The OSHA Files — Why Phillip McDaniel Died

By Bridgette Hester, Ph.D.

A foreman's failure to carry out his responsibility for safety in the construction of a 350-foot tower led to fatal injuries for one climber and serious injuries for another.

This installment of the OSHA Files series explores what happened to Phillip McDaniel in the summer of 1994. The hope is that you will use one of the installments in this series as a learning tool with your crews to identify the failures behind the fatality and to encourage crewmembers to ask what they can do to make their workplace safer.

Much of the information comes from the file OSHA sent me in response to a Freedom of Information Act request. OSHA redacted some of the file contents. Through an online search, I obtained other information, such as family details. The following are my words unless indicated by the citation: (OSHA, 1994).

According to the file, it appears that on or about June 6, 1994, McDaniel and his crew were constructing a radio tower when the tower collapsed after changes were made to the hoisting arrangement. They had been attempting to lower the gin pole when it slipped three feet. "The injured employee stated that the tower collapsed immediately after this." (OSHA, 1994).

Incident Factors

The crew had been on site earlier in May. On May 19, the job was placed on hold because the crew was awaiting an antenna delivery. When crewmembers returned on June 6, they noticed another contractor had added an electrical building to the site. The addition

of the building meant the hoisting arrangement previously made could not be used. In response, the foreman made two decisions that contributed to the accident.

First, the foreman decided not to move the hoist set-up to accommodate the addition of the building.

Second, instead of moving the hoist set-up, the foreman chose to move the lower snatch block by 22 feet.

As contributing factors, the bottom portions of the tower that had been assembled were extensively corroded. Also, according to file photos, it appears the guy anchor had more than one guy wire per hole.

Citation Explanations

Specific information delineates the reason for each citation OSHA issued. For a copy of the report, send me an email message at *bridgette@hubblefoundation.org*.

Citation 1, Item 1: When the crew was attempting to lower the gin pole, the cable securing the pole came loose, falling three feet. "The upper hook was defective and the lower snatch block had the safety latch removed." (OSHA, 1994).

Citation 1, Item 2: The failure to rearrange the hoisting setup and move the snatch block away from the base of the tower to a guyed portion of the tower "caused a concentrated lateral load for which the tower was

not designed." (OSHA, 1994).

Citation 1, Item 3: "Corrosive damages to the lower sections of the tower were extensive. Due to the extent of the corrosive damages in the lower section of the tower, the vertical legs were subject to stresses beyond their allowable value." (OSHA, 1994).

Citation 1 Item 4: Employees were exposed to possible head injuries while working on and under a radio tower while employees above them were using hand tools.

Commentary

This accident was rife with careless factors that were easily preventable. I concluded that corrective action would not have taken much time. To become more certain, I asked a 30-year veteran climber to read the report and offer his opinion. On that fateful June day, what could have been done differently? Did the file photos support the report's narrative?

He said he had never seen anyone install more than one guy wire per hole on an anchor. In his estimation, an additional anchor should have been installed. He had mentioned that they had installed used tower sections before, but they had been thoroughly inspected for defects. He said a critical flaw was the use of snatch blocks without the safeties and using the blocks on corroded tower sections, thus applying a load. He stated that had

16 *agl*

The OSHA Files

Phillip McDaniel: June 6, 1994

Pertinent Information:

Inspection Number: 107015299

Date of Incident: June 6, 1994, 9 a.m.

Location: County Road 204, Beloit, AL 36767

Gender: Male **Age:** 31

Family: If you know the family or could provide further information, please email

the author.

