LOTTIE WILLIAMS 1949-



HIT BY FALLING DEBRIS

Some believe there's no such thing as an unlucky person, only bad decisions. Tell that to Lottie Williams, the only person in the world to be hit by falling space debris.

On January 22, 1997, Postal Service worker Lottie Williams was walking laps with two friends through Tulsa's O'Brien Park around 3:30am, a regular routine she used to get exercise around her work schedule, when she thought she saw a shooting star streaking through the skies.

Less than thirty minutes later while still walking through the park, Lottie felt a tap on her shoulder. She looked around but saw no one near her so she started to run, thinking a stranger had appeared out of the shadows. Then she heard something hit the ground behind her. She had been hit in the shoulder by a six-inch cloth-like section of burnt fiberglass mesh.

Lottie was too scared to touch it. The debris weighed as much as an empty soda can. A little while later, she picked it up with gloves and put it in her car. On closer observation, it was blackened on the edges and consisted of layers of light metallic material. She took the metal home but was afraid to have it in the house so she put it in the garage, not sure if it had toxin gasses in it.

She called the local library, then the National Guard. They thought she was a "kook". Ultimately, the U.S. Space Command in Colorado Springs, CO confirmed a Delta II rocket body had re-entered the atmosphere early that morning over the southern central United States. The main wreckage was recovered a couple of hundred miles away in Texas. The National Weather Service believed the rocket had not survived re-entry. Finally in 2001, NASA's Center for Orbital and Reentry Debris Studies confirmed the piece of blackened, woven material to be part of the fuel tank that had launched a U.S. Air Force satellite in April 1996.

The most famous space junk of all time was the first American space station Skylab, which orbited the Earth between 1973 and 1979. Heightened solar activity had an effect on its orbit, prompting ground controllers to bring it down early. Its debris re-entered on the southern Australian coast. Teenager Stan Thornton, living in Esperance, Australia recovered some wreckage from the roof of his house and raced off to California, where the San Francisco Examiner was offering a \$10,000 prize to the first person who delivered a piece of the space station to its newsroom.

The largest object to fall out of orbit was the Russian Space station, which landed harmlessly in the Pacific Ocean. Mark Matney, an orbital debris scientist at NASA's Johnson Space Center in Houston, says space junk falls back to Earth about once a year, and usually no one notices. "If you're lucky enough to be near the re-entry at nighttime, you should see a spectacular show."

Over a 40-year period roughly 5,400 tons of debris have survived re-entry into the atmosphere. Components with high melting temperatures, such as stainless steel and titanium, are the likeliest to survive re-entry. Predicting where the space debris will land is an inexact science but ground controllers change a dying satellite's altitude, so it falls mainly over water or sparsely populated land.

Williams is retired from the Postal Service but whenever falling space debris makes news, Lottie's phone usually rings to share her experience. A few years ago, her home was burglarized and robbers broke the debris but left it. Now she keeps it under lock and key.