

Chasing Storms

At age six, Tim Samaras watched the movie *The Wizard of Oz*. In the movie, a tornado¹ takes a farmhouse high up into the sky. Tim was amazed. He said to himself, I'm going to see that tornado one day. From that time on, tornadoes were the focus of Samaras's life, and he became a storm chaser.² Samaras never got a college degree but he became a tornado researcher³ and a brilliant engineer.

The United States has the most tornadoes in the world about 1,200 every year. These are also the strongest tornadoes in the world. They happen in the central area of the United States known as Tornado Alley. There are a lot of tornadoes in this area because the land is flat and air conditions create powerful thunderstorms that develop into tornadoes.

Tornadoes are dangerous, sometimes very dangerous. The powerful winds in a tornado turn and twist. They can reach over 300 mph (480 km/h). Because they are so strong, they can tear up trees and pick up people and objects, like cars, and throw them hundreds of feet away. A powerful tornado can destroy thousands of homes and kill many people in its path. But we do not know enough about tornadoes. If we knew more, we could make better forecasts and give people more time to get away from tornadoes. We could save lives.

To try to help save lives, Samaras wanted to better understand tornadoes. He wanted to get more information about tornadoes for two reasons. The first reason was that scientists don't know much about tornadoes and how they are created. For this reason, Samaras designed special probes⁴ with cameras on them. Scientists are able to put these probes in the path of a tornado and look inside the tornado as it passes by. While scientists still don't have all the answers about tornadoes, these probes continue to give useful information.

The second reason that Samaras wanted to understand tornadoes was that he wanted to find out how powerful the winds are near the surface of a tornado. Samaras designed another piece of equipment, this time to measure wind speed near the ground. Information about wind speed can help people build stronger homes in areas where there are tornadoes. For example, if people know they are living in an area with many tornadoes, they can build homes with stronger walls.

For 30 years, Samaras put himself in danger following more than 125 tornadoes. The people who worked with him thought he was one of the best and most careful storm chasers. On May 31, 2013, in Oklahoma, there was a huge tornado. It was the widest tornado ever seen. Tim, his son Paul, and Carl Young, a meteorologist, were chasing this tornado for research. Suddenly, the tornado changed its direction. Tim, Paul, Carl, and eight other people were killed when this happened. It was the first time a storm chaser and a meteorologist both died in a storm.

Tim Samaras died that day, but his inventions and equipment continue to be used by scientists. Even after death, Tim's life's work continues to increase our understanding of how tornadoes work.



A Complete these sentences with the words in the box.

Brilliant
destroy

develop
flat

focus
forecasts

path
twist

1. Tornadoes are powerful enough to _____ homes and throw the pieces everywhere.
2. Meteorologists want to make better _____ of when tornadoes will hit areas.
3. Samaras was a _____ engineer who designed equipment to measure wind speed.
4. The winds of a tornado _____ around and make a huge funnel in the sky that is wide at the top and narrow at the bottom.
5. Tornadoes were all that Samaras thought about. They were the _____ of his life and work.
6. Strong thunderstorms usually _____ into tornadoes in Tornado Alley.
7. Tornadoes travel quickly over _____ areas that have no hills or mountains to stop them.
8. A tornado follows a _____ along the land, and anyone in the way is in danger.

