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Inside Towers

Thursday, February 15, 2018 Volume 6 | Issue 32

Pai: Satellite-Delivered Broadband 'Innovative'

FCC Chairman Ajit Pai is on-board with the concept of satellite-provided broadband services. He's recommending to his colleagues, that the Commission approve such an application from SpaceX to use non-geostationary satellites in a fixed-orbit to expand broadband, both in the U.S. and globally.

He called SpaceX's proposed technology, innovative. "Satellite technology can help reach Americans who live in rural or hard-to-serve places where fiber optic cables and cell towers do not reach. And it can offer more competition where terrestrial internet access is already available," said Pai.

Over the past year, the FCC has approved requests by OneWeb, Space Norway, and Telesat. If SpaceX gets the nod, it would be the first granted to a U.S.-based company for satellite-based broadband.

SpaceX VP Patricia Cooper told members of the Senate Commerce Committee last May, the company plans to build fiber-like services at a lower cost since there would be no negotiating over property costs, and no fiber trenches or actual fiber needed, *Inside Towers* reported. In its application, SpaceX told the FCC it wants to bring its satellites closer to the earth to reduce latency, getting closer to 35 milliseconds.

North Carolina

Phasing In Fiber Networks in Orange County

Officials in Orange County, NC are accepting proposals from broadband providers as the first stage in a $500,000 three-phased project aimed at improving broadband service and expanding the county's fiber network, according to a report from *Chapelboro.com.* Orange County's chief information officer, Jim Northrup, recounted the history and outlined the future of broadband enhancements in Orange County at a Board of County Commissioners meeting in early February.

In 2014, Orange County Information Technologies was brought on to improve broadband service, and, the county successfully launched WiFi-to-Go at the local library and a free public WiFi network, Northrup reminded Board

members.

In 2016, CenturyLink provided estimates to the county for expanding their fiber plant, which Northrup supports, according to *Chapelboro.com.* To this end, Northrup is discussing fiber plant and other broadband expansion with nearby Chapel Hill and Carboro, as well as other organizations with a vested interest in the project, such as Piedmont Electric and Orange Water and Sewer Authority. “To be talking with them and meeting with them on a regular basis has really proved helpful to understand our strategy and how our strategy will keystone in with theirs also,” Northrup said. Continue Reading

Verizon Will Soon Put Phones on Lockdown

This spring, Verizon will begin selling only locked phones, preventing customers from swapping SIM cards to use devices across different carriers in the U.S. or internationally, reported *CNET.*

Verizon claims the new locking policy will prevent theft since unlocked phones can be resold more easily. According to Tami Erwin, executive vice president of wireless operations for Verizon, "We're taking steps to combat this theft and reduce fraud. These steps will make our phones exponentially less desirable to criminals.”

As the winner of the C Block spectrum auction in 2008, Verizon agreed to sell its phones unlocked under open-access rules set by the FCC. The locking policy appears to violate a section in the network access requirements for Block C, which states the company is prohibited from locking handsets to prevent them from being used on other networks. However, a Verizon spokesman tells *CNET,* the new phone locking policy "is not inconsistent with our obligations under the C Block" because the move is designed to deter theft and fraud.

As of spring 2018, customers with locked devices will need to contact Verizon support to have phones unlocked. However, Verizon will accept unlocked phones from other carriers. The company plans to reveal more precise details about the policy before the roll out.

D.C. Download

Committee Sends FCC Reauthorization to Full House

By voice vote, the House Commerce Committee approved the FCC reauthorization legislative package on Wednesday. The bill now goes to the full House.

New language includes a fix to allow the FCC to conduct more spectrum auctions. It also includes a reserve fund to reimburse broadcasters, including full-power TV stations, TV translators, low-power TV stations and FM radio stations, moving to new channels because of the spectrum repack. None of the categories, except full-power TV stations, were eligible for repack funds before. Congress designated $1.75 billion to reimburse broadcasters; NAB and FCC Chairman Ajit Pai believe it will cost twice that. The measure would also establish an education fund so

stations could tell viewers where the new channels are.

What's not in the text? Mobile Now, sponsored by Senate Commerce Committee Chairman John Thune (R-SD), which would make mid-band spectrum available for 5G by 2020. The House Commerce Committee initially said portions of the measure would be included in the FCC reauthorization, but Chairman Greg Walden said fine points were still being negotiated.

NAB President and CEO Gordon Smith called the legislation addressing the repack funding shortfall "thoughtful" and strongly backs its passage on a matter of critical importance to local media. "NAB is committed to working on a bipartisan basis in both the House and Senate to secure sufficient funding to cover the cost of broadcaster repack relocation costs," Smith said.

