

# Chapter 1

## Introduction

“Name your price,” said the lawyer on the other end of the line. It was the first time that anyone had ever said that to me. A week earlier a representative from Universal Studios in Hollywood had asked me to come there for a trial. They were being sued by Volvo Corporation over the right to create an artificial tornado. Volvo claimed the right to produce artificial tornadoes because they had recently made one and used it in a television commercial.

I was being placed in the middle of this case because I had previously written a technical book and two textbooks that described how I had produced the first unconfined vortex that looked like a tornado by using a system of three different fans. The fans were placed above a hole in the ceiling of my laboratory to pull the air upward and attached to the ceiling to make the air rotate. The resulting miniature tornado extended from the floor into the hole in the ceiling and could be seen by using steam or other means.

I realized that the tornado I had created in my laboratory at the University of Kansas was original and could probably be patented. Since I was a Professor of Atmospheric Science and had developed the tornado on University property a patent would be shared by the University. I chose to make the information on how to develop the tornado available to the public by publishing it in research articles and in my books.

As a Professor at the University at that time in 1998 I was involved in the usual full-time load of teaching and research so it was a little hard for me to relate to Universal Studios urgency so I had turned them down the week before. But I realized that being told, “Name your price” was different and I quickly ran through some numbers in my head and came up with \$1000 per day for my services. I later realized that I could have asked for 10 times that amount and they would have gladly paid it.

My wife, Doris and I were given tickets to Los Angeles and accommodations in the Westin Hotel. This was a hotel where a previous president, Ronald Regan, had held his acceptance speech because of the huge banquet room on the first floor. We were in Hollywood for three days and needless to say Universal Studios won their case when one of my books, *Severe and Unusual Weather*, was entered as evidence since it contained detailed information on the creation of an artificial tornado and was first published in 1983.

The lawsuit was initiated after the Twister Movie in 1996 when Universal Studios wanted to create a tornado simulation in a new Twister building they were planning for

their park in Orlando Florida. Following the successful conclusion of the lawsuit they were able to make a realistic looking tornado patterned after mine that was 50 feet high. It is now the main attraction in the Twister building and was still in operation in 2015.

This was not my first high-profile experience. Early in my professional career a tornado struck Topeka Kansas in 1966 and I was the first to show that the Southwest corner of a house was statistically the most unsafe place to seek shelter. This contradicted the current information that was supplied to the public by the weather service. This, of course, caused great controversy for several years until I could verify that other tornadoes in many different states were very similar.

Prior to the launching of Skylab in 1973 I had been selected by NASA to direct one of the experiments to be conducted from space. For my experiment the astronauts turned on several of their instruments as they passed over the test sites that I had selected in Kansas and Texas. The control tower in Houston called me the day before they were planning to turn the equipment on for my data so that I could get my crew into the field to take ground measurements. From this successful experiment we learned that we could get detailed information on the amount of water in the surface 6 inches of the soil by using a radiometer from space.

I have always saved things so it was not surprising that I stored the many volumes of raw data that NASA sent to me for the Skylab experiment. Several decades after Skylab, in the year 2000 shortly before I retired from the University I got a call from the Department of Agriculture. They were looking for the raw data from my Skylab experiment to combine with more recent measurements to use for determining water distribution for crops. I was surprised to learn that NASA had lost track of duplicate copies of the raw data or had destroyed them and so the Department of Agriculture was delighted to have my copies. They paid my salary for two months during the summer so that I could organize and ship the many volumes of data to them and help them understand the data.

Becoming a professor and research scientist was not something I had imagined as I was growing up on a farm in the South Missouri Ozarks since I don't believe I even knew they existed. But I knew that recording artists existed and I had used the handle of a pitch fork stuck in a stage of hay bales in our large barn to sing their songs. My parents had never attended high school and had both completed only the third grade and I was the 11th of 12 children growing up on a farm in a rural area. Only one older sister had made it to college. My first eight years of school were in a one room rural schoolhouse and this is not usually considered to be the most ideal learning environment. I was also told by an older brother before I entered first grade that I would never amount to anything. The course of events that led me on my particular journey is detailed in the following chapters.