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 It must be rescinded.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.