Tower Ticker

February 14, 2018 at Close

Symbol	Price	Change	% Change	Low	Volume	High	52 Wk High	52 Wk Low
AMT	135.48	-0.83	-0.61%	132.62	4.83M	135.90	155.28	106.01
AMX	18.69	+0.85	+4.76%	17.74	3.73M	18.81	19.50	12.40
CCI	105.36	-1.00	-0.94%	104.01	2.91M	106.26	114.97	88.54
COMM	38.88	+1.17	+3.10%	37.61	3.56M	39.35	42.75	30.95
CTL	17.58	+0.37	+2.15%	17.01	17.54M	17.83	27.61	13.16
DY	112.96	+3.73	+3.41%	106.77	533.47k	113.52	123.99	73.95
ERIC	6.66	+0.11	+1.68%	6.46	4.49M	6.68	7.47	5.52
FTR	8.23	+0.33	+4.18%	7.76	2.31M	8.38	51.30	6.08
S	5.31	+0.05	+0.95%	5.20	9.38M	5.34	9.44	4.91
SBAC	162.56	+1.14	+0.71%	157.44	1.39M	163.38	177.67	107.30
T	36.41	-0.19	-0.52%	36.11	24.75M	36.77	42.70	32.55
TMUS	58.62	+0.93	+1.61%	57.06	6.44M	58.80	68.88	54.60
UNIT	15.07	+0.17	+1.14%	14.49	2.36M	15.12	29.65	13.81
VZ	49.51	-0.57	-1.14%	49.32	17.47M	50.10	54.77	42.80
ZAYO	36.18	+0.63	+1.77%	35.18	1.64M	36.26	37.95	29.73

Real-Time

USA TELECOM insurance services
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Zoning & Moaning

California

Activist Group, 17,000 Strong, Battles Radio Tower for a Decade

For over a decade, the 17,000 residents who call themselves Citizens for Preservation of Rural Living (CPRL) have been engaged in a protracted legal battle with the Lazer Broadcasting Corporation over the construction of a radio tower above Wildwood Canyon Park. According to a report from *Redlands Daily Facts*, the conflict continues, as CPRL has filed another appeal to the Board of Supervisors' decision to approve a 43-foot monopole antenna with a 100-square-foot equipment shelter on a 38 acre plot of land in November 2017. The new tower would increase Lazer's listener base from 191,000 to over two million people.

The clash began with Lazer's initial request, filed in March of 2009, for a 140-foot tall lattice tower with a 250-square foot accompanying equipment building, as well as a 500-gallon propane tank to power a backup generator, according to *Redlands Daily Facts.* Though the proposal was approved by the Planning Commission, CPRL filed an appeal, citing fears that the antenna would damage the aesthetic beauty of Wildwood Canyon Park, and the appeal was granted. In May of 2010, Lazer filed an amended application, requesting the smaller 43-foot monopole instead. Again, the Planning Commission approved the project in November of 2012, only to face another appeal from CPRL. Continue Reading

Seven New Towers Rile Up Florida Residents

City officials in Broward County, FL are looking forward to more reliable radio communications for emergency responders after the construction of a new $59.5 million radio system is complete, but residents balk at the prospect of seven new towers in the skyline. According to a report from the *SunSentinel,* the 325-foot tall free-standing towers will be able to withstand winds from a Category 5 hurricane. The county's current radio system is comprised of 10 towers, the tallest of which range between 300 and 420 feet.

Two of the new towers will replace smaller towers which were only able to receive, but not transmit, signals. The updated system will allow emergency responders to effectively communicate anywhere in Broward County, including inside buildings. "These are for our first responders to communicate. They are critical infrastructure," Assistant County Administrator Alphonso Jefferson told the *SunSentinel.* Continue Reading

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United Kingdom

Vodafone Brings Better 4G Service to UK Residents Via Mini “Masts”

Vodafone “Mini-Mast”

The UK’s Vodafone, in partnership with CommScope, plans to close coverage gaps with new mini 4G “masts,” reported *PCMag.com*. The telescopic masts extend up to eight meters, can be painted to blend in with their surroundings, and only take six months to construct.

After a successful trial where customers saw data rates of over 200Mbps as well as improved call quality, Vodafone is ready to erect masts wherever they’re needed, especially in countryside communities.

