

# Wade's Notes September 5, 2015

---

I just want to keep YOU up to date! .....	1
Don't forget! .....	2
Wi-Fi, LTE-U and more! .....	2
Safety Funding Available! .....	3
Verizon Offers LTE-Broadcast at Indy Race! .....	3
Update on 5 climbers that died in car crash!.....	3
Sadly, another Death in the Industry.....	3
Carriers Deployment.....	3
Sprint News.....	5
Jobs, Jobs, Jobs.....	5
The 600MHz Auction Made Simple .....	5
Vegas Smartphone Tracking .....	5
5G News .....	6
Random News .....	6
Commentary: .....	8
A Few Quotes:.....	9
Support the Hubble Foundation!.....	9

## **I just want to keep YOU up to date!**

I thought I would put together some news that I got this week to keep all of you up to date. I am putting this on a podcast for you as well, [listen or download here](#). I would really be thankful if you would subscribe on [iTunes](#) or [Stitcher](#).

To contact me, just reply to this email, I would be happy to hear what you have to say!

I would like to thank Tower Safety, <http://towersafety.com/>, based in Phoenix, Az. They would appreciate it if you would call them at (480) 313-0678 if you need OSHA training, tower safety and rescue training. They are developing close out training, drone training (December), and more. Now they are located at a crane yard and have their own tower in their back yard, how cool is that? Call them as soon as you need training! They also consult! By the way, they are a member of NATE and an accredited school.

I have some new blogs coming up this week. I write about the tower climber's #1 problem. I put this together because I thought the problem was safety, what a misconception. I learned it originally back at the TIRAP conference that it's really not safety, but money. Seriously, more tower climbers are worried about their jobs and getting paid than anything else. Contractors align with this as well as employees! Based on feedback and discussion in the industry, it goes like this:

1. Getting paid by employer or customer.
2. Getting expense money. Getting paid for Change Orders.
3. Where will I work next month?
4. Will I get fired/laid off if I say something?
5. Being away from home.
6. Safety!

**Wi-Fi Versus LTE-U:** I also have some posts coming out about the Wi-Fi and LTE-U discussions. I brought this up because it is a hot topic in the industry. There is a battle between the carriers and the Wi-Fi people about whether LTE-U should be allowed in the unlicensed band. I heard on [RCR TV Wi-Fi NOW](#) that the battle rages on. The Wi-Fi people are angry because they are worried about LTE-U tramping on them. The CEO of Bandwidth, David Morken, mentions that he thinks that the Wi-Fi users should be allowed to run Wi-Fi in the licensed bands. While this is funny, they could have purchased some licensed bands and maybe the FCC would let them run Wi-Fi in that band. I would call that WiMAX, but hey, you need to purchase the bands first, like Clearwire did. I am just saying. Don't get me wrong, I love Wi-Fi, I think it's awesome. I also think that LTE-U will be really cool and I am hoping they can coexist together.

### **Don't forget!**

1. [www.Wade4Wireless.com](http://www.Wade4Wireless.com)
2. [Scope of Work Tutorial](#)
3. [Tower Climbing: An Introduction](#)
4. [Tower Worker's Logbook](#)
5. [Tower Worker's Field Aid](#)
6. The Wireless Deployment Handbook should be out soon!
7. Wade4Wireless Membership site coming soon.
8. What are you thinking? [Wade4wireless@gmail.com](mailto:Wade4wireless@gmail.com)

### **Wi-Fi, LTE-U and more!**

**Will the House and Senate ask the FCC to free up more spectrum?**

[http://www.fiercewireless.com/story/report-former-fcc-commissioner-mcdowell-expects-legislation-free-more-spect/2015-09-03?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/story/report-former-fcc-commissioner-mcdowell-expects-legislation-free-more-spect/2015-09-03?utm_medium=nl&utm_source=internal)

**Wi-Fi versus LTU-U** is a fight, but Sprint doesn't care!

<http://www.fiercewireless.com/tech/story/sprint-conspicuously-absent-lte-u-debate/2015-09-03>

**Are you ready to test 3.5GHz?** Google is! [http://www.fiercewireless.com/tech/story/google-applies-experimental-35-ghz-license-kansas-city/2015-09-02?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/tech/story/google-applies-experimental-35-ghz-license-kansas-city/2015-09-02?utm_medium=nl&utm_source=internal)

