

SAF-105
MOORE OKLAHOMA DISASTER

Modified by Earl Pack - AE5PA from an article by Dan McClellan.
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An EF5 (winds greater than 200 mph) tornado hit Moore, OK (south of Oklahoma City) on Monday 5/20/2013. The tornado caused the death of 24, including 10 children.

Main observations from the Tornado: Pay attention to the warnings, but listen to your feelings. Tornadoes are fickle and don't always go where predicted. This one was head straight at a church (there was a funeral at the church at the time), but turned and destroyed two elementary schools. The Joplin tornado turned and left only a handful of the church walls standing. In the end most people that I've talked with say they felt that should do something specific and because they listened they were safe:

- One woman felt she should gather her documents together and hide under the stairs. That was the only part of her home left standing.
- Another was hunkered down but felt they needed to leave. They drove around the storm, only to return to a missing home.
- We helped a lady dig through her debris. Her mother told her to hunker down in a safe place inside. She did so but felt instead that she needed to leave and did so. Her roof is gone and all exterior walls are missing. She was sure if she stayed she'd be dead. (Interestingly in her kitchen, that had no roof, there was a hanging basket of kitchen utensils that was still hanging, clean and untouched.)

Observations from the recovery:

1. People want to help, but well-meaning is not always helpful. Right after the disaster well intentioned people tend to get in the way of trained rescuers and have caused delays that lead to loss of life.
2. It's important to be listen to what others say, even if you're right. Some of the leaders had great plans and had already started to respond. Because of that, they weren't as open to outside suggestions and missed some important facts. (Including the fact that if you keep track of names and hours of volunteers, FEMA reimburses the state for that time at something like \$20 and hour).
3. Not all disasters are the same: A lot of tents, cots, and sleeping bags were sent in after the disaster. These items are needed when the damage is widespread, but when it's severe but isolated there are still a lot of options in the community for shelter and those items won't be used.
4. It's important to make clear and specific assignments. On Wednesday evening there were various meetings to discuss plans. Many assignments were handled well, but the method and timeline to disperse contact information to the affected areas was not clearly defined.
5. In the clean-up it's easy to get involved in work that doesn't matter in the long run. People generally want to help people. The problem is that many of the streets near the major disaster were inaccessible (e.g. blocked by police and the national guard as the responders first searched for people and then the utility companies turned off the gas and restored electricity). So initial requests for assistance from the city are for areas that are accessible and not too destroyed. The city asked us to go to the high school to pick up garbage and to a

couple city parks to clear out significant tree damage. Not what you hope to do when you know of the personal destruction just a couple of blocks away. Interestingly, as we gained access into some destroyed areas, volunteers got trapped doing things that have little significant long-term value. Much of the area will be completely bulldozed, but groups assigned to help find valuables get sucked into cleaning houses. In the end cleaning out the park, though not as exciting, caused more lasting change than cleaning out by hand what is planned to be cleared by machinery in a couple of days. (Granted there is some value to the person as we serve and bring some order to their personal chaos, but it's easy to lose sight at times).

6. It's good to ask people who know what the need is and respond to that need. Many people want to help. We've had clothes and food sent in from many states in huge trailers. They reported that in one recent disaster they had to rent a 200,000 square foot building to house and sort all of the donations and that many were broken, soiled, or in some other way unusable. Generally the most effective thing, if you're far away is to donate to the Red Cross.

Those are just some thoughts after a handful of long, but fulfilling days. So, you ask, "What have you been doing, Dan?" Setting up computers and printers in a command center, learning the disaster program and training others on it, unloading a semi of supplies, mixing gas for chainsaws, answering phones, looking for places where we can send volunteers, sharpening and fixing chainsaws, checking out supplies, checking in supplies, cutting down trees, talking with leaders, oh yeah and talking with people who are having difficulty with the trauma, making sure volunteers don't starve or dehydrate (after our lunch plans fell through, we scrambled to get others to supply us with food. We ended up with enough food for about 800 when we had 200 at that location. They didn't starve because many people are so willing to help.

Separate from Dan McClellan article I would like to add that:

Professional storm chasers Tim Samaras, WJØG, his 24 year old son Paul Samaras, a gifted filmmaker, and fellow investigator Carl Young died May 31, 2013 near El Reno, Oklahoma, when an EF3 tornado suddenly changed paths and slammed into their vehicle, and they were unable to escape. In his biography on The Weather Channel website, Tim Samaras said that he always carried along Amateur Radio equipment when he chased storms. "I chase the most powerful storms on the planet," Tim Samaras said in a video on his personal website. "At times I have mixed feelings about chasing these storms. On one hand they are incredibly beautiful; on the other hand, these powerful storms can create devastating damage that changes people's lives forever." The TWISTEX tornado research team that Tim Samaras founded has been featured on The Discovery Channel's "Storm Chasers."

Samaras's instruments offered the first-ever look at the inside of a tornado by using six high-resolution video cameras that offered complete 360-degree views. He also captured lightning strikes using ultra-high-speed photography with a camera he designed to capture a million frames per second. Samaras's interest in tornadoes began when he was six, after he saw the movie The Wizard of Oz. Tim had a passion for science and research of tornadoes. He loved being out in the field taking measurements and viewing Mother Nature. His priority was to warn people of these storms and save lives.