Cause of Death:Tower collapseToxicology:Not indicated

Training: No certifications provided in file

Time with Employer: _____ 55 days (the file indicated eight years of experience)

Company Years in Business: Established in 1996, but the company has dissolved (source: *AlabamaCorporates*)

Number Employees: 10 (source: *Alabama Business Directory*)

Reported to OSHA: June 6, 1994

Others Injured: One seriously injured

Height of Tower: ______ 350-foot radio tower under construction (OSHA, 1994)

Height at Fall: Collapse of structure, victim at 350 feet on tower (OSHA, 1994)

Tower: Guyed

Tower Condition: Corroded lower members

Operation: Tower erection

Free Climbing: No

Fine Reduction: 70 percent reduction (60 percent for company size and 10 percent for history)

Case Closed - Last Closing Conference: June 10, 1994 **Informal settlement agreement:** Nov. 14, 1994

installed heel blocks high on a tower to rig over obstructions, such as shelters, but he said that higher the blocks apply a stronger the lateral force to the tower section, force that the structure is not built to withstand.

"Even with all the faults listed, such as structure corrosion, incorrect guy anchorage on the first tier and the missing safeties on the blocks, I believe the crewmembers would have been OK if they would have applied general rigging practices," the veteran climber said. "Since the installation of the shelter required the rigging to be adjusted, the foreman should have had the crew fasten the gin pole to the tower temporarily, pulled slack in the jump and load line of the gin pole and hoist, and then repositioned the hoist and lower block (the heel). If he had done that, the block would still have been at the base of the tower as it should be, but you would have had less stress to the

tower structure at this point while applying lateral force. From this point, they could have proceeded to lower the gin pole without incident."

He said that had the crew taken these steps, the tower would not have collapsed. It would have taken an hour to an hour and a half for a four-man crew to take these steps, according to the climber.

I am glad the climber called attention to the corroded lower sections because

The OSHA Files (Continued)

Thomas C. Owens: July 27, 1987

Citation HA, 1994):

Citation 1, Item 1: Serious

Proposed Penalty: \$2,100

Section (5) (a) (1) OSH Act of 1970: The employer is to furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees [in that employees were exposed to the hazard of being struck by a falling gin pole].

Reduced penalty: \$1,400

Citation 1, Item 2: Serious Proposed Penalty: \$750

Section (5) (a) (1) OSH Act of 1970: The employer is to furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees [in that employees were exposed to the hazard of a collapsing radio tower].

Reduced penalty: \$500

Citation 1, Item 3: Serious Proposed Penalty: \$2,100

1926.20(b The employer did not initiate and maintain an Occupational Safety and Health Program to address accident prevention. **Reduced penalty: \$1,400**

Citation 1 tem 4: Serious Proposed Penalty: \$1,050

1926.100 Employees were not protected by protective helmets while working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns.

Reduced penalty: \$700

TOTAL FINES PROPOSED: \$6,000

TOTAL FINES PAID: \$4,000

that was something that irritated me the most. The climber and I both believe that even if the crew had taken all of the steps the veteran said should have been taken, the tower would not have passed a structural analysis because of the decay and the improper guy wire installation.

I realize that those who assign tower work want the job done, and they want it done yesterday. However, I also believe that the foreman, as the eyes and ears on a site, is responsible for crew safety. The foreman in this case, by not moving the hoist setup and by allowing the use of corroded tower sections, demonstrated a disregard for the responsibility the

foreman's position carriers and demonstrated a negligent, intentional and blatant disregard for those in his charge.

It's impossible to know whether the foreman had orders to hurry up or to use the tower sections he used, or what other choices the foreman believed to be beyond his control. But, he had the responsibility to call the site and project unsafe, and he had the authority to shut it down. Many in the industry find the authority to stop a job to be debatable. In theory, anyone working at the site should be able to shut down the work for safety concerns. But sadly, workers don't want to be fired, and companies

don't want to lose contracts. Unfortunately, because of that mindset, people have died and more will die. This mindset is an element in this industry's safety culture that needs an overhaul.

Bridgette Hester, Ph.D., is a family and workplace strategist. She is the founder and president of the Hubble Foundation, which is dedicated to promoting the safety of tower workers, site crews and all workers at heights. The author thanks climbers for helping her navigate the intricacies of OSHA files and for using articles in this series to improve safety. Her email address is bridgette@hubblefoundation.org.