**Wi-Fi is so angry!** Wi-Fi advocates like LAA, LTE Assisted Aggregation, but hate LTE-U, LTE in the unlicensed spectrum. So much so that they are going to delay the adoption of LTE-U, maybe they will hold their breath until the FCC sees their point! <http://www.rethink-wireless.com/2015/09/01/wifi-3gpp-relations-thaw-lte-laa-lte-u.htm>

## Safety Funding Available!

**Safety Funding provided by OSHA!**  
[http://www.paintsquare.com/news/?fuseaction=view&id=13697&nl\\_versionid=1041](http://www.paintsquare.com/news/?fuseaction=view&id=13697&nl_versionid=1041)

## Verizon Offers LTE-Broadcast at Indy Race!

Verizon runs LTE-Broadcast at the Verizon Indy Car Series on Sonoma, Ca. They call it LTE Multicast. To watch, download the Verizon Indy Carr 15 app. You can watch the race on your compatible device, at the race, from the car's point of view. How cool is that? If you want to see how it works, go to the race on August 30<sup>th</sup>. <http://www.verizonwireless.com/mobile-living/inside/indycar/>

## Update on 5 climbers that died in car crash!

**Update on car crash where 5 climbers died.** All 5 men identified: Apolinar Nunez, 49, Jose Gomez, 53, Santos Vega, 47, Guillermo Chavez, 24, and Felipe Cruz, 48, killed, 2 airlifted after crash between pickup and box truck at Citrus Way and Ponce De Leon Blvd in Hernando County, Florida. <http://wade4wireless.com/2015/07/31/crew-dies-in-car-crash-so-sad/>

## Sadly, another Death in the Industry.

**In Brownsville, Tx, a man fell off a Water Tank while working on an antenna for Orbit Broadband.** <http://wade4wireless.com/2015/09/01/worker-falls-from-water-tower-in-brownsville-tx/>

## Carriers Deployment

**Do you know the steps that go into a wireless carrier deployment?**  
<http://wade4wireless.com/2015/08/31/carriers-wireless-deployment-steps-overview/>

**Does your company have a wireless strategy?** Well who do they want to support? Do they want to partner with a carrier or build out their own system? Do they have any licenses that they can deploy?

Do they want to use Wi-Fi? Will they use LTE-U if the FCC approves of it? What is their target customer? All questions to help with the clarity.

**When do we decommission 2G and 3G?** I think that it's only a matter of time, but they have to go sometime. 3G is going to be the provider of voice and there are so many UE units on CDMA that I don't see it going anywhere for 3 years or so. However, why is 2G still out there? What's up with that? If there is still 2G out there it should be removed in my opinion, at least in North America! Let's move ahead. AT&T set a date to remove 2G by 2017. They still have subscribers on 2G and let me tell you, no one wants to give up their old phones if they work. They don't want to go to a high priced data plan if they don't need it! If 2G will be live until 2017, then 3G will probably be alive until 2020, when 5G is going to be introduced as more than a good idea but as an actual product.

**3 channel carrier aggregation**, how cool is that?

[http://www.rcrwireless.com/20150903/carriers/nokia-networks-teliasonera-demo-lte-a-3xca-tag23?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29](http://www.rcrwireless.com/20150903/carriers/nokia-networks-teliasonera-demo-lte-a-3xca-tag23?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29)

**Syringa Wireless of Idaho is closing the doors!** You don't see too many carriers close their doors. This Sprint partner made the announcement that they can no longer afford to run the system. They were recommending any other carrier to replace them. What a shame!

<http://www.rcrwireless.com/20150903/carriers/another-rural-carrier-bites-the-dust-as-syringa-wireless-set-to-close-at-year-end-tag2>

**T-Mobile to punish hotspot abusers!** [http://www.fiercewireless.com/story/t-mobile-crack-down-customers-who-abuse-mobile-hotspot-data-allowance-tethe/2015-08-31?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/story/t-mobile-crack-down-customers-who-abuse-mobile-hotspot-data-allowance-tethe/2015-08-31?utm_medium=nl&utm_source=internal)

**In Hong Kong there is a company called SmarTone**, a carrier. The CEO is retiring and he gave an interesting interview with some different perspective. It is long, but an interesting read.

