## TOWN OF SAUGERTIES STATE OF NEW YORK

In the Matter of the Application of:

Tarpon Towers II, LLC and Cellco Partnership d/b/a Verizon Wireless

Application for a Special Use Permit, Site Plan Approval, a Use Variance and an Area Variance

EXHIBITS IN OPPOSITION

Premises: 766 Kings Highway, Saugerties, NY

Section: Block: 28.4

Lot:

11 13.1

**EXHIBITS IN OPPOSITION** 

Respectfully Submitted,

Andrew J. Campanelli Campanelli & Associates, P.C. 1757 Merrick Avenue, Suite 204 Merrick, NY 11566

#### Attorneys For:

Heidi (Muetzel) Lancto, 775 Kings Hwy, Saugerties, NY Matthew Lancto, 775 Kings Hwy, Saugerties, NY Douglas Pierson, 776 Kings Hwy, Saugerties, NY Regina Pierson, 776 Kings Hwy, Saugerties, NY Edward Osterhout, 778 Kings Hwy, Saugerties, NY Eric Osterhout, 778 Kings Hwy, Saugerties, NY Barbara Hewett, 778 Kings Hwy, Saugerties, NY Charlene Hughes, 780 Kings Hwy, Saugerties, NY David (Travis) Hughes, 780 Kings Hwy, Saugerties, NY Christopher Daughtrey, 782 Kings Hwy, Saugerties, NY Dorothy Smith, 783 Kings Hwy, Saugerties, NY Raymond Smith, 783 Kings Hwy, Saugerties, NY Dolores Moore, 787 Kings Hwy, Saugerties, NY Robert Moore, 787 Kings Hwy, Saugerties, NY Julie Desch, 793 Kings Hwy, Saugerties, NY Debra Wells, 793 Kings Hwy, Saugerties, NY William (Chris) St. John, 494 Glasco Tpke, Saugerties, NY Tim Wells, 515 Glasco Tpke, Saugerties, NY Jill (Riley) DelVillano, 558 Glasco Tpke, Saugerties, NY Biagio DelVillano, 558 Glasco Tpke, Saugerties, NY

Angelo Zani, 583 Glasco Tpke, Saugerties, NY MD Hossain, 595 Glasco Tpke, Saugerties, NY James McMullen, 595 Glasco Tpke, Saugerties, NY Nancy Fedoreshenko, 595 Glasco Tpke, Saugerties, NY Charis Becnel, 713 Churchland Road, Saugerties, NY Jay Mooers, 719 Churchland Road, Saugerties, NY Kara Mooers, 719 Churchland Road, Saugerties, NY Tamara Schupp, 1221 Churchland Road, Saugerties, NY Craig Hagquist, 1221 Churchland Road, Saugerties, NY Sarah Conroy, 64 Dussol Road, Saugerties, NY Bruce Lopresti, 64 Dussol Road, Saugerties, NY MD Hossain, 1238 Churchland Lane, Saugerties, NY James McMullen, 311 Market Street, Saugerties, NY Nancy Fedoreshenko, 311 Market Street, Saugerties, NY

## **Exhibit List**

A	Adverse Aesthetic Impact Letters
В	Real Estate Professional Opinion Letters
С	Verizon Coverage Map for the Proposed Location
D	Image of Oswego Cell Tower Collapse
E	Images of Collapsed Towers
F	Article pertaining to Fatalities in Kansas Cell Tower Collapse
G	Images of Cell Tower Fires
Н	Articles regarding Cell Tower Fires
Ι	Physicist's Report re Ice Fall
J	Article Pertaining to Decorative Element of Cell Tower "Slicing Through" a car.
K	Image of Hammer Which Crashed Through the Roof of a Structure

August 20, 2020

Jill K. DelVillano 558 Glasco Turnpike Saugerties, NY 12477

Re: Tarpon Towers and Verizon Proposed Monopole Installation - Town of Saugerties, NY

To whom it may concern:

I am a home owner within the affected area of the proposed cell tower and I do not wish to have an unsightly 120 feet high pole with cellular equipment hanging from it in view from my front yard.

I, along with my husband, purchased our home not long ago with the hopes of enjoying our neighborhood and ultimately retiring here, which by the way is in the near future. The home we live in is on the property at the NW corner of the intersection of Glasco Turnpike and Tower Drive. This is our only home and we are appalled at the idea that a tower could be considered to be built in our beautiful residential neighborhood.

Any such pole, tower, or other equipment in our neighborhood would be a categorical detriment to the esthetic beauty of our property and to the entire neighborhood.

We have a large family that visits often, we have many friends that visit regularly, and we entertain frequently. If this tower is erected, every person that visits our home no matter what direction they arrive from, will be forced to view this behemoth, ugly structure. Knowing my relatives and friends as well as I do I have no doubt they will be offended by its hideous existence if it is erected in the proposed location. Just to be clear, we will be forced to see the monopole every day and be reminded of the ugliness looming just outside our front door. We will no doubt need to keep our shades drawn to assure we aren't reminded of its imminent malice.

My husband and I enjoy taking walks around our neighborhood. If this tower is built at this location it will not only affect the view of the beautiful properties in our neighborhood but will also affect our mood as we will be reminded of its existence every time we see it. Which will be quite often. Let's put this in perspective. If I leave my house once every day, and I look out my window once every day, I will be forced to look at this thing 1095 times a year. That number is for leaving the house and looking out the window once per day. Only once! That number will surely grow exponentially along with the stress that it will no doubt cause me.

Please bear in mind the contents of this letter, the folks in our neighborhood, the very nice homes and properties in this residential area, and our retirement home when considering approval of this proposed tower's location.

We do not want this tower at this or any other location near our residence or near our neighbor's properties and homes. Please do not approve this tower's construction.

Sincerely, gel K De Villano

Fill K. DelVillano

August 20, 2020

Biagio W. DelVillano 558 Glasco Turnpike Saugerties, NY 12477

Re: Tarpon Towers and Verizon Proposed Monopole Installation - Town of Saugerties, NY—

To whom it may concern:

The purpose of this letter is to both confirm that I am a home owner within the affected area of the proposed cell tower and to declare my vehement opposition to the erection of such a device in my neighborhood.

My wife and I recently purchased and live in a home situated at 558 Glasco Turnpike in the Town of Saugerties. This property is our home and main residence in which we plan to enjoy our retirement years. Having said this, the last thing we want to see while enjoying the property around our forever home is a gigantic cell tower. We purchased this property because of its beautiful and protected landscape and we enjoy spending time on the exterior of our property as much as we do the interior of our home.

If this tower is erected we will be forced to look at the tower's imposing ugliness every day. This is not the way we wish to spend our retirement. The mere thought of having to endure the unsightly irritant is both heartbreaking and infuriating. Again, not an enjoyable thought.

My wife and I are active people. We, along with other neighbors, enjoy walking the streets around our home and at the risk of repeating myself, we'll be forced to be within the unavoidable sight of the menacing tower and also be walking near its associated ground level equipment.

Taking into consideration all of the above, and that the currently proposed location for this tower is within a residential area comprised of very nice well-kept homes and properties, we respectfully ask that this location be found to be inappropriate and also disruptive for a tower to be erected.

Respectfully,

Biagio W. DelVillano

Town of Saugerties
Zoning Board of Appeals
4 High Street
Saugerties, NY 12477

RE: Impact of proposed cell tower on Mt. Marion Fire House Property

To Whom It May Concern:

I live in Mt. Marion on the corner directly across from and north of the Mt. Marion Fire House. My husband and I have lived here and worked to improve the appearance of our property for almost 40 years. A tower at the Fire House would constantly be in view and would negate everything for which we have worked so hard to achieve. Not only would we see it from our house and yard, we would be assaulted by its presence each time we get in a vehicle to travel for mail, groceries, supplies, appointments or leisure.

I find solace in my yard and joy in gardening within it. With the firehouse property always in view, I spend many days planting, weeding and nurturing the flowers and shrubs within it. I relax in my yard while watching the birds that feed at feeders and nest in the bushes around them. That serenity would be spoiled daily by the view of a huge, in-your-face tower.

