P3 Interference Busters Ready to Tackle IoT Noise

P3 Expands Interference Hunting Team, Footprint to Take on Challenges of Increasingly Converged, Dense Wireless Networks

MORRISTOWN, N.J. (July 25, 2017) Anyone who remembers picking up a neighbor’s conversation on an early cordless phone, understands the concept of radio frequency (RF) interference. In those days interference mitigation was as simple as asking your neighbors to switch their phone to another frequency.

Now, imagine the complexity of today’s highly sensitive, hyper-connected LTE-Advanced and emerging 5G networks, where RF interference may impact everything from the video streaming on your mobile device to your toaster and self-driving car. That’s where the “Interference Busters” of P3 step in; and today, the company announced it is expanding the team of engineers deployed across North America to track down and eliminate RF noise created by a multitude of unlicensed signals.

P3 is a leading global consulting, management and engineering services company and has provided interference hunting services for major wireless carriers in the U.S. since 2010. P3’s interference hunting team specializes in pinpointing and analyzing sources of external RF interference that impact the quality of wireless transmissions on radio spectrum licensed by the Federal Communications Commission (FCC). They use high-tech spectrum analyzers and expert analysis to identify and shut down the sources of interference. Some sources, like the blazing billboards at the Crossroads of the World, are obvious -- others not so much.

“RF interference can degrade or even block cell phone signals and is caused by a wide variety of electronics including home cell signal boosters, florescent light ballasts, electric power transformers and even baby monitors,” said Michael Schwab, vice president of radio access engineering for P3 communications, Inc. “The Internet of Things promises a proliferation of connected devices that will use many different communications protocols on smaller and smaller slices of licensed and unlicensed spectrum. It creates an environment that is ripe for interference at a time when consumers and enterprises are demanding more speed and higher quality from wireless networks.”

But quickly and efficiently locating and characterizing the sources of interfering signals, which often are intermittent, takes more than the right equipment and techniques, said Schwab.

“The third-party equipment we use to analyze spectrum is pretty standard these days,” he said. “Using that equipment in a way that gets to the root of the problem, while saving time and money
for the network operators we support, requires engineering know-how and a great deal of experience. It’s as much art as science. Once we identify the location of the interference, interpersonal skills come into play. We frequently have to knock on doors of private residences, convince the owners to let us into their homes, and then tell them they have to switch off the offending device."

Individuals who refuse to switch off equipment interfering with licensed airwaves are subject to a follow-up visit from the Federal Communications Commission and fines up to $16,000 a day or more than $100,000 an incident.

The extremely high frequency bands being deployed as part of 5G will require P3 to put many more feet on the street as transmission areas shrink and the number of cells grow. P3 is currently looking for engineers to join its interference hunting team, which Schwab expects to double in size over the next year. For more information about P3 jobs visit http://jobs.jobvite.com/p3americas/search?l=Morristown&c=

“Noise and interference can have a negative impact on the range, quality and speed of wireless networks. As multiple IoT radios are co-located in homes and businesses the risk of interference will increase exponentially,” said Schwab. “Our mission is to keep the airwaves free of the noise that threatens to derail the benefits of the connected cars, cities and homes of the future.”

P3 communications provides a broad portfolio of independent technical and management consulting services including network planning, engineering, end-to-end optimization, market intelligence, security, QoS and QoE testing, international benchmarking, device testing and acceptance services. It is recognized worldwide as the completely neutral authority on network quality and is breaking new ground with its proprietary on-device customer experience measurement framework. In addition to wireless carriers and device manufacturers, P3’s telecommunications clients include infrastructure vendors, public safety organizations and regulatory authorities. For more information about P3 visit http://www.p3-group.com.

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**About P3**

*P3 is a global consulting, management and engineering services company, with a rapidly growing team of more than 3,000 consultants and engineers working to develop and implement innovative solutions to today’s complex technology challenges. Offering a broad portfolio of services and proprietary tools to the automotive, aerospace, telecommunications and energy industries, P3 adds tangible value that helps clients succeed at every stage, from innovation to implementation. For more information please visit [www.p3-group.com](http://www.p3-group.com).*