[http://www.mobileworldlive.com/ceo-spotlight/ceo-spotlight-douglas-li-smartone/?utm\\_campaign=MWL\\_20150901&utm\\_medium=email&utm\\_source=Eloqua](http://www.mobileworldlive.com/ceo-spotlight/ceo-spotlight-douglas-li-smartone/?utm_campaign=MWL_20150901&utm_medium=email&utm_source=Eloqua)

**Florida gets sued by AT&T!** AT&T is not happy about losing a contract in Florida, so they are suing! Wahhhh! Listen, if I protested every contract that I lost because the RFP favored another company, I could have filled a swimming pool, an above ground pool anyway. Let's face it, that is part of doing business. Who do they think they are? Motorola? (Inside joke here, if you ever competed against Motorola in public safety it seems that they protest any offer they lose in the USA, just a perception of mine, but if you work for Motorola then you enjoy the show.)

[http://www.rcrwireless.com/20150902/carriers/att-protests-400m-florida-contract-awarded-to-rival-tag20?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29](http://www.rcrwireless.com/20150902/carriers/att-protests-400m-florida-contract-awarded-to-rival-tag20?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29)

## Sprint News

**Sprint to deploy in Chicago!** If you're a deployment team in Chicago, then get in tight with Sprint! <http://www.rcrwireless.com/20150901/carriers/sprint-chicago-investment-boosted-to-more-than-1000-jobs-lte-a-still-on-deck-tag2>

**Sprint is #1**, at least at Overland Park, home of the Kansas City Royals!  
[http://www.rcrwireless.com/20150902/carriers/report-sprint-reigns-supreme-in-home-state-stadium-coverage-tag20?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29](http://www.rcrwireless.com/20150902/carriers/report-sprint-reigns-supreme-in-home-state-stadium-coverage-tag20?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29)

**More on Sprint, is the spectrum their only asset?**  
<http://www.rcrwireless.com/20150903/carriers/sprints-ace-in-the-hole-tag4>

**Will Sprint get respect?** [http://www.fiercewireless.com/story/hos-perspective-can-sprint-get-any-respect/2015-09-03?utm\\_medium=rss&utm\\_source=rss&utm\\_campaign=rss](http://www.fiercewireless.com/story/hos-perspective-can-sprint-get-any-respect/2015-09-03?utm_medium=rss&utm_source=rss&utm_campaign=rss)

**Sprint supports Pomona students with \$500K of FREE BROADBAND!**  
<http://www.cnbc.com/2015/09/03/business-wire-sprint-provides-more-than-500000-in-free-broadband-service-to-help-bridge-the-digital-divide-for-pomona-students.html>

## Jobs, Jobs, Jobs

<http://wade4wireless.com/2015/08/28/job-openings-for-osp-engineers/>

<http://wade4wireless.com/2015/08/27/jobs-telforce-group-is-looking-for-15-25-tower-technicians/>

## The 600MHz Auction Made Simple

**Well, not so simple, but this may help.** <http://wade4wireless.com/2015/08/24/what-is-the-fcc-600mhz-auction/>

## Vegas Smartphone Tracking

**What happens in Vegas stays in Vegas!** Well, in the Las Vegas Convention Center Cox will track your smartphone, if you have Wi-Fi and/or Bluetooth on. I have no idea what they do with the data other than use it to find your actual location. They want to create an app that will help you locate places, like the restroom, with directions right on your smartphone. So make sure that if you don't want anyone to know your there, disable your Wi-Fi and Bluetooth!  
[http://www.wirelessweek.com/news/2015/09/las-vegas-convention-center-tries-tracking-smartphones?et\\_cid=4793155&et\\_rid=582570407&type=cta](http://www.wirelessweek.com/news/2015/09/las-vegas-convention-center-tries-tracking-smartphones?et_cid=4793155&et_rid=582570407&type=cta)

## 5G News

**Is 5G too much for humans to manage?** I think that we rely on servers and programs to monitor and correct everything now. We still need to evaluate the data, but let's face it, we need to automate the process. This is not the old days where we put a transmitter in where we need it, now we look at need and budgets and then the design. Then once it's in there is so much that needs to support the system just to make sure it stays on the air, work well, and doesn't cause harm to the other sites around it. <http://www.rcrwireless.com/20150901/opinion/reality-check-managing-network-complexity-from-2g-to-5g-beyond-human-capability-tag10>