Our property is small so the backyard is our haven where we entertain friends, visit with family and play with grandchildren. A tower would be a constant, always-in-view eyesore, a disquieting invasion.

Gina Pierson

776 Kings Highway

Mt. Marion, NY

Town of Saugerties Zoning Board of Appeals 4 High Street Saugerties, NY 12477

To Whom It May Concern:

I bought my house in a residential area in Mt. Marion 38 years ago because for me it was an ideal location. It is half a mile from the Mt. Marion Elementary School for my children to attend, 3 miles from the NYS Thruway entrance in Saugerties, 4 miles from the Village of Saugerties where the High School and businesses are conveniently located and only 5 miles from the expansive services located in the Town of Ulster. It seems to be the perfect location.

If this tower is built, I will sit on my back deck having coffee in the morning, lunch at midday or dinner later on looking directly at an ugly cell tower. My picnic table will be about 200 feet from the base of this proposed tower. So much for location.

Doug Pierson

776 Kings Highway, Mt. Marion, NY

August 18, 2020

Saugerties Zoning Board of Appeals Saugerties Town Hall Saugerties, N.Y. 12477

#### Dear Board of Appeals:

My name is Raymond Smith and I reside at 783 Kings Highway, Mt. Marion, N.Y. I have owned and resided at this address since May of 1980.

It's my understanding that Verizon Communications would like to install a cell tower near the Mount Marion Firehouse. The firehouse is in close proximity to my residence and I would like to oppose such installation based on several factors including Aesthetic Impact of our neighborhood.

A cell tower of 120 feet, not including additional antennas would be above any trees between my residence and the fire house. This would be unpleasant to look at from my residence as it would obscure the view of the Southern sky. In addition, the construction of a commercial structure in a residentially zoned area could open the door for future commercial installations.

I would hope that Verizon would consider another site where the structure would not be considered an eyesore to the community.

Sincerely,

Raymond Smoth

Tamara Schuppin

1221 church Road, #3

Saugerties, NY 12477

845 684-0040

August 17, 2020

To Whom It Concerns,

My husband and I are retired and have chosen to live in Saugerties because of its rural charm and beauty. I drive by the Mt. Marion Fire Station several times a week on my way to do shopping and other errands in Lake Katrine. I find that route particularly beautiful and pleasant to drive along.

The thought of a communications tower a hundred feet high looming over me at the intersection of Glasco Turnpike and King's Highway along the route I love to drive, is repulsive to me. Furthermore, it is disturbing to me to think of the tower shedding chunks of ice in the road or on passing cars, including mine, during the wintertime, or even toppling over at any time of the year due to some sudden wind.

A tower should not be installed someplace where it will loom over passersby or homeowners going about their daily business or pleasure.

Thank you. Samara Schuppin

Tamara Schuppin

To whom it may concern-

I'd like to express my opposition to the proposed cell phone tower being erected at the Mt. Marion fire station in the town of Saugerties. I feel it's presense would detract from the beauty of the area and be an unfair imposition on the people who's homes would surround it. The proposed secondary site on Industrial Rd. would be a far better option and better meet the concerns of the area residents Craig Hagquist, 1221 Church Rd., Saugerties, N.Y.12477 8/17/2020

August 21, 2020

Re: Proposed Cell Tower Construction

Mt. Marion Firehouse - 766 Kings Highway, Saugerties, NY

To Whom it May Concern;

776 Kings Highway, Saugerties, NY has been my home for the last 35 years. While I have not been a permanent resident for the last 15 or so years it will always be "home", a safe place with responsible, respectful neighbors and friends who have also called our small residential hamlet home for the past several decades. The people in our close-knit community have always been cognizant of how their actions may impact their neighbors and have approached undertakings in a manner that would not cause adverse effects to those with whom we share property lines. Our small patch of the world is dotted with quaint, single family homes with neatly kept lawns and no cell towers, and that is the way it should remain.

I am not an expert on land use and/or zoning regulations, I am simply a long-time member of the community writing to express my concerns regarding the construction of a cell tower in such close proximity to our family home and the homes of our neighbors. Besides the known and quantifiable negative impact of reducing the property values of all homes surrounding the proposed tower location, there are many unknown potential impacts.

There is an extremely rich and diverse avian community that resides in our neighborhood which also includes a state-regulated wet-land directly abutting the potential tower location. How will that ecosystem respond to the introduction of a tower that is constantly sending and receiving signals? In the event that variances are granted to bypass the current zoning regulations, who will guarantee that no hardships, other than reducing the property values of the surrounding land and homeowners, are incurred to the community?

After learning about this project, I afforded myself the displeasure of viewing the industrial invasion which was allowed to proceed at the Centerville Firehouse. I can not comprehend how the uninterrupted beauty of our rural, residential communities was allowed to be permeated by such a nauseating intrusion to our skyline. This abomination is so aesthetically upsetting that I could not imagine ever owning or buying land in proximity to such a structure. Any yet, this is exactly what this project is trying to force upon our family and all the families who call our community home.

The current zoning boundaries should be upheld and the petition to skirt regulations for the perceived financial benefit of those who will not have a cell tower built in their backyards should be flatly rejected.

Sincerely,

Stephen Pierson

To Whom D+ Concerns, I live at 5/5 Glasco Turnpelse, which I ouest. I bought the house because it is in a setting of natural beauty and I do not want to have to see a commercial all Howet from my home. Please find a fetter place for the tower to sie our held, away from homes. Tim Wells

To Whom It Concerns I sun 520 Ylasco Tampike, and I am in opposition to a cell tower going up at the Mt. Marion Tire Station property down the road from my home. I love the beautiful country surrounding our home and the cell towar woold man that ergognent for me. Avze Micken

Jay Mooers 719 Churchland Rd Saugerties, NY 12477

August 21,2020

#### To whom it may concern:

I am writing to in regards to my concerns of the impact on the surrounding area of the proposed cell phone tower by Tarpon Towers and Cell-co(Verizon) located at the Mt. Marion Firehouse. I have resided and own my home at 719 Churchland Road for the last ten years. I have several concerns in regards to the proposed tower including the impact on the property values of surrounding homes, potential risk of involuntary exposure to radiation from the proposed towers and the adverse aesthetic impact.

The proposed location is at a busy intersection of Ulster County roads Glasco Turnpike and Old Kings Highway. Large amounts of traffic pass through this intersection on a daily basis and will have to view the tower. "Small cell" towers are not small, they are many feet taller than other telephone poles and loaded with electrical equipment. I believe these will be an eyesore to our community and don't believe those who reside in this area should have to view the unsightly poles every time we pass through the intersection. In most cases, numerous times per day. Every time I pass by the tower, I will have to think about or wonder if the tower is emitting harmful radiation to my children. Every time I pass through the intersection, I will be impacted by looking at this tower and wondering if it is safe for my children to play in our yard. My home was built in 1930 and all the folks who have resided at this residence were able to survive for the last 90 years without a cell tower at this location, I believe the area is able maintain safely without the addition of this potential risk.

Home or business owners risk property value loss where a cell tower is installed in the neighborhood. A survey by the National Institute for Science, Law & Public Policy found that 94 percent of homebuyers are "less interested and would pay less" for a property located near a cell tower or antenna. As a homeowner who worked very hard to purchase a home for my family in this community it is very concerning to hear the equity I have built in home over the last 10 years may be erased due to installation of a proposed tower near my home.

I am urging those who are responsible to decide the fate of this proposed tower to seriously consider how it will impact those who reside in the area. Many of us have worked very hard to obtain our homes. It would be very discouraging to have worked so hard to achieve our dreams and then see the equity in our homes reduced because a company wants to improve their service. These folks do not live here, their children do not play here, they just want to place their towers here to fatten their wallets.

