

IB Docket 11109

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 8:51 AM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Anthony J. Gromacki  
M Squared Engineering

Contact Information:

FILED/ACCEPTED

AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE

IB Docket  
11-109

August 14<sup>th</sup>, 2011

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

Subject: In the Matter of LightSquared LLC Request for Modifications of its Authority for an Ancillary Terrestrial Component, SAT-MOD-20101118-00239

Dear Ms. Dorch:

I am writing to express my strong opposition to plans announced by LightSquared to construct and operate 40,000 high-powered broadband transmitters in the satellite spectrum adjacent to the low-powered Global Positioning System (GPS) spectrum.

I am in charge of a Survey Department of a small Civil Engineering Company in Southeastern Wisconsin. Our companies Survey Department relays on the Continuously Operating Reference Stations (CORS) set up and maintained by the Wisconsin Department of Transportation (WisDOT). This System was recently explained to your Department in a Letter dated July 28, 2011 from the WisDOT. I'm quite concerned that if the LightSquared Subsidiary LLC, is allowed to be approved to operate on the spectrum adjacent to ours that they will disrupt our companies Survey operation costing us to replace our current GPS units. Because of our small company trying to compete in the present Economic times this additional cost would prove to be devastating to our small company.

I would like the FCC to perform a study to conclusively demonstrate there will be no interference to GPS reception before LightSquared is permitted to proceed. As an alternative, I request that the FCC require LightSquared to use another spectrum that is not adjacent to the GPS spectrum.

Thank you for your consideration of and attention to these matters and continued commitment to ensuring the GPS spectrum remains fully functional and free of interference for a variety of users.

Sincerely

**Anthony J. Gromacki, PLS**



***M Squared Engineering, LLC***

W62 N215 Washington Avenue  
Cedarburg, WI 53012

**O 262-376-4246**

**M 262-844-4404**

**F 262-375-2274**

**[www.msquaredengineering.com](http://www.msquaredengineering.com)**

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 10:06 AM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Wade Oehmichen  
Wisconsin Department of Natural Resources

Contact Information:

FILED/ACCEPTED

AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE

FCC,

I am responding about your organization authorizing a new frequency for Light Squared. The possibility for frequency interfering with GPS would be a great detriment to our Wetland Surveying practices in Wisconsin. We rely on the WISCOR network to provide high grade error corrections which we utilize during survey work. Without this network we would be forced to purchase ground correction units (which cost around \$25,000 each) and that wouldn't even guarantee accuracy. Please reconsider this LightSquared position.

Sincerely,

*Wade Oehmichen*

Wade Oehmichen

Wildlife Biologist

Wisconsin Department of Natural Resources

TB Docket  
11-109

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 3:52 PM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Eduardo Falcon  
Topcon Positioning Systems, Inc.

Contact Information:

FILED/ACCEPTED

AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE



August 15, 2011

VIA ELECTRONIC FILING

Ms. Marlene Dortch, Secretary  
 Federal Communications Commission  
 445 12<sup>th</sup> 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-2010118-00239

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 know 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.

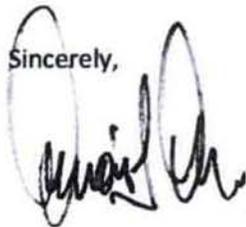
**Topcon  
 Positioning  
 Systems, Inc.**  
 7400 National Drive  
 Livermore, CA 94550  
 Phone: 925 • 245 • 8300  
 Fax: 925 • 245 • 8599



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

TB Docket 11-109

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 4:05 PM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Michael R Powers  
Alliant Energy

Contact Information:

FILED/ACCEPTED

AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE



Alliant Energy Corporation  
1000 Main Street  
P.O. Box 769  
Dubuque, IA 52004-0769

Office: 1.800.822.4348  
www.alliantenergy.com

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth St. SW  
Washington, DC 20554

Regarding LightSquared Subsidiary LLC. Request for Modification of its Authority for an Ancillary Terrestrial Component, IBFS File No. SAT\_MOD-20101118-00239

Dear Ms. Dortch:

I am writing to express my concern and opposition to LightSquared to construct and operate 40,000 high-powered broadband transmitters in the satellite spectrum adjacent to the low powered Global Positioning System (GPS).

The five month study by the technical working group (TWG) conclusively demonstrated that LightSquared plans would cause widespread interference to the GPS system. In effect, it would completely drown out all GPS receivers in the area. I do not have to go into detail with you as to how catastrophic this would be to the GPS industry and those that rely on it for critical day to day operations

I realize LightSquared has made new claims that using the lower frequency band would not cause harmful interference. I don't believe we have enough data to support this claim. Alliant Energy request that the FCC insist on a new study to conclusively demonstrate there will be no interference to GPS reception before LightSquare is permitted to proceed. As an alternative we request that the FCC require Light Squared to use an alternative frequency not adjacent to the GPS system.

