

The Honorable Julius Genachowski  
Chairman  
U.S. Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Subject: **IB Docket Number 11-109**. FCC File No. SAT-Mod-20101118-00239, LightSquared  
Subsidiary LLC (LightSquared) Request for Modification of its Authority for an Ancillary Terrestrial  
Component

Dear Chairman Genachowski:

Please allow me to introduce myself and indulge a few minutes of your time to address an issue of great importance. My name is Thomas Wilcox. I am a Lead Systems Engineer at General Dynamics Advanced Information Systems in McLeansville, NC. I have been working in the unmanned systems industry for the better part of 14 years, first as a payload designer and now as a systems integrator. Clear, unobstructed access to satellite-based GPS signals is critical to the success of Department of Homeland Security and US Navy Unmanned Underwater Vehicles (UUVs) which play such a crucial role in our nation's current and future defense.

As a member of the unmanned systems community, I am deeply concerned about a current waiver request from LightSquared to operate high-powered terrestrial transmitters on a radio frequency adjacent to the weak satellite-based Global Positioning System (GPS). Independent studies show that LightSquared's terrestrial operations could completely knockout GPS receivers for miles around each transmitter.

Before the Federal Communications Commission grants LightSquared waiver to build tens of thousands of high-powered terrestrial transmitters and use a radio frequency adjacent to GPS, more research and studies must be done.

As you know, all around the world, unmanned systems (air, ground, and maritime) rely on accurate, dependable GPS signals. The lack of a reliable GPS signal poses a serious threat to our public safety and national defense, and the potential expense of retrofitting or replacing affected GPS receivers would truly be an undue burden.

I ask that you take careful consideration of the potential harm LightSquared's proposed plan would have on the emerging field of unmanned systems, not to mention all other users of GPS. Thank you for the opportunity to submit comments for the official record.

Sincerely,

Thomas Wilcox  
Lead Systems Engineer  
Elon, NC