Concerned Citizen,

Jay L. Mooers

aug 20, 2020 To Whom it may concern My husband and I are against the tower going up near the free House in Surgerties. on Kings Highway and Glasco Turnpike -We do not want to see this Tower everytime we walk down our wond as it would be visible and destroyour beautiful view -We hope you will consider our rights in this Surely-Sand Conors Bu 11 Zo Par 64 Dussol Rd. Sangaties, 714 12477

Julie N. Desch 793 Kings Highway Saugerties, NY 12477 845-430-5091 indesch@hotmail.com

August 21, 2020

Town of Saugerties Zoning Board 4 High Street Saugerties, NY 12477

To Whom It May Concern:

I am writing in opposition to the cell tower that Tarpon Towers and Verizon plan to put up on the Mount Marion Fire Station property on the corner of Kings Highway and Glasco Turnpike. My family has owned our property at 793 Kings Highway for 80 years. Surely there must be a better location set off the road where the tower could still serve the community. There are other eye sores along Kings Highway where this could be added and minimally impact the neighborhood near the four corners.

I am also concerned about the exposure to radiation from this wireless antenna and devaluation of my house and property that would be caused by the tower in my neighborhood.

Please change the proposed location!

Sincerely,

Julie N. Desch

Vincent Cinelli

7380 long shot In

8/18/2020

knoxville tn

(865)789-9466

to whom it may concern just a brief letter regarding the cell tower being proposed on mount marion fire house ,sorry to hear a cell tower might be going up with in eyeshot of your back yard ,hopefully theyll reconsider finding another location less intrusive on locals privacy , sure sounds like a giant obtrusive eyesore in the fall ,winter ,early spring ,what about issues relating to lightning and threatening winds? when im at ur place 583 glasco turn pike theres a relaxing at one with nature vibe your place gives off .....yet another beautiful thing to destroy by mans greed

Sincerely

Vincent Cinelli

Guest 583 Glasco Turnpike

To Saugerties Zoning Board:

This letter is regarding the proposed site at the Mount Marian Fire Department on the corner of Kings Highway and Glasco Turnpike in Mount Marion NY for the cell tower.

When my husband and I found out that cell tower, if passed, would be placed in a conspicuous location on the site, we decided to oppose the proposal for the installation there. It was my understanding at first that it would be placed in a more secluded area at the Mount Marian Fire Department.

Although we agree a cell tower is needed in the area; with further research, we found that the zoning is residential. We feel there are many other sites that would be more appropriate for a cell tower in a business zone. The visibility of the tower would be unsightly to the neighborhood and passing vehicles. What would be the consequences to the cell tower provider if the tower fell on a home or damaged property or a person? In addition, it also could bring a decrease to the assessments the neighboring homes, not to mention possible health risks.

In conclusion, we are against the proposed site as indicated above. Please take these issues into consideration and put the cell tower in a more appropriate site.

Sincerely,

Charlene and David (Travis) Hughes

## CATSKILL MOUNTAIN REALTY INC.

86 NORMA COURT KINSGTON, NEW YORK 12301 845-331-5665

August 24, 2020

Angelo S. Zani 583 Glasco Turnpike Saugerties, New York 12477

ToWhom It May Concern:

I have been asked my opinion from Mr. Zani whether I felt Cell Towers have any effect on the value of a property. Mr. Zani currently owns a 3 br 2 bath 1761 sf home on 583 Glasco Turnpike in Saugerties, New York. He said a company will be installing a cell tower in his neighborhood within 214 feet of his property. The impact of cell phone towers on house prices in residential neighborhoods, which was published in The Apraisal Journal in 2006 found that buyers would pay as much as 20% less for a property near a cell tower or antenna. Research indicates that over 90% of home buyers and renters are less interested in properties near cell towers and would pay less for a property in close proximity to cellular antennas. Documentation of a price of up to 20% is found in multiple surveys and published articles. See some of the Articles that I have listed below. The Housing and Urban Development (HUD) considers cell towers as Hazards and Nuisances. The California Association of Realtors Property Questionaire specifically listed cell towers on their disclosure form for the sellers

Survey & Published Articles:

https:magazine.realto/dailynews/2019/06/24/nar-fcc-s-5g-plan-could-hurt-property-owners

WirelessTower and Home Values: An Alternative Valuation Approach Using Spatial Economic Analysis (Journal of Real Estate Finances and Economics), May 1, 2018)

Impact of Communication Towers and Equipment on Nearby Property Values (prepared by Burgoyne Appraisal Company, March 7, 2017

The Cost of Convenience; Estimating the Impact of Communication Antenna on Residential Property Values (Land Economics, Feb. 2016

Cell Towers; Not in my Backyard (Tedium Blog, Aug 5, 2015) Cell Towers Problematic For Buyers(published in Realtor Magazine)

Respectfully Submitted

Warner Scott Miller

Catskill Mountain Realty, Inc.



The Splesman Group 223 Boices Lane Kingston, NY 12401 845-336-2633

8/18/2020

To Whom it May Concern,

I am writing concerning the proposed cell tower 200 feet from 776 Kings Highway in Mt Marion, NY. I have been Licensed in NY State in Kingston since 1988 and as an Associate Broker, then Broker since 1993. I am-currently the Broker owner of Weichert Realtors-The Spiesman Group. I currently sit as a director on the Hudson Valley Catskill region MLS and was President in 2018.

In my professional opinion, if the cell tower is put in the proposed location, it will reduce the market value of the home at 776 Kings Highway, by approximately 10% or more. Even if the home is lowered in price, installation of the cell tower would still make it less marketable and less desirable to potential buyers.

Sincerely

Randy Spiesman

Broker

Weichert Realtors-The Spiesman Group



To Whom -

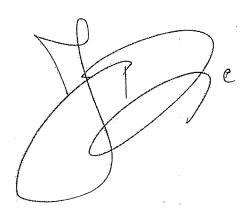
GO

Re: Biagio DelVillano & Jill Riley 558 Glasco Tumpike Saugerties, NY 12477

I am a NYS Licensed Real Estate Agent/Realtor® and member of the Columbia Greene Northern Dutchess Board of Realtors. I have been marketing residential properties in both Ulster & Greene County for over five years. It is my professional opinion, that if this facility/structure is installed where proposed, it will immediately negatively impact the value of the home by at least 20-25%. It will also make the home less marketable for resale in perpetuity, even at a significantly reduced price.

Sincerely -

Jason A. Dugo
NYS Licensed Real Estate Agent/Realtor®
Shaw Country Realty
NYS Lic. #10401302250





9/1/2020

## FREHOISE

HOME | HOME | OSWEGO, NEW YORK CELLULAR TOWER CRUSHES CHIEF'S WEHICLE

## Oswego, New York Cellular Tower Crushes Chief's Vehicle

Within a matter of seconds Thursday morning, the cellular tower behind the Oswego Fire Department's eastside station went from being 165 feet tall to being 165 feet long.

**NOVEMBER 14, 2003** 



VIEW GALLERY

STEVE YABLONSKI/OSWEGO BUREAU CHIEF

It stretched for more than half the length of a football field, causing considerable damage but no injuries.

Within a matter of seconds Thursday morning, the cellular tower behind the Oswego Fire Department's eastside station went from being 165 feet tall to being 165 feet long.

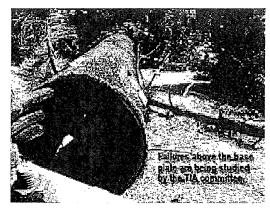
Winds, in excess of 55 mph toppled the tower in an easterly direction; the fire chief's vehicle and a section of a fence were crushed.

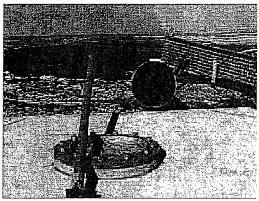
There were no injuries, Chief Ed Geers reported.