**What is 5G?** Who knows at this point? Everyone, especially Nokia, is speculating that it will enhance LTE. I believe the carriers don't want to replace LTE, just do upgrades if at all possible. They are tired of sinking so much money into these networks for new technology. That's the game though, right, build a better network! Nokia is really prepping for 5G! They can't wait!  
[http://www.fiercewireless.com/tech/story/nokia-unveils-programmable-5g-multi-service-architecture/2015-09-02?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/tech/story/nokia-unveils-programmable-5g-multi-service-architecture/2015-09-02?utm_medium=nl&utm_source=internal)

**Nokia pushing 5G mmWave, pretty cool!** [http://www.fiercewireless.com/tech/story/nokia-networks-lobbies-70-80-ghz-bands-mmwave-5g/2015-08-29?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/tech/story/nokia-networks-lobbies-70-80-ghz-bands-mmwave-5g/2015-08-29?utm_medium=nl&utm_source=internal)

**Nokia loves 5G**, they have a 5G partner call "5G Norma". <http://telecoms.com/439371/nokia-reveals-new-network-as-a-service-5g-architecture/>

<http://iteworld.org/news/nokia-networks-unveils-its-programmable-5g-multi-service-architecture-networksperform>

## Random News

**Alcatel-Lucent CEO gets a \$14M bonus!** Can you imagine getting a \$14M bonus for just over 2 ½ years for work? I mean all that after you resign! And he sold the company no less. If you worked for Alcatel-Lucent, did you get a raise and bonus? Can you rely on them every one or two years? It makes me wonder, will the Alcatel-Lucent employees get a bonus this year? That is if they don't get laid off. What a great exit strategy! He gets it in stock over the next 2 years, so he is guaranteed income for the next 2 years! I wonder if any other Alcatel-Lucent employees can get that after they quit?  
[http://www.fiercewireless.com/story/alcatel-lucent-defends-stock-payments-outgoing-ceo-combes-amid-french-criti/2015-08-31?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/story/alcatel-lucent-defends-stock-payments-outgoing-ceo-combes-amid-french-criti/2015-08-31?utm_medium=nl&utm_source=internal)

**AGL Magazine** for September is out now! <http://www.aglmediagroup.com/current-issue/>

**AGL Small Cell Magazine** for September. <http://www.aglmediagroup.com/current-issue/small-cell-magazine/>

**AGL Magazine August** has been out for awhile now, I am so sorry I didn't let people know before now! <http://online.qmags.com/AGL0815#pg1&mode2>

**AGL small cell August.** <http://online.qmags.com/SCM0615#pg1&mode2>

**Who says rural broadband doesn't pay?** Well it's not the some carriers because they are getting a combined \$1.5B of government (our tax) money just to provide it. Let's look at Verizon and AT&T, they are getting part of the pot of gold! This money is coming from the Connect America fund. It's nice to see that this grant money is helping the little guys! To be honest the carriers got the amount based on homes and businesses served. AT&T will get \$427M, Cincinnati Bell will get \$2.2M, CenturyLink will get \$505M, Consolidated will get \$13.9M, Fairpoint will get \$37.4M, Frontier will get \$283M, Hawaiian Telecom will get \$4.42M, Micronesian will get \$2.62M, Verizon will get \$48.55M, and Windstream will get \$174.9M. So if these are your customer and you're in a rural area, get cracking! They need to spend that money! <http://www.mobilitytechzone.com/topics/4g-wirelessevolution/articles/2015/09/01/409272-10-carriers-get-combined-15b-from-fccs-rural.htm>

**The FCC supports broadband expansion!** <http://www.rcrwireless.com/20150902/policy/fcc-continues-push-to-subsidize-broadband-access-tag15>

**Space clean up.** Most satellites just float in space after they have been retired. The often just float there and a group had to keep tabs on them so they know where all the junk is and track it entering back into the atmosphere. Well, a company in Spain has a plan to remove the old satellites from space. The problem with all of this junk is that if it hits another satellite it can cause serious damage to that very expensive tool. Let me tell you, that is a long way for a service call! They basically want to have it reenter Earth's atmosphere so it will burn up. That way it is no longer a threat in space and it burns up coming back to Earth, at least we hope it does. <http://www.cellular-news.com/story/Technology/67993.php?source=rss>

**FirstNet news!** New Jersey is showcasing JerseyNet project in Atlantic City. Where else? Apparently it worked perfectly! Do you think people got luckier in the casinos? I don't know. <http://blog.sevana.fi/new-jersey-firstnet-project-takes-center-stage-in-atlantic-city/>

