

Bootleg fire spawned tornado, expert says

■ The fire fueled a tornado on July 18, a day of extreme fire behavior at the blaze that has burned more than 413,000 acres

By Joe Siess

(Klamath Falls) Herald and News

On July 18, the Bootleg Fire generated what appeared to be a flaming tornado, sweeping skyward from the trees and into the towering thunderheads above.

Officials confirmed Monday, July 26, that it was an actual tornado, fueled by the fire itself.

According to Bruno Rodriguez, an incident meteorologist assigned to the Bootleg, the phenomenon occurred on the southeast side of the blaze on a day of extreme fire behavior. Rodriguez said that day the fire generated pyrocumululus or pyrocumulonimbus clouds that rose higher than 30,000 feet into the stratosphere — roughly the altitude where most commercial airplanes fly.

Those massive clouds, in combination with intense heat generated by the fire on the ground, intensified an updraft, according to Rodriguez. That in turn pulled and rotated air up from the surface to the base of the fire-produced clouds — creating a literal tornado.

The Bootleg tornado was far beyond the more common fire whirl phenomenon, Rodriguez said.

Fire whirls are smaller, surface-based vortices. But Rodriguez said the Bootleg tornado and others like it “are essentially the same as a regular tornado” — but with the added element of fire.

The tornado is not actually made of fire, Rodriguez clarified, but flames from the trees and other vegetation swirls around in wind



Richard Parrish/Contributed Photo

The Bootleg fire burning on July 23, 2021. The fire, started by lightning in early July, has burned about 413,000 acres.

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— Neil Lareau, professor of atmospheric science, University of Nevada

generated by the tornado.

Ryan Sandler, a meteorologist at the National Weather Service in Medford, explained that while the fire tornado generated by the Bootleg Fire is in fact, a tornado, the National Weather Service is cur-

rently unsure how to categorize it.

While a traditional tornado often travels for many miles and can also be miles wide, a fire tornado relies on the updraft created by the fire and the cumulus clouds above to form and draw energy, Sandler said. Given those constraints, a typical fire tornado can only travel a few miles at most, and is therefore not a threat to human life if it occurs in a relatively remote area like the Fremont-Winema National Forest.

Once the fire tornado gets too far away from the heat of the fire it starts to lose force and its shape, Sandler said.

“If they don’t have the heat from the fire, then they don’t have the updraft. Without the updraft, it would

weaken very quickly,” he said.

Sandler added that the reason the NWS did not issue a tornado warning is because the fire tornado is essentially chained to the heat from the fire and the cumulus clouds above.

Neil Lareau, a professor of atmospheric science at the University of Nevada, said he speculates the Bootleg tornado’s strength to be akin to an EF2-type tornado. EF2 tornadoes are characterized by wind speeds between 111 and 135 miles per hour. Evidence on the ground, such as extensive tree damage and scouring of road surface and soil, are indicative of winds of that magnitude.

“Prior to last year, there had only been two well-documented tornado strength vortices generated by fires,” Lareau said. “A decade ago, we could not have even imagined this. But here we are.”

Lareau, who is currently working on a National Science Foundation funded project focused on fire-generated tornadoes, said studying these kinds of events is increasing in importance.

The project, Lareau said, was motivated by confirmed fire tornadoes amid the massive wildfires of 2020.

“But every time a new tornado happens, we will work to understand the physics of what is going on, and build up a case library to identify when a fire is getting close to producing these sorts of things,” he said.

The study of fire tornadoes is “really a frontier of science,” Lareau

said, and the objective of his research is to understand which fires will produce tornadoes and when, and to identify the signals of when one of these events will happen.

That information is important to helping stop the spread of these major wildfires, and giving fire crews as much information as possible in order to stay safe and protect nearby communities.

David Blunck, associate professor of mechanical engineering at Oregon State University, said although there hasn’t been much research on the topic, he absolutely suspects that fire-produced tornadoes can create larger embers and send them sailing much farther distances through the air — possibly starting new fires.

The wind that sends embers sailing through the sky can either be from the atmosphere or produced by the fire itself — as has been witnessed with the Bootleg. Lareau said that climate change is absolutely a factor for the increase in fire tornadoes, and is essentially the “backdrop,” or “the changing baseline in which these (events) are embedded,” he said.

Hotter, drier conditions, and a prolonged fire season goes hand in hand with the larger, more intense wildfires and extreme fire behavior becoming more and more common, Lareau added.

“By and large it is a rare phenomenon,” Rodriguez said. “It is observed on a semi-regular basis by now on those extremely large fires we get.”

VACCINE

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“The Oregon Department of Education, Oregon Health Authority and Governor’s office are reviewing the CDC’s guidance,” said Marc Siegel, a spokesperson for state’s

top education agency. “Any update would come only after thorough review and consultation.”

Under current guidelines from the state’s department of education, individual districts can decide whether to require students, staff and faculty

to wear masks inside school buildings.

In addition, on Tuesday the Oregon Health Authority followed suit with CDC in urging people to wear masks in indoor public spaces, but stopped short of reinstating an indoor mask mandate.

“Because life-saving vaccines are safe, effective, and widely available — and because so many Oregonians are protected — we have reached the point in the pandemic where unprecedented, blanket statewide measures are no longer the most effective or

efficient defense against the spread of COVID-19, which is now concentrated in communities with low vaccination rates and high vaccine hesitancy,” Boyle said.