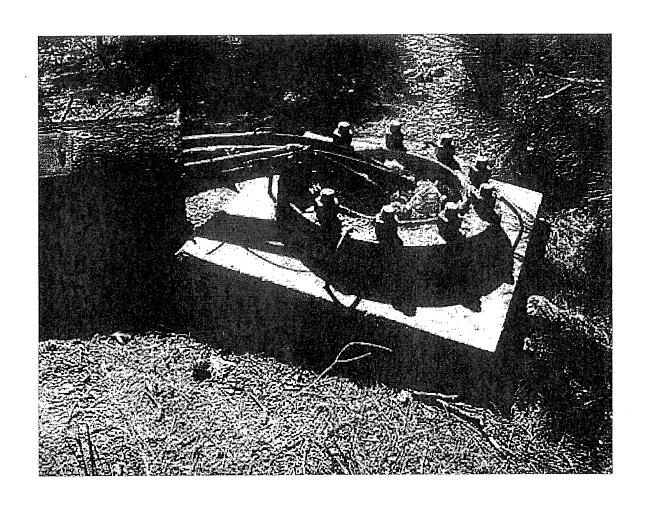
Firefighters quickly cut off the power to the tower, Deputy Chief Mark McManus added. "Nobody got hurt, but it got the adrenaline pumping," he said.

The tower fell in the best possible spot, the chief said.











# Two Men Identified, Tower Related Fatalities Increasing In Kansas

By WIBW, Ariana Cohen | Posted: Tue 11:48 AM, Mar 25, 2014 | Updated: Mon 1:56 PM, Aug 17, 2015

**BLAINE, Kan. (WIBW)** The two workers who died after two communications towers collapsed near Blaine Tuesday have been identified and the Federal Occupational and Health Administration is involved in the investigation.

Pottawatomie County Sheriff Greg Riat has identified the men as 25-year-old Seth Garner of Saint Peters, Missouri and 38-year-old Martin Powers of Saint Charles, Missouri.

They died Tuesday while working at the 250 foot level of the telecommunication tower that collapsed. Riat said Powers died at the scene and Garner at a local hospital.

13 News has learned the two men had worked for Wireless Horizon of Saint Louis for less than five months. Wireless Horizon is a subcontractor working for the Union Pacific Railroad.

The two men were dismantling an old tower which was right next to a new tower when the accident happened, destroying both towers.

Michael Moon, Acting Director for OSHA (Occupational Safety and Health Administration), says there were 13 tower related fatalities last year and 4 so far this year.

"They are in a very high risk job. In 2013, we were more than double in the number of fatalities for tower related incidents than we were in 2011 and 2012 combined," said Moon.

This isn't the first time Wireless Horizon employees have been killed. According to http://www.wirelessestimator.com/breaking\_news.cfm, in 2005, an Illinois technician was killed after falling 120 feet. Wireless Horizon was fined \$1,500.

And in West Virginia, five people have died on or around cell phone towers in the past eight months.

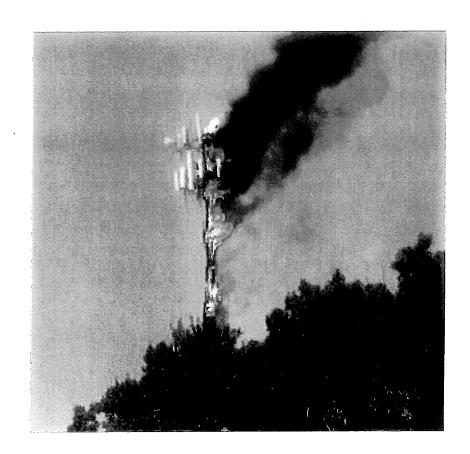
Their deaths are attributed to towers collapsing and equipment failures, according to http://www.wvgazette.com, a West Virgina online newspaper.

\*There isn't a specific cause that we can say but they are all preventable, should be preventable, if employers would just simply take a few extra moments and a few extra precautions to check and see what they are doing," said Moon.

Moon told 13 News they had investigators on site Wednesday near highway 16 and Rock Creek Road where the incident happened. He said the investigation could take up to 6 months. Violations could mean a fine anywhere from \$7,000-\$70,000.



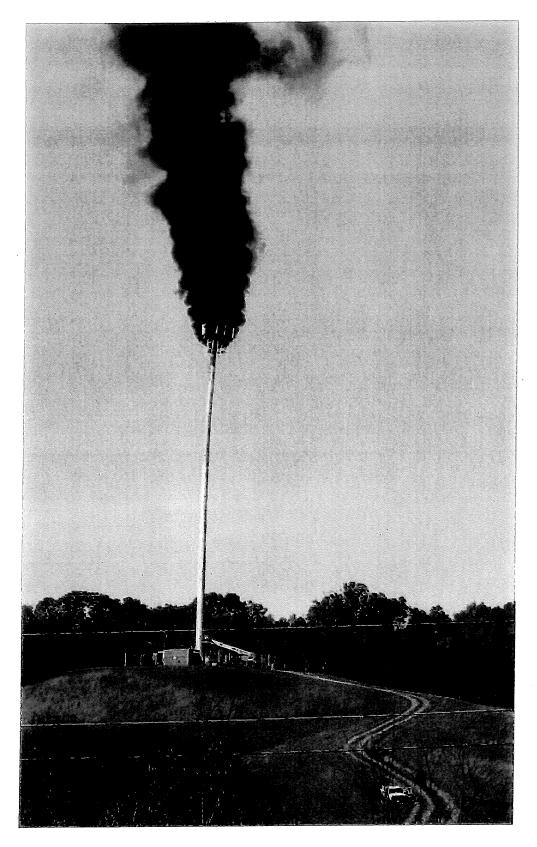
Wellesley, MA January 2009



Philadelphia, PA June 2013



Montgomery MD June 2015



Greenville TN November 2014



Lilburn, GA December 2011



Newport, VA June 2015



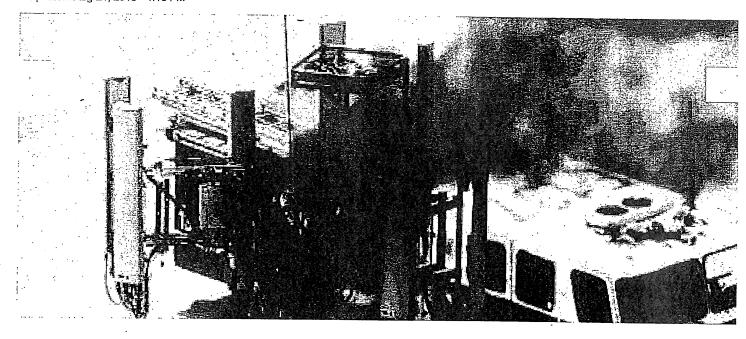
Not Now

122



## Cellphone tower catches fire in Sanford

Updated: Aug 21, 2013 - 4:15 PM





SANFORD, Fla. - A cellphone tower caught fire Wednesday in Seminole County, according to fire rescue officials.

The fire happened on Historic Goldsboro Boulevard while cell tower crews were doing welding work, officials said.

Officials said there were four employees working on the tower at the time of the fire, and one off-site.

"They (workers) got down before we even got fire crews on the scene," said Sanford Fire Chief Tim Robles.

They were adding shaft and phalanges, fire officials said.

The workers realized they had to get down fast. They didn't have time to lower the bucket so they secured it and got down on their own.

Businesses were evacuated and roads within a 170-foot radius of the 127-foot tower were closed.

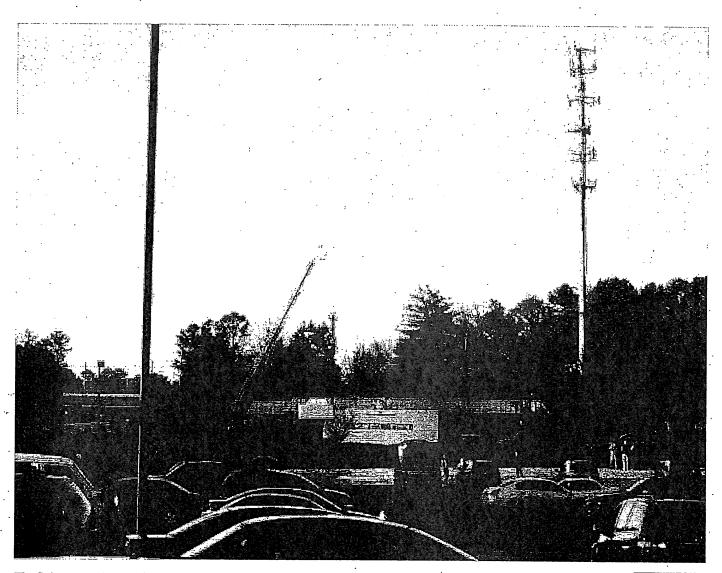
The city fire marshal said the heat made the metal expand, causing the tower to lean southward and said there was concern at one point that the tower would fall.

