resonates through the ship.

As the order to fire, (or VRUC! in their dialect) is sounded, a mix of stone and debris can be seen, shooting from the alien ship's upper cannons, into Intruder Two, once again homing in on the disabled ships.

With this final attack, the remains of the shuttles are scattered clear through Intruder Two and into the void of space.

Every crew member on the Salvation One is intently focused on the alien ship as it slowly comes about in their direction. Swinging back over thirty degrees starboard, several blasts from the alien ship's retros line it up perfectly with the Salvation One .With no real chance of escape, Commander Ruttgers attempts to bypass the Salvation One's controls in hopes of firing a momentary burst from its secondary engines.

Then, suddenly there is a deafening 'BOOM' accompanied with a decisive jolt from the aft section of the Salvation One, as a red, glowing ball of fire streaks toward the alien ship.

The crew watches as the laser cannon's projectile closes in on the alien ship. It's a direct hit, sending fiery fragments of the ship in every direction!

John immediately jumps into the air, shouting, "Sarah's alive!"

Sarah then fires several more well placed shots, within a tight cluster across the top of the ship. The Salvation One crew erupts in cheers, but their jubilation is short lived.

The alien ship fires up its engines and plows through a layer of dense smoke. The laser has taken out two of its three upper cannons, as well as the right articulating claw - but the ship remains functionally intact.

Starting slowly, the alien ship builds up speed as it closes in on the Salvation One.

Inside the arsenal, the room is dark, except for the light emitting from the controls within the laser cannon's transparent turret. The weapon's instruments cast an eerie glow across Sarah's face, now soaked with oil and sweat, and nearly covered with dampened hair.

She intensely focuses on her target with an expressionless, trance-like stare. She calmly pulls her hair to one side. Her breathing becomes labored as she slowly lowers herself to the weapon's sight. She tilts her head to the side and closes one eye, whispering, "It's Payback Time... F##KERS!"

Sarah squeezes the trigger. The cannon kicks back with a resounding BOOM as a crimson ball of fire streaks from the barrel.

The turret is suddenly awash with a spectrum of colors, highlighting Sarah's slender silhouette. She covers her eyes with her forearm and turns away.

As the alien ship nears the Salvation One, a single red projectile streaks by the alien craft, violently piercing the nose of the port side pressure tank, resulting in a catastrophic decompression of an epic magnitude.

The alien ship is thrust rearward with enough force to clear all of the remaining equipment from its outer surfaces. Several of the alien ship's components erupt within a barrage of explosions, pummeling the Salvation One with hundreds of fragments, as it lights up the main cabin as bright as day.

Spinning violently, amidst another series of explosions, the alien vessel quickly fades into the distance, leaving only a faint trail of smoke behind.

John rushes to the opening of the ductwork. The faint beam of a flashlight can be seen darting from side to side as Sarah makes her way back to safety. Nearing the opening, she pauses and smiles.

John reaches into the duct and slides her from the opening. He wraps her in a robe and looks deep within her eyes. She rests her head against his chest and sighs.

Back at the ship's massive observation window, The Earth can be seen as it converges on Intruder Two. There are sporadic outbreaks of flames as it enters the tunnel. The sporadic contacts continue as the Earth barrels its way through the mass.

Seeming more like an eternity, the Earth passes through Intruder Two in less than fifteen minutes, returning mostly unscathed, back into the welcome void of unrestricted space.

John and Sarah arrive to find the entire crew huddled around the radio, anxiously awaiting a message from Mission Control. Tension is on the rise as their efforts to contact Earth are answered only with static – until the reply, "We read you, Salvation One, Well Done!" fills the room.

The entire crew spontaneously erupts in cheers, once again. In a bittersweet moment, Sarah and John look into each other's eyes and embrace.

Realizing that Sarah has entered the room, she is met with a standing ovation and congratulations from the entire crew.

Mission control relays that the effect on the planet was far less than expected. Plus, a fleet is on their way with a full surgical hospital for your injured, plus two with food, beverages, air, fuel, clothing and repair parts - along with a dozen additional technicians.

Communications are severed with Mission Control as the speaker momentarily squeals out a shrill feedback whistle.

Once things have calmed down a bit, John and Sarah retire to their quarters. Iying motionless on their bed, looking out into space through their cabin's window, they have an unencumbered view of the Earth as it gently fades into the star-filled tapestry of space.

As Sarah pulls John close, she is distracted by a slight movement outside the window. Sliding out of bed, she gazes into the eternal serenity of space and sighs, when suddenly – rising rapidly into view – the alien ship is back, and only feet from the Salvation One!

