August 15, 2011

VIA ELECTRONIC FILING

Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C.

Re: In the Matter of LightSquared Subsidiary LC Request for Modification of its Authority for an Ancillary Terrestrial Component; SAT-MOD-20101118-00239

Dear Ms. Dortch:

Topcon Positioning Systems, Inc. ("TPS") is leading developer, manufacturing, and supplier high precision GPS, GIS, integrated positioning, motion control, machine control and equipment automation products for use in survey, construction and agriculture. TPS supplies many OEMs, including well known industry leaders such as AGCO and Komatsu, with high precision GPS receivers and technology. As a member of the GPS industry TPS has been, and remains, deeply concerned over the operation of LightSquared’s proposed network. TPS recently participated as a member to the Technical Working Group ("TWG") co-chaired by LightSquared and the U.S. GPS Industry Council ("USGIC").

As a member of the high precision GPS user group of the TWG TPS participated in testing and data collection with LightSquared and other interested parties over the past four months. By this letter TPS joins in the comments of Deere & Company (July 5, 2011, Notice of Ex Parte Presentation), the National Space-Based Positioning, Navigation, and Timing Systems Engineering Forum (“NPEF”) (July 2011, Assessment of LightSquared Terrestrial Broadband System Effects on GPS Receivers and GPS-dependent Applications), the USGIC, the American Agronomy Association (July 27, 2011 Letter), and those others urging rescission of the conditional waiver granted to LightSquared authorizing operation of its terrestrial network.

During the TWG activities TPS engineering personnel had the opportunity to work with peers from various high precision segments, users and manufacturers, including representatives of LightSquared, to conduct tests regarding potential interference of GPS signals by LightSquared’s proposed network. The test results conclusively established that operation of LightSquared’s proposed network would cause substantial interference with TPS’ high precision GPS systems - systems that are used on a daily and routine basis in the agriculture, construction and survey industries.
LightSquared has acknowledged the fact that the operation of its network will substantially interfere with GPS systems and, although it has produced a lengthy “Recommendation of LightSquared Subsidiary LLC”, it has not offered any reasonable solution to mitigate the interference problem as no such solution exists. Its suggestion of limiting initial operation to the lower end of the subject spectrum will not eliminate interference for high precision devices and any suggestion that filters are a reasonable alternative is without merit as there are no known filters in design or existence that could be employed to retrofit existing GPS receivers.

As described by many of those concerned individuals and entities providing comment interference with GPS signals would have a profoundly negative impact on almost every segment the U.S. economy as it has become dependent upon the accuracy and reliability of high precision GPS devices. TPS high precision devices are used in: agriculture to guide equipment and to manage fertilization; in the survey industry to facilitate high precision mapping; and in construction to guide equipment and to provide precise measurement. These systems result in increased safety, efficiency, productivity and environmental protection and are vital to the day to day affairs of the United States and the world. Interference with GPS signals could cripple operations in many industry segments, create significant risks to public safety, and render routine undertakings, economically infeasible. It is imperative that GPS signals be protected from interference.

In conclusion, TPS reiterates its agreement with the recommendation of NPEF that the conditional waiver granted to LightSquared be rescinded as it is clear that operation of the proposed network will interfere with a vital utility used by all segments of the economy and, at this point in time, no reasonable solution exists to mitigate the problem. Should the Commission wish to further explore use of the L-Band spectrum it should thoroughly and deliberately analyze all aspects and potential effects of the proposed use and should do so in a rulemaking process to ensure that the public is given ample opportunity to participate in the process.

Sincerely,

Eduardo Falcon
Sr. Vice President and General Manager
Topcon Positioning Systems