Once the fire was watered down and the metal cooled, it amazingly righted itself, the fire marshal said.

https://www.gwinnettdailypost.com/archive/cell-tower-fire-closes-rockbridge-road-evacuates-day-care/article\_c799bdd9-1162-52a6-8cd7-7784653883ae.html

## Cell tower fire closes Rockbridge Road, evacuates day care

Josh Green Dec 1, 2011



Firefighters work to extinguish a fire at a cell phone tower at Rockbridge and Lilburn-Stone Mountain roads near Lilburn on Friday.

Buy Now







ON AR NOW

THE SEAN HANNITY SHOW

3 PM - 6 PM (EDT)

There are currently no traffic incidents.

LISTEN NOW

TRAFFIG >>

. INGIDENTS TRAVEL TIMES

CERENT COMMITTEES
Parely Cloudy, H 92° L 77°

HOLYNG

Partly Cloudy, H 92° L 77°



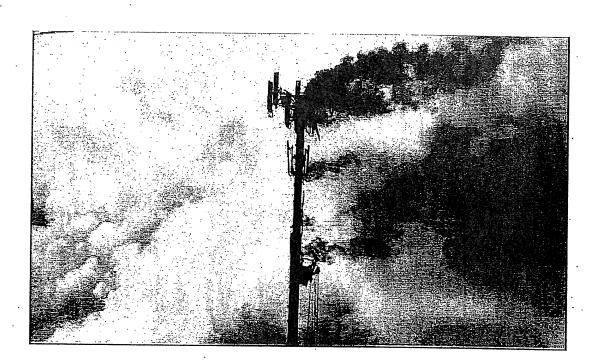
ATTENOIN

Sct Thunderscorms, H 89° L 76°

LISTEN

THE LATEST NEWSGAST

LOCAL



CELL PHONE TOWER BURNING, COULD FALL

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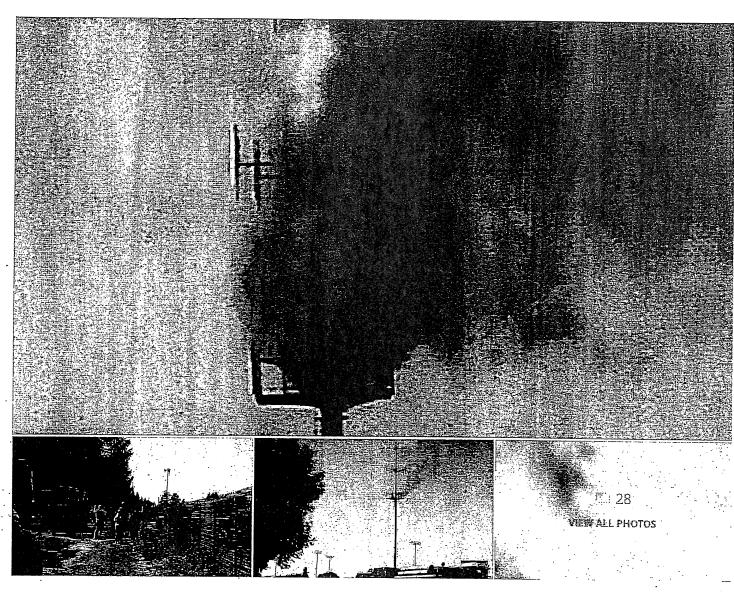
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## Cell tower fire near Thurston High sends up smoky plume

by News Staff Saturday, September 13th 2014





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## NJ Cell Tower Leans Dangerously After Cables Catch Fire: Cops

Published May 16, 2013 at 11:59 AM





A cell phone tower caught fire in New Jersey Thursday morning, prompting the structure to lean dangerously to its side, police said.

Police said the cell phone tower tilted five or six feet to one side after its cables caught fire.

The tower is on the edge of the fire department's academy in Middletown.

The leaning tower is not close to any buildings, any authorities are trying to determine if they can upright it or it needs to be removed.

-Brian Thompson contributed to this report

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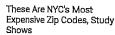


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# UPDATED: Cell Tower May Collapse After Fire

Tom Sofield June 21, 2013

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Friday, 1:48 p.m.:

Residents of the Bensalem Woods complex remain out of the their homes due to safety concerns, Bensalem police say.

PECO crews were called to the scene to de-energize electric service to the tower.

As of 1:45 p.m., the tower is still standing, but it is leaning over the Public Works facility.

Thackeray Crane representatives are at the scene to see what can be down with the leaning tower.

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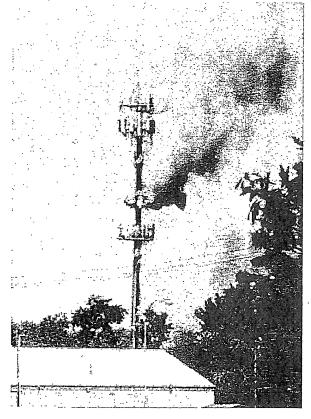
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Credit: Twitter.com/Mz Erica7801



Credit: John Buczek







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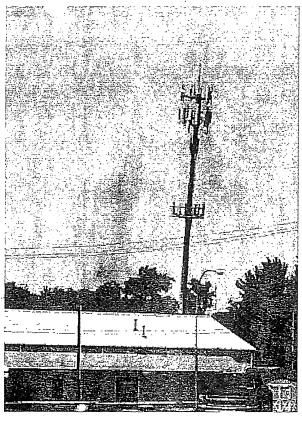
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Langhorne Manor

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Credit: Neal K Sanderson/Submitted

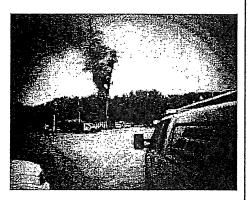
More to follow.

#### Original story:

A cell phone tower off Byberry Road at the Bensalem Township Public Works Complex is reported to be on fire and may collapse, according to reports.

The tower is leaning and officials could be heard on the scanner order evacuations for the Bensalem Township complex and nearby

Bensalem



A photo of the fire, Credit: Twitter.com/Bensalem\_Fire

Woods housing complex.

According to NBC 10, the township's Public Works manager confirmed the tower may fall on their facility.

Photos from the scene show smoke and flames billowing from the tower. A fire official said the tower was "well involved."









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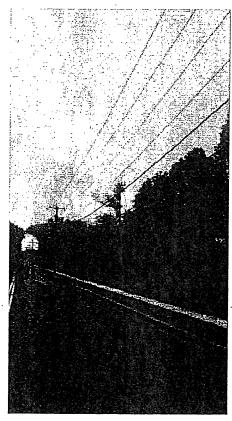
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Firefighters ...ere heard on the radio staging crews in preposition for a possible collapse.

Emergency crews responded to the scene just after 11 a.m.

Bensalem Public Safety Director Fred Harran said on 6abc's noon newscast that crews were working on the tower around the time the fire is believed to have started.



Credit: Chris Doster

Alleged Arsonist Firefighter Charged in More Blazes June 1, 2013 In "Cops, Courts and Fire"

UPDATED: SWAT Standoff Escalated After Man Shot At Officers, Cops Say December 20, 2014 In "Cops, Courts and Fire" Hulmeville Residents Pack Meeting Room For Hearing On Proposed Cell Tower March 12, 2015 In "Government" Fire and Iron Children Without Parents Designer Bag Bingo

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Bucks County Event Venue Show September 19 @ 4:30 pm - 7:00 pm

Toastmasters Meeting September 26 @ 6:45 pm - 9:00 pm

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## Tom Sofield

Tom Sofield has covered news in Bucks County for seven years for both newspaper and online publications. Tom was honored at the Pennsylvania Newspaper Association Foundation's Keystone Press Awards for his coverage of President Obama's visit to Falls Township and his reporting has been featured

D\*

around the globe. When he's not covering news in the area, Tom enjoys checking out the newest restaurants and bars, exploring forgotten places of industry in the area, going to local parks and spending time with his friends and family. If there's one thing you should know about Tom, he is a local news junkie through and through. Email: tom@levittownnow.com Phone: 215-431-1001 
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## LAS VEGAS SUN

## Cell tower fire closes U.S. 95 exit ramp at Jones Boulevard

## By William D'Urso

Published Monday, Feb. 4, 2013 | 2:10 p.m.

