



Hogan & Hartson LLP
Columbia Square
555 Thirteenth Street, NW
Washington, DC 20004
+1.202.637.5600 Tel
+1.202.637.5910 Fax

www.hhlaw.com

December 22, 2009

Michele C. Farquhar
Partner
(202) 637-5663
MCFarquhar@hhlaw.com

VIA ELECTRONIC DELIVERY

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Room TWA325
Washington, DC 20554

**Re: Written *Ex Parte* Presentation
PS Docket No. 07-114**

Dear Ms. Dortch:

Polaris Wireless, Inc. (“Polaris”)¹ submits this *ex parte* letter to encourage the Commission once again to address the extraordinary, unique challenges that rural carriers face in deploying improved E911 Phase II location accuracy and reliability technologies.

Polaris continues to work aggressively to improve the performance of its network-based technology and has repeatedly provided the Commission with new test data and other information indicating that certain E911 technologies – including hybrid solutions – have been trialed and are readily available to more rapidly address the current challenges in urban and indoor areas.² Specifically, hybrid systems combining A-GPS with network-based technologies,

¹ Founded in 1999, Polaris is a privately held company that has developed and commercialized a wireless location software technology for the delivery of location services, including E911 Phase II. Polaris’s software products have been deployed extensively since 2003 in 20 GSM and IS-136 networks covering 39 states to meet E911 Phase II emergency call location requirements and enhance customer safety. As deployed, Polaris’s software-only location systems provide E911 Phase II services to about 1,000 PSAPs nationwide and process more than 10,000 emergency call locates daily. In addition, Polaris’s location systems have been deployed on three carriers’ UMTS networks in the Asia-Pacific region for lawful interception applications.

² See, e.g., Reply Comments of Polaris Wireless, Inc., PS Docket No. 07-114, 2-5 (filed Dec. 4, 2009); Comments of Polaris Wireless, Inc., PS Docket No. 07-114, 5-9 (filed Nov. 20, 2009); *Ex Parte* filing by Polaris Wireless, Inc., PS Docket No. 07-114 (filed Dec. 11, 2008) (“Polaris Dec. 2008 *Ex Parte*”); Comments of Polaris Wireless, Inc., PS Docket No. 07-114, 4-9 (filed Oct. 6, 2008); *Ex Parte* filing by Polaris Wireless, Inc., PS Docket No. 07-114 (filed May 16, 2008); *Ex Parte* filing by Polaris Wireless, Inc., PS Docket No. 07-114 (filed Feb. 6, 2008); *Ex Parte* filing by Polaris Wireless, Inc., PS Docket No. 07-114 (filed Dec. 12, 2007); Reply Comments of Polaris Wireless, Inc.,

such as Polaris's Wireless Location Signatures, can be applied in the near term to: (1) realize county-level accuracy in urban areas; and (2) achieve better indoor performance in urban areas.

Despite these ongoing efforts, the proposal for network-based carriers submitted by AT&T, NENA, and APCO fails to account for the key obstacles and technical feasibility issues faced by rural carriers such as GCI Communication Corp. ("GCI"). As Polaris discussed previously in this proceeding, the current proposal, if adopted without modifications, would produce extreme inequities between the treatment of large carriers such as AT&T, which has a network covering many urban and suburban environments, and rural and regional carriers, which have networks that are almost completely contained in challenging environments.³ Polaris therefore continues its support of the efforts and filings of well-informed parties such as GCI, the Rural Cellular Association ("RCA"), the Rural Telecommunications Group, Inc. ("RTG"), and T-Mobile USA, Inc. ("T-Mobile").⁴

Based on the record developed in this proceeding, Polaris continues to advocate the approach it proposed in December 2008.⁵ Thus, it encourages the Commission to adopt modified benchmark milestones, explicitly defined waiver criteria, and special provisions addressing extraordinary challenges faced by some operators in uniquely difficult rural and remote environments, such as those faced by GCI in Alaska.

The Commission should recognize the extraordinary challenges of rural carriers.

As GCI stated in its comments, "[n]othing has changed since the last comment cycle to change the realities of serving [low-density, rural] areas."⁶ Some operators in difficult rural and remote environments face unique obstacles in providing their service, and GCI's operations in Alaska provide a perfect example. As GCI discussed, providing Phase II E911 service in Alaska poses many challenges, including "vast stretches of sparsely populated areas, difficult terrain, line-of-sight barriers, and public property ownership restrictions."⁷ Wireless services are vital to life and public safety in places like Alaska, and providing reliable service there is a tremendous challenge that has been admirably met by GCI and other operators. AT&T's "one size fits all" approach, however, does not match the reality of the wireless industry and E911 deployment; rather, it was "designed so that AT&T can comply given its particular mix of 'hard-to-estimate' and 'easier-to-estimate' cell sites, but without any evidence that AT&T's mix of cell sites is representative of any other carrier's."⁸ Therefore, it is imperative that the Commission adopt special provisions

PS Docket No. 07-114, 6-7 (filed Sept. 18, 2007); Comments of Polaris Wireless, Inc., PS Docket No. 07-114, 6-23 (filed Aug. 20, 2007).

³ Polaris Dec. 2008 *Ex Parte*.

⁴ See, e.g., Reply Comments of T-Mobile USA, Inc., the Rural Cellular Association and the Rural Telecommunications Group, Inc. on the E911 Accuracy Remand, PS Docket No. 07-114 (filed Dec. 4, 2009); Comments of GCI Communication Corp on the 911 Location Accuracy Remand, PS Docket No. 07-114 (filed Nov. 20, 2009) ("GCI Comments"); Comments of T-Mobile USA, Inc., the Rural Cellular Association and the Rural Telecommunications Group, Inc. on the 911 Location Accuracy Remand, PS Docket No. 07-114 (filed Nov. 20, 2009).

⁵ Polaris Dec. 2008 *Ex Parte*.

⁶ GCI Comments at 1.

⁷ *Id.* at 2.

⁸ *Id.* at 5.

for rural areas and other challenging environments, allowing carriers to provide technically feasible E911 Phase II service at costs that fit the needs of their reasonable business models.⁹

Finally, Polaris notes that the AT&T, NENA, and APCO proposal not only fails to address the deployment obstacles faced by rural carriers, it also falls short of achieving readily available improvements in county-level urban accuracy and better indoor performance. A hybrid solution that combines network-based and handset-based technologies is by far the best approach to achieving consistent accuracy. A “one-size-fits-all” standard fails to account for the practical technical realities of providing E911 Phase II service in different environments and the technology solutions best suited for these environments.

Pursuant to Section 1.1206 of the Commission’s rules, I am filing this notice electronically in the above-referenced docket. Please contact me directly with any questions.

Respectfully Submitted,

/s/ Michele C. Farquhar

Michele C. Farquhar
Mark W. Brennan
Counsel to Polaris Wireless, Inc.

⁹ For example, GCI has proposed that the Commission exclude from the interim and final E911 Phase II location accuracy benchmarks (1) boroughs in Alaska where fewer than three cell sites are deployed, and (2) any community or part of a community where at least three cell sites are not viewable to a handset. GCI also proposed that with respect to areas in category (2), Tier III carriers in Alaska be required to measure compliance with the interim and final benchmarks only for those areas within a four-mile radius circle that includes at least five cell sites (where the test location within such circle has a usable signal level greater than -104 dBm to all cell sites within the circle). *See, e.g.*, GCI Comments at 5. Polaris supports GCI’s proposals.