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December 8, 2005

Mr. Fred Campbell
Legal Advisor to Chairman Martin
Federal Communications Commission
Washington, D.C. 20554

Re: *Ex Parte* Communication
WT Docket 05-157
Mesh Networks in the Public Safety Environment

Dear Mr. Campbell:

On behalf of Tropos Networks, we write to thank you for meeting with us to discuss the effectiveness of wireless mesh networks in the public safety environment. In our meeting, a question arose about the extent to which RF signal interference can limit the functionality of a mesh network. We have since consulted with senior Tropos engineers so that we could provide you with additional information on this important subject.

As we indicated, Tropos has not run into any significant interference problems in the approximately 250 networks it has deployed or is in the process of deploying for two principal reasons. First, mesh routers are typically mounted on poles and lampposts at 8 to 10 meters above ground level. They thus avoid the high interference environment typically present at heights above 30 meters. (The pragmatic decision to mount routers at this height not only contributes significantly to the lack of interference, but also helps make the technology more affordable than wired and cell-based technology.)

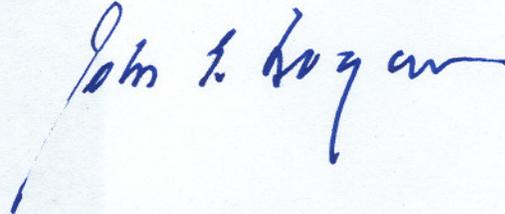
Second, the inherent nature of the technology routes around problems. The technology was designed to thrive in an unlicensed metro scale environment prone to highly variable RF conditions. It was well understood that wireless links are prone to fading and interference, particularly in the public safety sector where transmitters and receivers are often moving. Tropos routers overcome propagation and interference challenges by sampling, many times per second, the performance of neighboring routers. The dynamic character of the mesh technology ensures that a router will select the most effective path available in those rare instances in which interference on a particular other path is detected.

The character of the mesh Wi-Fi technology is premised on IEEE-standards-based collision avoidance, and thus to manage a situation when multiple users seek access to the wireless medium. Because the technology is directed toward ensuring that a communication is transmitted no matter what the environment, there is no system level single point of failure. Unlike the pre-Internet Protocol era where a communication defaulted never to be delivered, a packet-based communication is sent many times until received, even in a crowded environment.

Having been designed to optimize broadband throughput in a dynamic metro-scale Wi-Fi mesh environment, the Tropos technology enables high-performing, safe and secure metro-scale mesh deployments that were previously difficult or impossible.

Tropos Networks appreciates very much the Commission's dedication to public safety communications. Please let us know if you have any additional questions about how mesh technology might be deployed to help advance the Commission's mandate.

Respectfully,

A handwritten signature in blue ink, reading "John T. Boyer". The signature is written in a cursive style with a long horizontal stroke at the end.