

Tornado Chasers

1 In the U.S., tornadoes are **responsible** for 80 deaths and more than 1,500 injuries each year. Although they **occur** quite **frequently**, tornadoes are difficult to predict. Why? Tornadoes develop from storms, but only some storms
5 have the **potential** to become tornadoes. Meteorologists don't know where and when a storm will touch the ground and turn into a tornado. Today, the warning time for a tornado is usually just 13 minutes.

Tim Samaras is a storm chaser. His job is to find
10 tornadoes and follow them. When he gets close to a tornado, he puts a special tool called a *turtle probe* on the ground. This tool measures things like a twister's temperature, humidity,¹ and wind speed. With this information, Samaras can learn what causes tornadoes to
15 develop. If meteorologists understand this, they can **warn** people about twisters sooner and save lives.

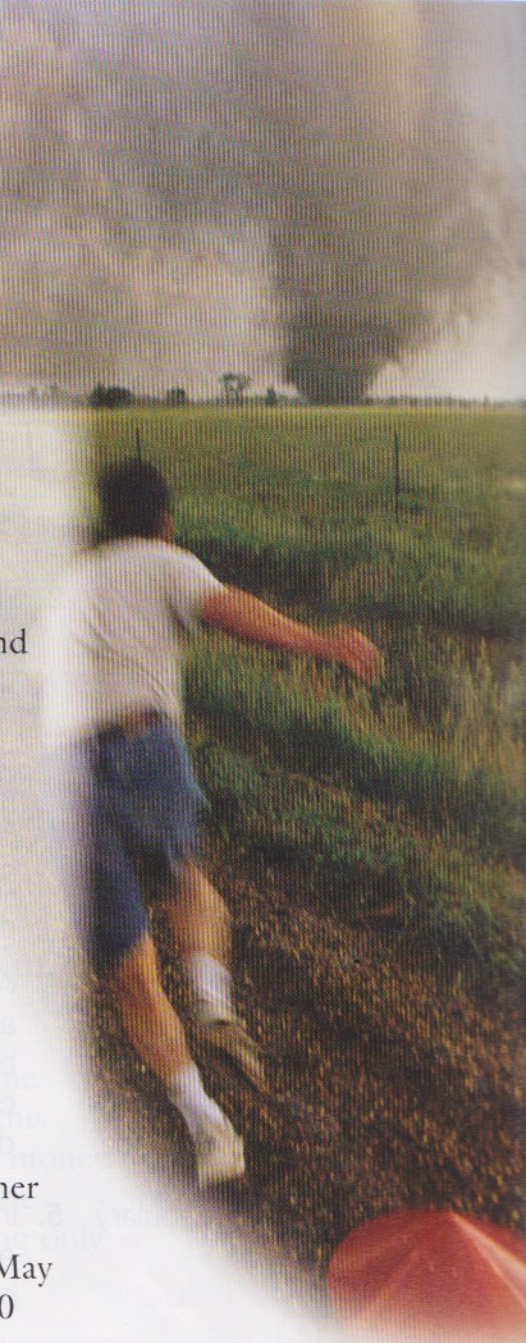
How does Samaras hunt tornadoes? It's not easy. First, he has to find one. Tornadoes are too small to see using weather satellites.² So Samaras can't **rely on** these tools to find a
20 twister. Instead he waits for tornadoes to develop. Every May and June, Samaras drives about 40,000 kilometers (25,000 miles) across an area known as Tornado Alley, looking and hoping to spot a twister.

Once Samaras sees a tornado, the chase begins. But a
25 tornado is hard to follow. Some tornadoes change **direction** several times—for example, moving east and then west and then east again. When Samaras finally gets near a tornado, he puts the turtle probe on the ground. Being this close to a twister is **terrifying**. Debris is flying in the air. The wind is
30 **blowing** at high speed. He must get away quickly.

The work is risky, even for a **skilled** chaser like Samaras. But danger won't stop his hunt for the perfect storm.

¹ **Humidity** is the amount of water in the air.

² A **weather satellite** is a tool that circles the Earth and sends back information about the weather.



▲ Samaras runs back to his car after placing the turtle probe.

Smokejumpers

1 Every year, wildfires **destroy** millions of hectares of forest land. Homes are **damaged**, and thousands of people die. Smokejumpers are helping to stop this.

5 What is a smokejumper?

Smokejumpers are a special type of firefighter. They jump from planes into areas that are difficult to reach by car or on foot, like the **middle** of a mountain forest. They **race** to put out fires as fast as they can.

10 What do smokejumpers do?

At a fire site, smokejumpers first examine the land and decide how to fight the fire. Their main goal is to stop a fire from spreading.

15 Using basic **equipment** such as shovels and axes,¹ smokejumpers clear land of burnable² material like plants and other dry material. They carry water with them too, but only a limited amount.

20 Who can be a smokejumper?

Although the **majority** of smokejumpers are men, more women are joining. Most important are your **height** and weight. Smokejumpers **employed** in the U.S., for example, must be 120 to 200 pounds (54 to 91 kilograms), so they don't get hurt when they land, or get blown by strong winds.

Smokejumpers must also be **capable** of surviving in the wilderness. In Russia, many smokejumpers know how to find food in the forest and even make simple furniture³ from trees.

30 The work is dangerous, and the hours are long. But for these firefighters, smokejumping isn't just an **occupation**. They love being able to jump out of planes, fight fires, and live in the forest. As 28-year-old Russian smokejumper Alexi Tishin says, "This is the best job for tough guys."



"We face danger three times: one when we fly; two when we jump; three when we go to [the] fire."

– Valeriy Korotkov,
smokejumper

Did You Know?

Russia has the largest number of smokejumpers in the world.

¹ A **shovel** is a tool used for digging earth; an **ax** is a tool used for cutting wood.

² If something is **burnable**, it can start a fire easily.

³ Objects such as chairs, tables, or beds are known as **furniture**.