**Should FirstNet regroup and reboot?** Joe Hanna of MissionCritical thinks so. The problem I see is that they are already years behind. I get it, maybe they should get moving or they should have let the states move ahead when they were starting to years ago. My opinion here, the states should have gotten grant money and they should have been given requirements and then done it themselves. The requirements could have been simple, although nothing in government is simple. I would include, 1) There has to be a common handoff process from state to state, 2) there has to be a common core run by the feds or a way for the states to have all the cores connected, 3) they have to let federal agencies on the system, like the FBI, CIA, ATF, DHL, and so on. They would add a hundred more requirements but I am a fan of deployment. I understand the planning but come on! 5G will be out before they build this system. For more on this follow this link, Joe wrote a very long article, but one I really appreciate! <http://mccmag.com/Features/FeaturesDetails/FID/597>

**IoT news.** Interested in IoT and Enterprise security? Here is an interesting slide show you may enjoy. They provide an overview of IoT and what it is and who it may serve.

[https://www.brighttalk.com/webcast/12853/167973?autoclick=true&utm\\_source=brighttalk-recommend&utm\\_campaign=network\\_weekly\\_email&utm\\_medium=email&utm\\_content=company](https://www.brighttalk.com/webcast/12853/167973?autoclick=true&utm_source=brighttalk-recommend&utm_campaign=network_weekly_email&utm_medium=email&utm_content=company)

**IoT and M2M** – let the machines talk! A company called SIGFOX has a protocol, wait for it, called SIGFOX. This is something that would allow small packets of data talk wirelessly on a dedicated network that is not on the carrier's network or Wi-Fi. Why? To save on battery life and to improve security. The security issue is always something can throw out on a new networks. Let me tell you that if someone can get on the network and has any desire to hack into your thermostat, they will do it. Who would want to hack into your thermostat? Not me, I have better things to so!

[http://www.thenewip.net/document.asp?doc\\_id=717997&site=thenewip](http://www.thenewip.net/document.asp?doc_id=717997&site=thenewip)

### **RCR tells us 3 ways that the industry has changed.**

[http://www.rcrwireless.com/20150901/network-infrastructure/towers/3-ways-the-cell-tower-business-is-changing-tag4?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29](http://www.rcrwireless.com/20150901/network-infrastructure/towers/3-ways-the-cell-tower-business-is-changing-tag4?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rcrwireless%2FsLmV+%28RCR+Wireless+News%29)

### **Commentary:**

**Commentary: This is only my opinion.** Recently a young man died by climbing a tower for the fun of it. I hate that people think they are there for their amusement. It's bad enough that many people getting paid to climb communications towers are poorly trained. Now you have people that think its fun to go up with no gear and act stupid. My hope here is that the police actively prosecute all of these people to the fullest extent of the law. Not because it is trespassing or simply wrong. To show these people that it is against the law and that they could die.

Fences help, they are the first deterrent. I also know on some towers they had the ladders covered with plates and locked to keep people off. Some towers had barbed wire around the legs to keep people off. I think the best thing is to have cameras at every site. Although the owners rarely have anything at the site other than the hardware, so it would be up to a tenant to install the camera and put it in the tower. Say like AT&T, Verizon, Sprint, or T-Mobile. I wish they all would do it just to keep the tower safe. I know they all alarm their cabinets or shelters, but there is not alarm on the tower and I really don't know how you would do that.

So the young man I spoke of, (information here), was a thrill seeker and climbed for fun. Why climb? Apparently it was fun, but now he is dead. It is truly a shame that his family has to live with this horrible thing. This kid could have gotten trained to do this as a career and gotten paid for it! Why didn't he look into that so he could have made money doing something he loved? We may never know why, and now his parents have to bury their son. What a sad story when this kid thought he could defy gravity with any safety equipment.

We see it all the time, these pictures of people doing this. I get that they think it is fun, and it probably is until they get caught or they die.



### **A Few Quotes:**

Remember that happiness is a way of travel, not a destination... Roy Goodman

You have to demand what you really want from yourself—and use your will to hold the image on the screen of your intellectual mind... Sandy Gallagher

I don't think that once you get to one level, you can relax. You've got to keep pushing...Larry Bird

### **Support the Hubble Foundation!**

<http://hubblefoundation.org/>