According to Scott Petty, Vodafone UK’s chief technology officer, "We're working hard to connect customers across the UK and our new mini mast will help provide 4G in places where other networks struggle to reach, while minimizing the visual and environmental impact. It forms part of our major investment in our network and services to provide our customers reliable coverage where they live, work and travel."

International

Philippines Ponders Having One Tower Provider

When GLOBE Telecom, owner of half of the towers in the Philippines, said they were considering the divestment of all or part of its cellular tower assets it prompted talks about allowing an independent tower company to be its sole provider of the vertical assets for the country. Currently, the Philippines, with only 16,000 cell sites, (8,000 of which are owned by GLOBE) feels it is woefully behind other emerging markets in telecom infrastructure, according to *Business World.*

Globe President/CEO Ernest L. Cu, said “We have been allocating over 30 percent of our total revenues to capital expenditure for the past five years and this level will be sustained over a period of time. An independent tower company will be a win-win solution.” Continue Reading

Tower Safety

Brought to you by: NATE

Stop Work If You See a Hazard On A Job Site

On a job site where multiple company’s employees work together, each employer is responsible for their employees’ safety and health. If any one employer created a hazard and exposed workers to that hazard, they’re liable. That’s

according to Mark Lies, partner in the Seyfarth Shaw law firm. Speaking during a NATE webinar titled “Disaster Recovery & Employee Safety” on Wednesday, Lies updated attendees on the latest changes to the Occupational Safety and Health Administration (OSHA) regulations.

“We’ve had situations where [while] your employees worked at ground level, a sub employee working above ground level did not have fall protection and fell. That leaves you open to criminal prosecution,” he said. “As far as OSHA is concerned, they’re your employees,” including subs, temporary employees and consultants on the job site.

“Make sure they’re protected against hazards,” said Lies. He also cautioned against trying to tell a subcontractor how to do their job. That makes you their direct employer, with more liability. “If you see a hazard, stop the work. Get them off the tower,” he said.

He suggested walking around the job site before work begins to identify potential hazards and address them. Worker safety training is a must; after an accident OSHA will ask your employees if they had, and understood, such training.

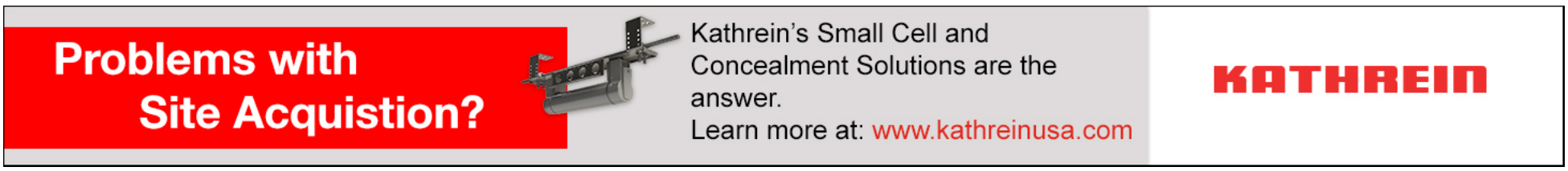
5G

Brought to you by: KATHREIN

Verizon is First to Meet 3GPP Standards in 5G Call

In the race to reach new landmarks in 5G technology, Verizon has been an early leader, working in tandem with other companies to explore 5G’s possibilities. In early February 2017, Verizon successfully partnered with Samsung and KT to complete a 5G video call between Minneapolis and Seoul, South Korea. According to *ZDNet,* Verizon has now reached another milestone as the first carrier to carry out an over-the-air call on a 3GPP-compliant 5G New Radio (NR) system. The test call was initiated in Murray Hill, NJ, using Verizon’s licensed millimeter wave spectrum, Nokia 5G network technology, and Qualcomm’s 5G NR equipment, which incorporated a smartphone design and an optimized millimeter wave RF front-end.

Joe Glynn, Qualcomm’s VP of business development, told *ZDNet*, "The successful completion of standard-compliant 5G NR millimeter wave testing with leading mobile industry innovators such as Nokia and Verizon, prove that we are well on the path to making this a reality.” Since the approval of the 5G NR Standard in December 2017, carriers have hurried to make their mark in the eventual global 5G rollout, and testing is sure to ramp up going forward. “Qualcomm Technologies is committed to supporting the launch of standard-based commercial 5G networks and products beginning in 2019,” Glynn said.