Updated Monday, Feb. 4, 2013 | 4:20 p.m.

A fire on a Verizon Communications Inc. cell phone tower has forced authorities to shut down the U.S. 95 exit and on-ramps to Jones Boulevard.

The fire started about 11: 30 a.m. when welders were working to reinforce the structure with additional metal plates, Las Vegas Fire & Rescue spokesman Tim Szymanski said.

Szymanski said the ramps were closed because the tower is leaning toward NV Energy power lines.

He said workers were using a crane to take the tower down in sections that was to take about an hour. He said power in the area was shut down while the work is under way.

The ramp remains closed, and it is unclear when traffic will be allowed through, Nevada Highway Patrol Trooper Loy Hixson said.

Workers from NV Energy and Verizon are on scene, but authorities did not know if power to homes or cellphone coverage had been affected.

Welders were working on tower when the fire started, Szymanski said.

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## Spark ignites cell tower fire

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Posted: Monday, January 6, 2014 10:37 pm

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The Brownsville Herald

A welder's torch sparked a fire to a cellphone tower late Monday morning in Brownsville, Fire Chief Lenny Perez said.

Brownsville police cordoned off the area around the tower near East Polk, East Taylor and East 26th streets shortly after 11 a.m.

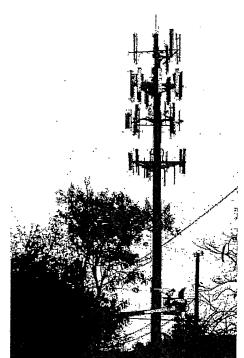
Sparks from the welding ignited insulation on the wires, Perez said.

There weren't any visible flames around noon, but smoke could be seen periodically escaping from the body of the tower as residents watched.

Brownsville Public Utilities Board spokesman Ryan Greenfeld said workers cut power to the high-voltage antenna so the fire department could control the fire.

Some residents lost power but it was restored by 1 p.m., Greenfeld said.

The antenna will be disconnected until it is replaced, he said



Brad Doherty/The Brownsville Herald

A Brownsville Public Utilities Board employee in a bucket truck maneuvers into position to disconnect electrical lines near a cell phone tower at 25th and East Taylor streets that had been on fire. The Brownsville Fire Department said welding sparks ignited the fire.

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Posted in Local News on Monday, January 6, 2014 10:37 pm.

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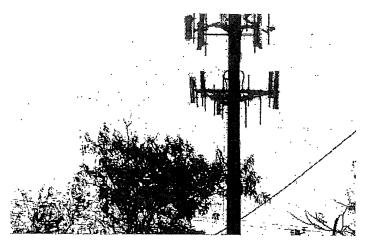
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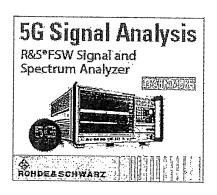
By Jarad Matula on JANUARY 10, 2014

Cell Tower News, Towers, Wireless

Welcome to our weekly collection of all the top cell tower news stories, where we cover global, national, regional, local and distributed antenna system stories. It's the first full week back to work of the new year and it seems that news is happening everywhere. This week's edition is jam-packed with more stories than any previous cell tower news update. A cell tower fire broke out in Texas; Solid and CommScope continue to up their DAS game; and Crown Castle is now operating is a real estate investment trust. But what exactly does that mean? For this answer and more, click on the news stories below and enjoy:

#### National/global news:

- A spark from a welder's torch caused a cell tower to catch on fire in Brownsville, Texas.
- As of Jan. 1, Crown Castle is now operating as a REIT.
- ▼ T-Mobile US and Verizon Wireless will swap spectrum in a deal valued at \$3.3 billion.
- The Federal Communications Commission looks to update RF exposure rules.
- Who's to blame? A year after a tragic tower climber fall, no one is willing to take the responsibility.
- · Read this fascinating article that examines each party.
- AGL posted an article on why this will be a strong year for smaller cell tower companies.
- Vertical Consultants will be participating in a Strafford webinar on Jan. 9 to discuss rooftop cell tower leases.
- Inside Towers explains how recent studies show that broadband and tower jobs are driving employment in this country.





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## Welding Sparked Cell Phone Tower Fire: Official

Officials figured out what caused the fire that left a cell phone tower leaning, ready to collapse By Karen Araiza

Published Jun 21, 2013 at 11:46 AM | Updated at 3:54 PM EDT on Jul 8, 2013



Police tell us two welders were working on the tower when flames erupted almost 80 feet in the air. NBC10's Deanna Durante reports with the latest. (Published Friday, June 21, 2013)



Crews Work to Knock Down Cell Phone Tower



Big Cat Still in Search of Forever



Employee Shoots, Kills Robbery Suspect Inside Metro PCS Store



Toy Company Hasbro Is Saying Goodbye To Plastic

Welders were working 70 feet in the air on a cell phone tower in Bensalem, Bucks County when sparks set off an intense fire ten feet above them. They tried to put it out, but ended up having to race down to get help.

"They rappelled quickly...and called 911," said Fred Harran, Public Safety Director for the township.

The fire spread quickly and left the tower, which stands nearly 10 stories high, leaning over precariously. Authorities were afraid gravity would win out and it would come crashing down on top of the township's Public Works Building. But there are also homes and an apartment complex nearby. Anyone who could see the tower burning, could also see it bending and swaying from the heat.

"If the tower was to come down instruments on top of the towers could have become projectiles, exploded on crash and shrapnel may have injured kids playing

## THIS AFTERNOON'S TRENDING STORIES





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## NJ Cell Tower Leans Dangerously After Cables Catch Fire: Cops

Published May 16, 2013 at 11:59 AM





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The tower is on the edge of the fire department's academy in Middletown.

The leaning tower is not close to any buildings, any authorities are trying to determine if they can upright it or it needs to be removed.

Brian Thompson contributed to this report

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# Cell phone tower near Heritage High School catches fire

POSTED 1:00 PM, JUNE 16, 2015, BY BECCA MITCHELL, *UPDATED AT 04:13PM, JUNE 16, 2015* 



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**W** VIEW GALLERY (4 IMAGES)



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# Osprey nest, electrical problem sparked Poulsbo cell tower fire

POULSBO — An osprey nest and an electrical malfunction ignited the cell phone tower fire that closed down State Route 305 for 12 hours Monday in the Lemolo area. Kitsap County Deputy Fire Marshal Tina Turner said an electrical malfunction at a lighted beacon on top of the 150-foot tower caught the bird's nest on fire before 4 a.m. Monday. Turner said the birds likely damaged the beacon or its 110-volt power wire while building their nest, contributing to the fire.

By Tad Sooter

Tuesday, June 21, 2011 9:22pm | NEWS NORTH KITSAP



POULSBO — An osprey nest and an electrical malfunction ignited the cell phone tower fire that closed down State Route 305 for 12 hours Monday in the Lemolo area. Kitsap County Deputy Fire Marshal Tina Turner said an electrical

malfunction at a lighted beacon on top of the 150-foot tower caught the bird's nest on fire before 4 a.m. Monday. Turner said the birds likely damaged the beacon or its 110-volt power wire while building their nest, contributing to the fire.

The fire spread from the top of the tower down through its hollow interior, burning through electrical cable insulation, Poulsbo Fire Battalion Chief Bruce Peterson said. The tower was glowing red nearly to its base when fire crews arrived. Firefighters allowed the fire to burn out on its own.

