

By Carmen Victoria Felix

Pioneer One: Science and Entertainment

A mysterious space capsule has entered Earth's atmosphere. A US Department of Homeland Security investigation recovers the lone young passenger in an unstable mental condition, dressed up in a Soviet space suit. A note in Russian, found at the crash site, claims the man is the child of cosmonauts living at a base on Mars. And while the investigation unfolds, a cover up story of an old radioactive satellite fallen from the sky is spread to the media. This is the basis of the plot of Pioneer One, an American web series produced and directed by Josh Bernhard and Bracey Smith. The show, whose recently concluded first season counts six episodes, has been recognized as the Best Drama Pilot at the 2010 New York Television Festival. The first episode received over 420,000 downloads, creating a worldwide fan base. We contacted Josh Bernhard, creator of the story, to learn more about this show.

A Radioactive Debris Accident

The series got our attention because of its artful mix of science fiction and accurate technical and scientific facts, which provides a mix of science, drama, and action that is not just entertaining, but also educational. "I've always been very interested in the space program and in Cold War history," said Bernhard. "With those two topics swirling around in my head for years and years, the story for Pioneer One seems to have shaken out."

The first episode introduces the scenario of a spacecraft fallen from the sky, initially considered to be space debris potentially capable of spreading a wave of radiation. "While I was making my research for the pilot, I discovered that an incident involving a re-entering Soviet satellite spreading radioactive material over Canada had actually happened in the late 70s," Bernhard explains referring to the Cosmos 954 incident. "At the core of the show was this idea of the Cold War era re-introducing itself

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during the so-called War on Terror,” he adds, “so the idea that a malfunctioning space capsule would re-enter the atmosphere and its damaged battery would spread radioactivity would be interpreted through that lens of terrorism.” About the actual risk of radioactive contamination from falling debris, Bernhard explains “I was overstating the danger of the re-entering capsule for the sake of drama and to justify the idea that it be interpreted as an act of terrorism. I think nuclear power is a huge boon for space travel and should not be wholly written off because of terrestrial concerns.” ►►



Josh Bernhard, writer, and Bracey Smith, director of Pioneer One. - Credits: Josh Bernhard



The cast of Pioneer One. - Credits: Josh Bernhard

Science and Fiction

The show illustrates the effects of the space environment on the human psyche and physiology through Yuri, the young cosmonaut found inside the Russian capsule. "His DNA is human, but he's not quite one of us," says Bernhard. He suffers from osteoporosis, a decrease of bone mineral density that can be caused by long term exposure to microgravity. He also presents all the symptoms of radiation poisoning, which is considered the major risk in a deep space human mission. Finally, Yuri experiences severe psychological distress: "He's grown up in a completely alien environment, with at maximum a handful of other human beings," says Bernhard. "To him, the existence of 'People' was a story. Now he's been ripped from that environment and found himself in that world that up until now had been a fairy tale."

Over the first season, Yuri finds a way to interact while establishing a relationship with Jane, a Russian speaking nurse: "His experience with her is a tragic one, which makes him human. We'll continue to explore the consequences as the show continues."

The plot presents a somewhat plausible political scenario, with a complex and detailed interaction between US and Russian politicians to illustrate the intricacies of diplomacy, international law, policy, and regulations. "I was fascinated with the notion that a returnee

from Mars would be caught up in a situation where his legal status was questioned," says Bernhard. "It's not enough to survive the trip from Mars to Earth, you need to overcome skepticism and red tape!"

The Production

The episodes are all planned in advance," says Bernhard about the production. "When we shot the pilot, I had a rough outline of the rest of the season, and then when we knew we were going to be able to do more, I sat down and started writing the full scripts. But the whole show has an arc and a shape and has been leading somewhere since day one," he adds.



The protagonist, portrayed by James Rich, studies Yuri's cosmonaut helmet in episode 6 "War of the World." - Credits: Josh Bernhard

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The first episode was produced through a campaign with Kickstarter. "We like to think of ourselves as one of their early success stories," Bernhard said, and added "the show was funded about 75% through fan donations, and the rest was contributed by two independent investors. But the lion's share was donations from the audience, which is quite humbling to know there was enough support out there from people we'd never met."

The fan donations worked out well for the first season, but now Bernhard and Smith are working with BitTorrent directly: "We're going to try to marry some of their sponsors to the show to provide the budget for year two. While we'd not be opposed to working with a more traditional network, we're really excited about making the show a success online, where we have an opportunity to define our own destiny as it were," said Bernhard. Four more seasons are planned at this time. Bernhard says they are open to new ideas that can improve the quality of the content along the way.

Besides winning the "Best Drama" award for the pilot at the 2010 New York Television Festival, Pioneer One was also nominated for "Best Drama" at the 2012 International Academy of Web Television awards. "One of our goals is to try to bring back public interest in space exploration as best we can," commented Bernhard. "By creating a compelling drama where our characters are sympathetic and passionate, you care about what they care about," he concludes. "The initial response to the show proved beyond a shadow of a doubt that there's a demand for this kind of content: our goal is to continue and finish the show."

Pioneer One can be downloaded for free at pioneerone.tv/watch/. The Season 1 DVD and Blue Ray can be ordered at pioneerone.tv/dvd.