Carrier Coverage

New York

State Partners with Verizon to Deliver Broadband to Rural Homes

Verizon Wireless is set to deploy high-speed broadband in 15,500 homes in rural upstate New York in a public-private project with funding totaling $106.6 million. According to a Verizon press release, $70.7 million comes from the New NY Broadband Program and an additional $12 million comes from the FCC Connect America Fund (CAF), plus Verizon's own investment.

"Verizon is focused on delivering broadband service, and the major economic benefits associated with it, to the difficult-to-reach service areas of upstate New York," said Kevin Service, senior vice president of wireline operations for Verizon.

Verizon will complete the project through a partnership with Corning, Inc. The New York-based company is poised to provide fiber optic cable and associated hardware to expand Verizon's broadband network in targeted unserved and underserved communities through 2020.

Leecia Eve, vice president of state government affairs for the TriState region for Verizon added, "We applaud Governor Cuomo for his leadership in establishing the most robust broadband program in any state in our nation… This historic partnership will expand high-speed broadband access to thousands of New Yorkers and will better connect our communities. This work will be done by our highly skilled and compensated workforce and will enable all of New York State to better compete in the global economy."

Comp Country

Ground Lease Up For Auction in Peru, IL

Cell At Auction LLC is offering on behalf of the City of Peru, Illinois, a 50-year easement of an American Tower ground lease at 1402 11th Street. The initial lease agreement was executed in March 2000, with iPCS. In January 2005, the ground lease was amended with an initial five year term and four additional five year extensions. The tower is located at Washington Park. Included in the offering is an additional site lease executed with Illinois Valley Cellular, which is separate from the AMT ground lease.

There are four carriers on the tower. The annual base rent from AMT has four percent annual increases. The City receives 25 percent revenue share from the second tenant, 33 percent from the third and 50 percent thereafter or the greater of $6,000 from each carrier. There is no right of first refusal by AMT. Buyer agrees to cover the legal costs incurred by the City of Peru up to an amount of two percent of the purchase price to close this transaction.

Details include:

- Sealed Bid Deadline: March 19, 2018
- Current Annual Rent: $69,990.72
- Location: Washington Park, Peru, IL
- Published Reserve: $1,150,000

For further information contact Cell At Auction LLC

Tower-Pro

Claim or Create Your Listing

Tower-Pro.com, *Inside Towers*' companion **Buyer's Guide**, boasts over 3,500 listings in 130+ categories - all of which are relevant to the telecom and/or tower industry. Tower-Pro is a go-to resource for thousands of users each year. You can enhance your listing to make sure your company is noticed first. Below is a chart outlining the differences between a basic and enhanced listing. Seems like a no-brainer to us. An enhanced listing is a nominal $250 fee.

Search for and claim your listing, create a listing or enhance your listing today or contact us for assistance.

BENEFITS	BASIC	ENHANCED
Featured on Tower-Pro.com homepage		✔
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Up to 5 Product images or logos		✔
Full Company description including HTML		✔
Links to social media sites	✔	✔
Additional media uploads		✔

Tower-Pro.com

Inside Towers Impact

Groundhog Phil may have predicted more cold weather, but the reality is, spring will be here before we know it. This year, we are introducing our inaugural Spring Showcase.

What you need to know:

* The showcase will be spotlighting various products and companies.
* It will be prominently featured both in the newsletter and on our website.
* You will receive a PDF to share with your clients
* We will target your message to our 15,000+ followers on social media.

There is limited availability. Please reach out to your sales rep today for more information.

No artwork? No problem. Our in-house graphic designer can create it for you at no charge.

Tower Calendar

See All Calendar Events

IWCE

March 5-9, 2018, Orange County Convention Center - Orlando, FL

The line is blurring between LMR and non-consumer cellular/LTE as more reliable connectivity is necessary for outdoor, indoor, deployable networks, small cells, smart cities and the Internet of Things. Enhance your connectivity and coverage to make sure your network is always available. From the tower and antenna to the individual to machines, IWCE's Network Infrastructure Forum provides the understanding, products and services to assure that your network is always connected, always on.

Since 1977 IWCE has been the go-to event for communications technology for non-consumers. Critical radio systems, handheld devices, spectrum management, backhaul, interoperability, and FirstNet – we've covered it all over the years. With the proliferation of cellular, network connectivity and coverage take on a whole new meaning. Now that the transition from LMR to an LTE infrastructure has begun, IWCE is ready with IWCE's Network Infrastructure Forum.