The tower leaned precariously, raising concern it could fall across the highway. The state Department of Transportation closed both lanes of SR 305 and detoured traffic through Lemolo. Verizon, which operates the tower



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## Cell phone tower to be taken down following fire

NEWS | Dec 02, 2011

By Alexis Stevens, The Atlanta Journal-Constitution

NONE — The engineers and owners of a cell phone tower in Gwinnett County that was damaged by fire will begin the process of taking it down Saturday, authorities said.

Fiber optic cable on the tower caught fire Friday afternoon, forcing road closures in the Lilburn area.

A telecommunications company was welding on the 150-foot tower, in the 500 block of Rockbridge Road, when the fire sparked shortly before 3 p.m., according to Capt. Tommy Rutledge with the Gwinnett County Fire Department.

After the fire was extinguished, fighters remained on the scene for several hours and were wetting down the area around the tower in preparation for any falling embers or the possibility of the tower falling, Rutledge said. The tower was leaning slightly and firefighters created a "collapse zone" in the event it falls, he said.

Rockbridge Road was temporarily closed between Arcado Road and Lilburn-Stone Mountain Road while firefighters battle the blaze, according to Cpl. Jake Smith of the Gwinnett County Police Department. Miller Road also was shut down at the intersection of Lilburn-Stone Mountain Road, Smith said.

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A crew was dispatched to the scene to cut the power supply to the tower, Rutledge said.

Five homes and a daycare center were evacuated as a precaution. About 20 children and 10 adults were moved to a parking lot across the street, away from the hazardous area, Rutledge said.

Bethany Lee told the AJC her home was one of those evacuated. She and other neighbors were concerned about the possibility of the tower falling, she said.

"I am amazed that it did not collapse," Lee said. "That was our biggest worry because all of our homes would have been in grave danger."

No injuries were reported.

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## Fire in Pr. George's Cell Phone Tower Extinguished

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By Ruben Castaneda Washington Post Staff Writer Friday, April 14, 2006; 2:42 PM

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Prince George's County firefighters this morning extinguished a fire that broke out in a cell phone tower in Temple Hills where contract workers were applying additional support beams, a fire department spokesman said.

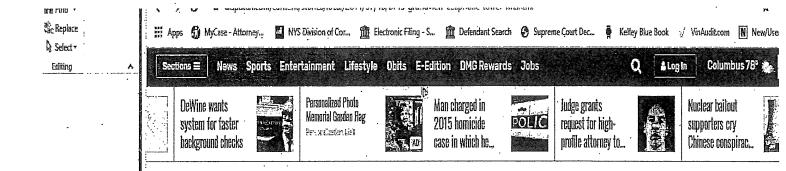
The fire ignited around 11:10 a.m. in the 5300 block of Beech Place, said Mark Brady, chief spokesman for the county fire department. Contract workers were using a welder to apply the support beams, and plastic pipeway inside the tower caught fire, Brady said.

It took county firefighters about a half hour to put out the blaze, Brady said. Firefighter used a 100-foot tower ladder to help extinguish the blaze. Fire and heavy smoke was visible from the top of the tower to about three-quarters of the way down, he said.

Active: themseld The tower at one point leaned to one side, and about a dozen workers from a nearby waste management company were briefly evacuated, Brady said.

After the tower cooled, it straightened out, Brady said. The tower, owned by the cell phone company Sprint, sustained about \$75,000 in damage, and Sprint officials said they will replace the tower, he said. No injuries were reported.

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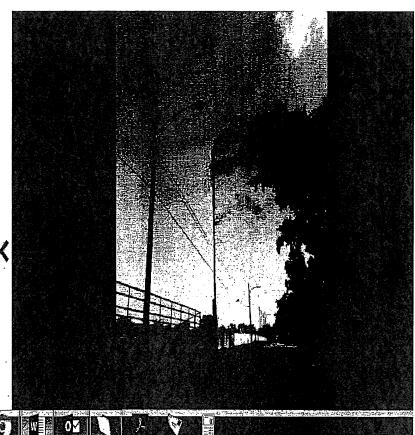


# Cell phone tower catches fire in Grandview



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## Maryland Cell Tower Destroyed by Fire

The leaning tower straightened up after it cooled down.

**APRIL 14, 2006** 

Prince George's County firefighters battled a blaze at a cell phone tower in Temple Hills Friday morning.

Units were called to the 5300 block of Beech Place just before 11 a.m. for a 125-foot tower on fire and leaning.

"People see it, and they see this large, humongous metal structure, and it's on fire," Mark Brady, of Prince George's County Fire and EMS. "And the only thing combustible about it is the wiring and the conduit inside of it, and that's exactly what was on fire."

According to the fire department, contractors doing welding work accidentally ignited conduit and wiring inside of the tower shaft. The heat caused the tower to lean, and a waste management company was evacuated.

Authorities said the fire was extinguished in about 35 minutes, and once the tower cooled down, it moved back into a vertical position.

The tower, which is owned by Cingular, was declared a total loss, and the integrity of the tower was compromised, so the tower was scheduled to be dismantled. A mobile tower will be set up until a new permanent structure can be built. Cell phone service may be spotty in the area until the mobile tower is erected.

Damages from the fire are estimated at \$75,000.

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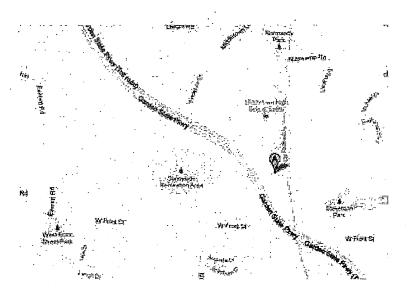
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**НТИОМИОМ** 

# Update: Cell tower fire unrelated to Middletown police communication interruption

Posted May 16, 2013



Middletown police are operating their radios on a secondary frequency after a fire at a cell tower on Normandy Road knocked out communications.

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### By Ashley Peskoe | NJ Advance Media for NJ.com

**MIDDLETOWN** – Authorities have determined the cell tower fire on Normandy Road was unrelated to the police department's main radio channel going down.

The fire, which has since been extinguished, started around 11:20 a.m. on a Normandy Road cell tower that crews were working on, police said.

The Middletown Police Department's main radio frequency went out shortly after, and was originally believed to be caused by the fire. However, police said at around 2:20 p.m. that they determined the department does not have any equipment on the cell tower and that the radio problem is unrelated.

Police are still working to determine what's wrong with the main radio channel and are operating on a secondary channel. The department's phones are also working, police said.

Editor's Note: This story was originally published at 12:49 p.m.

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## An Analysis of Cell Tower Ice Falls

(www.symdesign.us/icefall)

Dr. Dennis L. Rogers\*

April 16, 2013

Abstract: The following is an estimate of the effects of ice falling from cell towers. The velocity of impact and distance of impact from the tower are calculated for the type of ice fragments expected due to freezing rain on the flat surfaces of the tower and antenna structures. These calculations are not intended to be comprehensive but do show the magnitude of effects to be expected.

Introduction: Freezing rain can cause ice to build up on on the flat surfaces of the antenna elements arrayed around a cell phone tower and also on the tower itself. The photo to the right shows such an antenna array. Since these surfaces are oriented vertically one would expect the ice to form primarily in almost flat sheets oriented vertically to the ground. The thickness of these sheets could be up to 6 cm thick due to freezing rain. In what follows I will consider the fate of such a sheet of ice that has detached from the cell tower surface. This could be due to heat from the antenna currents melting a thin layer next to the tower or antenna element. Indeed such ice falls have been observed.

**The Physics:** The sheet of ice will be subject to two forces: the downward force of gravity and the force exerted by wind resistance. The force of gravity is constant and equal to:

Cell Phone Tower Antenna array in Kent NY.

Eq 1 
$$F_{grav} = Mg$$

where  $g=9.8 \text{m/s}^2$  is the acceleration of gravity, and M is the mass of the ice sheet in kg. In what follows I will assume the use of MKS units in the calculations.