Instead state officials say that they believe targeted efforts or local coronavirus-

related safety measures would be more beneficial to address high-infection rates in counties.

“Such measures at the local level are more likely to be effective in reaching unvaccinated Oregonians than state-level mandates,” Boyle said.

Former lawmaker pleads guilty to misconduct for letting rioters into Oregon Capitol last year

By Connor Radnovich

Salem Statesman Journal

Former state representative Mike Nearman pleaded guilty Tuesday, July 27 to one count of official misconduct in the first degree for letting rioters into the closed Oregon Capitol building during a special legislative session on Dec. 21, 2020.

As a result of the negotiated plea agreement, Nearman was sentenced to 18 months probation, during which he will need to complete 80 hours of community service and is banned from the Capitol building and grounds.

He also will pay \$200 in court fees and \$2,700 to Oregon Legislative Administration for damages done to the Capitol during the Dec. 21 riot. The count of criminal trespass in the second degree was dismissed.

“There aren’t a lot of conditions on this,” Marion County Circuit Court Judge Cheryl Pellegrini said.

The maximum penalty for this misdemeanor is one year in jail, a \$6,250 fine or both.

Nearman was soft-spoken while answering Pellegrini’s questions before sentencing.

He admitted letting protesters into the Capitol, but said he didn’t intend to cause harm. Nearman said he did so because he believed they had a right to be in the building and so he would appear to be supportive of those people and they would look upon him favorably.

“I think that the citizens were allowed to be in the Capitol, so I was letting them in,” Nearman told the judge.

Nearman’s actions allowed dozens of rioters — some armed and wearing body armor — to gain access to the Capitol, which was closed to the public due to the coronavirus pandemic. In the ensuing scuffle with Salem and Oregon State police officers, six officers



Salem Statesman Journal

Former Oregon State Representative Mike Nearman, far right, pleads guilty to official misconduct in the first degree on Tuesday, July 27, 2021 at the Marion County Circuit Court in Salem.

were injured and the building incurred thousands of dollars in damages.

“I don’t support what they did when they entered,” Nearman added.

Neither Nearman nor his attorney Jason Short spoke to reporters after the hearing.

House Republican Leader Christine Drazan, R-Canby, declined to comment on the court proceeding through her spokesman.

Senate President Peter Courtney, D-Salem, did not comment on the sentencing itself, choosing instead to look forward.

“This is behind us now. I’m grateful. And it comes at a time when our Capitol is open. People are coming back,” he said. “There is a normalcy here that makes me feel good.”

The building was re-opened to the public on July 12.

House Speaker Tina Kotek, D-Portland, did not immediately respond to a request for comment.

Nearman was expelled from the Oregon House of Representatives on June 10 by a vote of 59-1, with the only vote against coming from Nearman himself. He was the first sitting lawmaker expelled from the Oregon Legislature

in state history.

Video evidence shows Nearman exiting the Capitol at 8:29 a.m. on Dec. 21 from the vestibule entrance on the west side.

At the time, only one demonstrator was standing near the door. When Nearman exited, he stepped around the demonstrator and the man rushed in. A second quickly followed, and they both waved for others to join them while holding the outside door open.

Three more did so before police officers arrived and shoved them back outside. But by then the door was being held open from the outside and the four officers were not able to close it.

Police eventually needed to pull back due to a protester spraying a chemical irritant.

Ultimately at least 50 people accessed the Capitol’s vestibule.

When the videos became public, Democrats began calling for his resignation or expulsion. Nearman had the support of Republicans until another video came to light that appeared to show him suggesting to a group days before the riot that if demonstrators texted him he might let them in.

During his arraignment in May, several dozen supporters gathered at the courthouse with signs. During the House of Representatives expulsion vote, another crowd came to his defense outside the Capitol, with chants of “let us in” and banging on an exterior door.

He later received the most votes from precinct committee people in House District 23 during a nominating convention held by the Oregon Republican Party to find an appointment for the then-vacant seat.

A handful of supporters came to the meeting where they appointed his former legislative aide Anna Scharf to that seat, and quietly expressed their frustration afterward with the county commissioners’ decision.

House District 23 stretches from outside McMinnville to near Harrisburg and includes the communities of Dallas, Amity and Dayton.

Extra jobless benefits to expire in September

PORTLAND (AP) — Oregonians could lose more than \$70 million in weekly employment benefits after Labor Day, when some federal pandemic aid programs expire and the state stops paying a \$300 weekly unemployment bonus.

David Gerstenfeld, acting director of the Oregon Employment Department, called it a “sobering” moment Wednesday, The Oregonian/OregonLive reported. He warned that more than 115,000 Oregonians are receiving assistance under temporary programs that date to the first COVID-19 relief act from March 2020.

Oregon has paid more than \$10 billion in jobless aid since the start of the pandemic, most of it federal money provided through a succession of pandemic relief bills. The major programs include the \$300 weekly bonus, a benefits extension program called Pandemic Emergency Unemployment Compensation, and a new program for self-employed workers called Pandemic Unemployment Assistance.

Those programs expire the week ending Sept. 4.

The number of Oregonians collecting benefits each week has been declining for several months and beginning this week, workers must demonstrate they are searching for new jobs to continue receiving aid.

But Oregon’s jobless rate remains elevated at 5.6%.

The state has now reopened nearly all of its WorkSource job search assistance offices. Gerstenfeld also noted that employers are hiring at a nearly unprecedented rate.



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