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AUG - 9 2011

Federal Communications Commission
Office of the Secretary

Comment to FCC about LightSquared

SAT-MOD-20101118-00239

<http://licensing.fcc.gov/myibfs/pleading.do>

Results from the Technical Working Group, as well as common sense, tell us that LightSquared's ground-based radio signals (1525 – 1559 MHz) – transmitting at well over a billion times more power than the GPS satellite signals – will disrupt the GPS signals in their adjacent radio spectrum (L1, 1575.42 MHz).

I have worked as a consultant to city and county governments, and private utility companies, helping them use Geographic Information System (GIS) technology, for over 30 years. The basis for locating and mapping the roads, fire trucks, pipelines, land parcels, and environmental habitats that are of concern to my clients - and ultimately to their citizens and customers - is measurement derived from GPS observation. Disrupting GPS would disrupt the very core of our civic institutions and operations.

If LightSquared were allowed to use their part of the spectrum for ground-based cell phone transmission, there are no technical means to insulate nor mitigate the disruption to all GPS users with current technology – and hundreds of billions of dollars have been invested in this technology.

This is a problem that doesn't have to happen. The FCC can rescind its conditional approval of the radio spectrum for ground-based transmission use. As you know, LightSquared originally purchased the spectrum with the expressed purpose of Mobil Satellite Service (MSS), and only recently applied for a conditional waiver to repurpose the spectrum ("modification of its Ancillary Terrestrial Component"). Such a modification would disable a vital national resource. It must be rescinded.

The potential windfall profit to LightSquared's owner, Harbinger Capital Partners, for gaining approval to use this spectrum (perhaps up to \$12 Billion) is insignificant compared to the loss of productivity attributable to high-accuracy GPS reception (over \$96 Billion a year, every year). The FCC could encourage LightSquared to use this spectrum for MSS purposes only, or it could require LightSquared to build its cell phone network using a different spectrum. The current ill-conceived, dangerous, disruptive project must not be implemented.

GIS Consultants

7/27/11

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TB Docket
11-109

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To members of the FCC:

Federal Communications Commission
Office of the Secretary

I am writing to you in concern of the potential adverse affects of light squared technology on current gps signals. In agriculture the current gps signals are used to to reduce input costs for the farmer helping him become more efficient. GPS technology is becoming relied on more and more by production agriculture. Another benefit of this technology to the farmer is very detailed record keeping of all operations done in the field. This helps for a multiude of reasons of knowing your costs, managing risk, and overall management of the farming operation.

I am specifically asking the FCC to throughly test the light squared technology using independent sources. Evaluate these tests and hold light squared technology accountable for any adverse affects caused on the agriculture gps signals. Reserve the right to shut down light squared if it proves to have negative affects on the agriculture gps signal. Please do your due diligence in researching the pros and cons of allowing this technology to use radio bands. Please error on the side of caution in preserving our gps.

A conerned citizen

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FCC,

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Office of the Secretary

It has been brought to my attention that a company called LightSquared will affect my future in farming.

I use GPS when farming to help prevent land erosion, use less fertilizer, chemical, and etc. Without GPS it would be a major economic impact for our farming operation. We use GPS for several reasons. But to make this letter short I will say without it we wouldn't be able to produce the yields and profit that we are accustomed to today.

If we lost GPS not only would I lose my day-time job, but farming would be extremely tough. A decade ago GPS in farming was a luxury, now it is essential as our tractors use it to place our seed and fertilizer in the right location. Without this we would lose lots of money, efficiency, land stewardship/conservation, and more.

While more capacity for wireless broadband services is important, it should not come at the expense of GPS, which is critical to our country's economy.

The results of the testing that were performed at the FCC's request are conclusive - they show that GPS reception would be wiped out by LightSquared's proposed service.

The test results have shown interference to GPS, the FCC shouldn't allow LightSquared to keep trying out modified versions of its plan to use the spectrum near the GPS band. LightSquared's operations and GPS are fundamentally incompatible and the FCC should order LightSquared out of that band.

Please save GPS!

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We have over \$50,000 invested in gps equipment that relies on the same frequency. If this goes through who will be responsible for our losses? I thought it was the duty of the FCC to prevent interferences such as this from happening. Whose interests are being served? Oh and thanks a lot for letting legislation changes go through making use of our private band two way radio frequency illegal. We paid for use of that frequency. Where is our refund? That is going to cost us over \$2000 to replace those radios.

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- 1 The FCC must make clear, and the NTIA must ensure, that LightSquared's license modification is contingent on the outcome of the mandated study unequivocally demonstrating that there is no interference to GPS. The study must be comprehensive, objective, and based on correct assumptions about existing GPS uses rather than theoretical possibilities. Given the substantial pre-existing investment in GPS systems and infrastructure, and the critical nature of GPS applications, the results of studies must conclusively demonstrate that there is no risk of interference. If there is conflicting evidence, doubts must be resolved against the LightSquared terrestrial system. The views of LightSquared, as an interested party, are entitled to no special weight in this process.
- 2 The FCC should make clear that LightSquared and its investors are proceeding at their own risk in advance of the FCC's assessment of the working group's analysis. While this is the FCC's established policy, the Commission's International Bureau failed to make this explicit in its order.
- 3 Resolution of interference has to be the obligation of LightSquared, not the extensive GPS user community of millions of citizens. LightSquared must bear the costs of preventing interference emanating from their devices, and if there is no way to prevent interference, it should not be permitted to operate. GPS users or providers should not have to bear any of the consequences of LightSquared's actions.
- 4 This is a matter of critical national interest. There must be a reasonable opportunity for public comment of at least 45 days on the report produced by the working group and further FCC actions on the LightSquared modification order should take place with the approval of a majority of the commissioners, not at the bureau level.

Campbell County
7/22/11