Thank you for your consideration and attention to these matters and your continued commitment to ensuring GPS remains a functional system.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael R. Powers".

Mike Powers  
Manager of Telecommunications and Networks  
Alliant Energy

113 Docket 11-109

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 12:19 PM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Tod Griffin  
AgriBusiness Association of Kentucky / KyCCA Program

Contact Information:

FILED/ACCEPTED

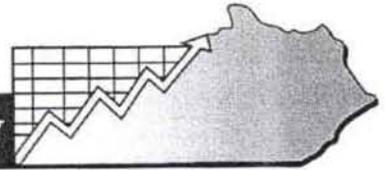
AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE

**AgriBusiness Association of Kentucky**

August 15, 2011

512 Capitol Avenue  
Frankfort, KY 40601  
(502) 226-1122  
FAX (502) 875-1595  
[www.kyagbusiness.org](http://www.kyagbusiness.org)

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

RE: In the matter of LightSquared LLC request for modification of its authority for an ancillary terrestrial component; SAT-MOD-20101118-00239

Dear Secretary Dortch:

The AgriBusiness Association of Kentucky (ABAK) and its affiliate, the Kentucky Certified Crop Adviser Program, appreciates the opportunity to offer comment on the FCC's recent decision to grant a waiver to LightSquared LLC to use its satellite spectrum to operate a high powered wireless broadband network. We have concerns that this decision will cause degradation of the Global Positioning Satellite (GPS) System's accuracy and reliability.

ABAK represents businesses that ultimately provide farm inputs to Kentucky farmer producers. The membership represents companies on all levels of the distribution chain, from manufacturer, wholesaler, distributor, to the retailer level. The Kentucky CCA program represents professional agronomists across the state who provide advice and inputs to farmers.

Kentucky's agriculture industry today reaps the benefits of enhanced technologies not the least of which are communications breakthroughs such as cellular service, broadband connections, and global positioning systems. Because of these technologies today's farming operations are more efficient, more productive, and more environmentally sound.

However, we are concerned with the request by LightSquared LLC to use a system that would be incompatible with current GPS technology and may render the current GPS service ineffective. Millions of Americans depend on GPS technology every day and we cannot afford to jeopardize the important role it plays.

Kentucky is a rural state and our citizens and businesses need new and improved broadband access. We recognize the investment of companies that are willing to come forward with these new technologies and bring them to the marketplace. However, these advancements should not come at the expense of such an important tool in the lives of so many Americans.

We request that the FCC take immediate action to prohibit LightSquared LLC from operating new satellite spectrums near the GPS band unless a comprehensive, public, and impartial evaluation on the impact of other spectrum users can prove that no interference will occur.

Sincerely,

Tod A. Griffin  
ABAK Executive Director  
KyCCA Executive Secretary

"Serving Kentucky Agriculture"

Bucket 11-109

**From:** myIBFS  
**Sent:** Monday, August 15, 2011 6:47 AM  
**To:** Jerry Ma; Gerald Mays; Sarita Kale; Siva Appavu; Andrea Kelly; Stephen Duall; Kathryn Medley; CurTrisha Banks; Stephanie Shieh; Kathleen Campbell  
**Subject:** Pleadings and Comments Notification from MyIBFS

Type of Pleading: LETTER

Date filed: 08/15/2011

Filer Information:  
Christopher E Perreault  
Carow Land Surveying, Co

Contact Information:

FILED/ACCEPTED

AUG 15 2011

Federal Communications Commission  
Office of the Secretary

Proceedings List

File Number	Callsign	Applicant
SATMOD2010111800239	S2358	LightSquared Subsidiary LLC

No. of Copies rec'd 0  
List ABCDE

August 15, 2011

Marlene H. Dortch  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

Re: LightSquared Subsidiary LLC

Dear Ms. Dortch:

I am writing to express absolute opposition to plans to allow LightSquared to construct and operate 40000 high-powered broadband transmitters in the satellite spectrum adjacent to the low-powered Global Positioning System (GPS) spectrum.

It has been shown CONCLUSIVELY that this high-powered system would be a disaster to virtually ALL GPS receivers. This includes receivers in Civil, military, and commercial Sectors, (Aviation, Transportation, Disaster management, Scientific research, high-precision agriculture, road construction, surveying and mapping, just to name a few).

This issue can be resolved by requiring LightSquared to use another spectrum that is not adjacent to the GPS Spectrum.

Thank you for reviewing this issue and your commitment to ensure the GPS spectrum remains fully functional and free of interference for the variety of users who daily rely on GPS to complete their work.

Respectfully,

Christopher E. Perreault, PLS