The force due to wind resistance depends on the actual geometry of the piece of ice but is roughly proportional to the area exposed to the wind, A, the square of the velocity, v, at which it falls and the drag coefficient, C<sub>d</sub>, which depends on the exact shape of the ice fragment. Using the EIA-222-C standard for calculating wind forces on antenna structures, the wind force can be written:

Eq. 2 
$$F_{wind} = F_0 A v^2 C_d$$

where 
$$F_0 = 0.26 \frac{nt - s^2}{m^4}$$

No Wind: The simplest case is where there is no wind blowing. The wind resistance is then only due to the velocity at which the object is falling. The downward acceleration, a, is then given by:

Eq. 3 
$$a = \frac{dv}{dt} = \frac{F_{total}}{M} = \frac{-Mg + F_0 Av^2 C_d}{M} = -g + \frac{F_0 Av^2 C_d}{M}$$

For the thin sheets oriented vertically, the second term, the wind resistance force, will be negligible and the ice will fall primarily due to the force of gravity. The cases in which the ice sheet is not oriented vertically will not be considered. Assuming a tower height of 50 meters (about 150 ft) and only gravitational forces, the ice sheet would reach a velocity of 31 m/s or about 67 mph before hitting the ground. Assuming the flat surfaces of the antenna structures are 1 meter sq in size and that the ice is 6 cm thick this would result in a piece of ice weighing approximately 54 kg (119 lbs) striking into the ground with a speed of 67 miles per hour. Since the wind resistance is negligible for vertically oriented sheets, this speed will be independent of the size of the ice sheet.

With Wind: With wind, of course, the ice can move in the direction of the wind before reaching the ground. A sheet of ice can experience considerable force from the wind, especially if the flat side of the sheet is perpendicular to the wind. In this case there is an equation of motion for both the vertical direction and the direction in which the wind is blowing. Vertically the equation is the same as in the no wind case:

Eq 4. 
$$a_z = \frac{dv_z}{dt} - g + \frac{F_0 A v_z^2 C_d}{M}$$

while in the direction of the wind:

Eq 5. 
$$a_x = \frac{dv_x}{dt} = \frac{F_0 A (v_w - v_x)^2 C_d}{M} - \frac{F_0 A v_x^2 C_d}{M}$$

where  $a_x$  is the acceleration in the direction of the wind,  $v_w$  is the velocity of the wind and  $v_x$  is the velocity of the ice in the direction of the wind. The first term is the force on the windward side of the sheet and the second term is the force on the opposite side of the sheet due to normal wind resistance. The amount the ice travels in the direction of the wind depends on the thickness of the sheet, with thinner sheets traveling further. These equations have been solved to determine the amount of travel in the direction of the wind that the ice sheet would travel before impacting the ground. Again assuming a 1 meter-sq sheet, the figure below shows the distance from the tower the ice sheet would fall for four different thicknesses and weights:

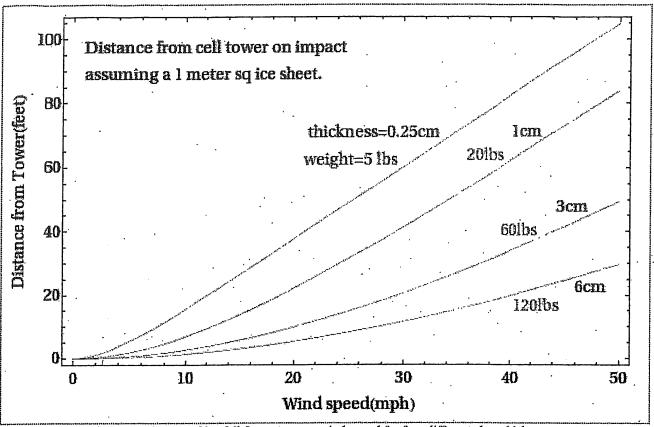


Figure 1. Distance of ice fall from tower vs wind-speed for four different sheet thicknesses

As in the no wind case, the ice sheet would be traveling at approximately 67 mph on impact. Obviously, thinner sheets can travel further from the tower. Note also that, since the weight of the sheet is proportional to it's area, the distance it falls from the tower will be approximately independent of it's cross sectional area.

Summary: This analysis has shown that for one case, that of thin sheets of ice falling from the vertical part of the antenna structures, the ice fall can be a dangerous problem with the ice fragments weighing over a hundred of pounds impacting the ground at almost 70 mph. It also shows that wind conditions can cause these fragments to fall as much as 100 feet from a 150 foot tower with smaller, thinner sheets falling the furthest distances. Of course, as the photo to the right illustrates, in reality the problem can be more complex with the ice fragments being composed of a combination of both snow and ice and the ice build up being more extensive than envisioned in this analysis with possibly even more severe consequences. Therefore care must be taken in positioning these towers to place them sufficiently distant from other structures and places where people may live and work.



\* Dr. Rogers received his Phd in theoretical solid stated physics from the University of California at Davis in 1977. Since then he has worked at IBM Research in Yorktown Heights NY for 27 until 2005. Since then he has formed the company Symbiotic Designs and is developing cell phone applications and energy saving devices.



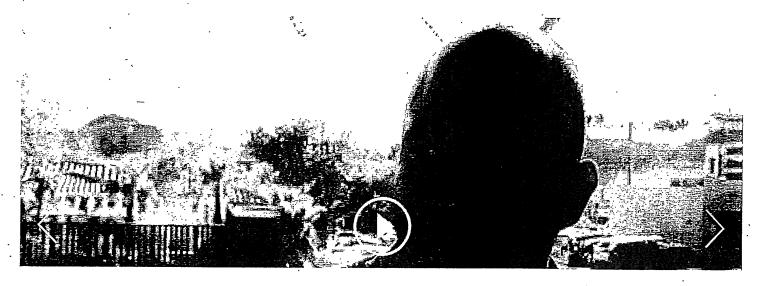
# Decorative Frond Falls From Palm Tree Cell Phone Tower, slices through man's car

Posted: Nov 16, 2012 10:28 AM MST Updated: Aug 23, 2016 02:20 AM MDT

ABC-7's Matthew Smith Reports on a decorative frond from palm tree cell phone tower striking a car while a man was driving. From February 2012.

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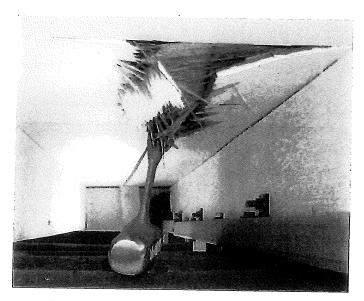


Figure 2 - Hammer Fall from Tower

In order to protect the public, a radial "fall distance" is generally specified from the tower with respect to public access areas. This radius should be flexible based upon circumstances (e.g. the nature of the land and the likelihood of public egress), but it should be certified by a competent engineering study.

Tower structures are specified by the industry-developed TIA/EIA 222-F standard; this is the only "complete" standard with respect to towers in that it deals with all manner of load, ice and wind conditions. The EIA-222 standard, which is periodically updated (the current revision is "F", the next revision, due next year, will be "G"), should be utilized by engineering personnel to ensure the safety of the public, since they are more rigorous than the corresponding BOCA or Civil Engineering standards which do not specifically refer to tower structures.

Specifying other standards in addition to EIA can create conflicts. For instance, the EIA standard calls for a two hundred percent safety margin for some tower components. The corresponding structural standard permits a safety factor of one hundred sixty percent, and in some cases, only one hundred twenty-five percent. The single exception to this rule are the standards promulgated by Wisconsin DILHR, which are designed to work in tandem with EIA-222, and result in a new structure which is approximately 30% stronger than would otherwise be the case. This is good for a new structure, but the DILHR rules also conspire to reduce the number of additional colocated carriers which can be placed on *existing* structures, thereby aggravating the site shortage referred to in Section 1.2.

An important issue with respect to tower safety is ice loading. Typically, cell towers are designed to survive winds of 73 miles per hour with ½" of radial ice. While this specification does not violate the EIA standard, it represents a set of conditions which has been realized more than once within the last 20 years. However, it is precisely these types of overstress conditions which are contained within the 200% EIA and 30% DILHR safety margins. For properly

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