Caught completely off guard, Sarah locks eyes with the alien ship's captain.

John and Sarah both scramble toward the cabin door. The moment her hand touches the door handle, the Salvation One is impacted by their attacker. The ship lunges violently sideways, slamming them both into the wall. Alarms sound ship-wide as the life support and artificial gravity systems shut down.

John is barely conscious. Sarah snatches his weightless body and pulls him into the main cabin, where they are met by four additional crew members, floating and dazed, but still conscious. The crew shoots across the cabin, pushing off anything they can within their weightless environment.

Still in a state of shock, the survivors cram into an airlock and seal the door, as a series of deafening blows to the Salvation One's hull culminates with a massive claw protruding through the top of the main cabin.

John forcibly turns the Aurora's entry handle and is met with a powerful blast of air. The hatch swings open wildly, slamming everyone into the rear wall of the airlock.

Recovering immediately, they pile into the Aurora and slam the hatch. Sarah motions everyone to the floor.

The alien ship releases the Salvation One and stealthy passes by the side of the Aurora, with dozens of probing search lights homed in on their position. The moment the aliens pass the Aurora, Sarah flips on every switch in the cabin - as many as four at a time.

She glances at the rearview screen, panicking as the alien ship begins to turn toward them. Sarah fires all four engines simultaneously, but. with the gangway still attached to both ships, she only succeeds in slamming the Aurora into the side of the Salvation One.

Sarah fires every starboard side retro rocket simultaneously, shifting the Aurora sideways and severing the gangway.

They are free - but only for a split-second. The alien ship has clamped onto the Aurora's remaining tail fin, and is reeling them in!

Sarah fires every starboard retro, then alternates to the port side retros and back again, creating a powerful motion that severs the entrapped fin. Breaking free from the alien ship's grip, Sarah full-throttles all four main engines and heads for open space.

While strapping in, Sarah shouts a command to the computer , then wiggles the joystick from side to side to verify that she has control.

Several pieces of stone and debris shoot past the port side of the Aurora as Sarah banks hard to starboard. A loud bang at the rear of the ship puts the Aurora into a slide, but Sarah guickly recovers.

With the attackers closing the gap, Sarah yanks the joystick completely back, sending the Aurora streaming upward and the entire crew to the floor. She then rolls hard port, then hard starboard, to no avail. She can't shake them.

Frustrated to the point of screaming, Sarah desperately searches for a way out. Midway through a hairpin turn, she catches a glimpse of the nearly invisible mass that had been dredged from Intruder Two.

Sliding into another tight, 180-degree turn, Sarah fires everything the Aurora can muster, engaging every propulsion system on the ship and speeds up to maximum velocity. She makes a few minor course corrections to line the Aurora up with the nearly invisible mass - as close to perpendicular as possible.

Still at full-throttle, she checks her rear-view screen, then throttles down momentarily, allowing the alien ship to close the gap. It nearly collides with the rear of the Aurora.

Relying on her acute ability to accurately detect the outline of the Intruder, Sarah throttles up to full power, heading straight for the dredged mass.

Pausing only for a moment, Sarah jams the joystick to the rear, nearly ripping it out of the console. The Aurora shoots upward, barely grazing the outer edge of the mass, while causing the Aurora's entire crew to blackout from the extreme G-forces

With no time to change course, the alien ship plows directly into the mass at maximum velocity.

The alien craft's outer hull begins to glow red, then yellow, as it plunges deeper into the mass. Small fragments begin to break away from the craft, followed by its engines and remaining claw. Moments later it disintegrates in a shower of sparks, flames and debris.

Sarah wakes, momentarily disoriented, then snaps to full consciousness. Frantically hunting for the alien ship, she homes in on hundreds of fragments streaking through the mass.

She gives a little sigh and smiles confidently. A firm squeeze on her shoulder wheels Sarah around in John's direction.

The rest of the crew makes their way to the cockpit. Sarah points out the glowing fragments within the mass. The crew members gaze out into space for a moment of quiet reflection.

The Aurora is floating motionless in space, several miles from the crippled Salvation One. Soon a squadron will arrive with food, supplies, medics and technicians.

The Salvation One's hull will be repaired and life support reinstated, to serve as the crew member's home for an entire year - until the Earth returns on its next orbit.

LED flares, placed around and through the Intruder will continue for a thousand years, to serve as warning buoys for passing space travelers.

THE END