Who Attends:

- Service Providers
- Engineering / Consulting
- Tower Owners
- Public Safety (Law Enforcement, Fire, EMS, Private Security)
- Government (Local, State, Federal, Military or Government-owned entities like public transportation or utilities)
- Business/Industry/Enterprise (e.g. private utilities, other motor freight/fleet services, aviation/aerospace, security, construction, manufacturing, facilities management, education, retail, travel/hospitality, hospitals)

For more information and to register, click here. Use code ENIF1 to get 20% off any IWCE Conference Package and/or free exhibit hall. Our very own Managing Editor, Jim Fryer will be a panel moderator.

Tower Jobs

Take advantage of this special opportunity to join the *Inside Towers* team. *Inside Towers* has over 8,400 subscribers and over 15,000 social media followers. In the last two years, our newsletter clicks have increased 301% and our web page views have increased 230%. To keep up with it all, we are seeking a Director of Advertising. Unlimited income potential. Location is flexible as the job can be handled remotely. For more details on the position, please email us. The candidate should possess the following attributes:

- At least 2-3 years of sales experience, preferably digital
- Knowledge of wireless infrastructure and financial services is a plus
- Communications or business degree is preferred
- Effective communicator and presenter, written and verbal
- Self-motivated and proactive professional with proven track record of results
- Hard-working, trustworthy individual with positive attitude

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Feature your job listing in our newsletter and on our website.

Tower Trivia

When was the concept of DAS first discussed in writing?

Click here for the answer. Don't forget to submit your trivia questions and be sure to include your source.

Tower Shots

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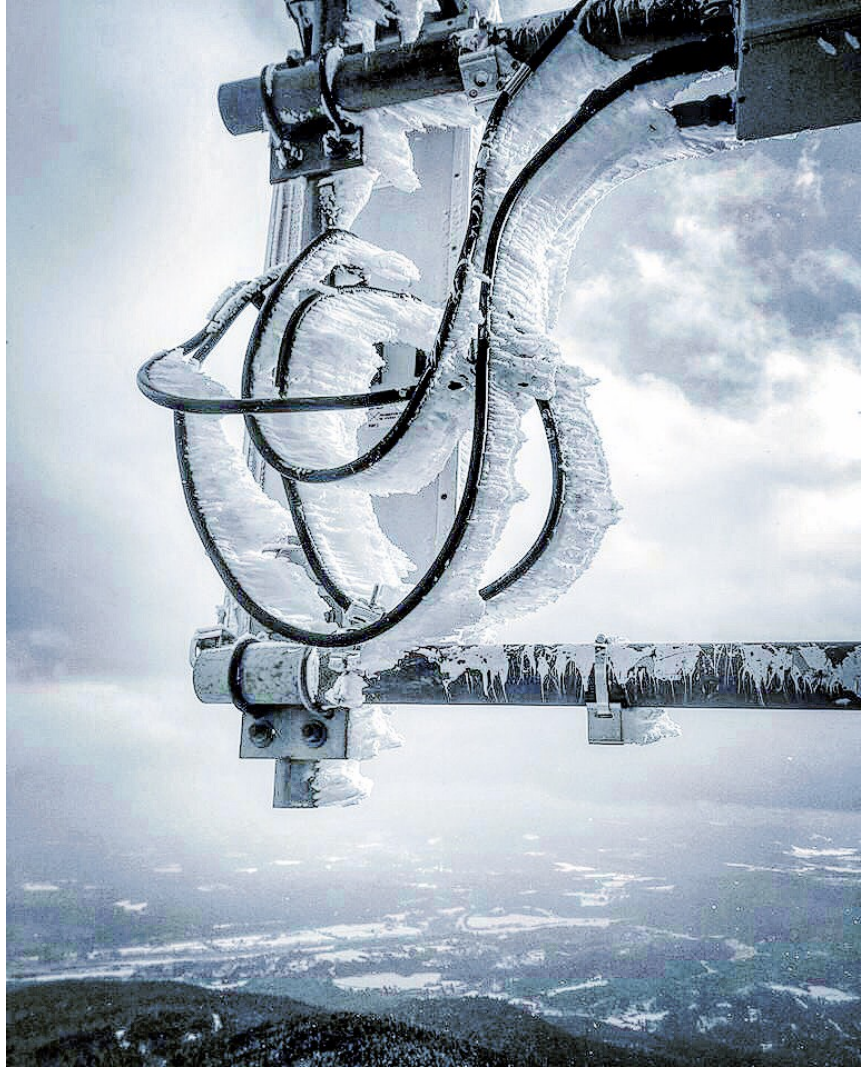

Weathersfield, VT submitted by Scott Smith and taken by Tyler (IG @tyler.mc603).

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