Robert Hickman
905 Orleans Street
Beaumont, TX 77701-3520

July 18, 2011

Federal Communications Commission
445 12th St., SW
Room TWA325
Washington, DC 20554

Received & Inspected
JUL 28 2011
FCC Mail Room

Re: Comments regarding FCC IB Docket No. 11-109, Interference with GPS Signals

Dear Federal Communications Commission:

As you consider the conditional approval for LightSquared, I write to ask you to preserve the integrity of the nation's GPS system.

Last year, the federal government shut down the Loran navigation system, making recreational mariners solely reliant on GPS for all electronic navigation needs. Like so many other GPS users around the country, GPS is now integrated into our daily outings, and we look to the FCC to protect the integrity of the GPS signal.

We regularly depend on GPS for small boat navigation in conditions where visibility is limited or visible reference points are not available. The threat to the proper function of the GPS system represents a direct threat to my safety and the safety of others who depend on GPS to safely navigate back to port from offshore.

Kindest Regards,

Robert C. Hickman, P.E.

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Received & Inspected

JUL 26 2011

FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Pennsylvania, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

The Department of Defense, FAA, DHS, NASA, DOI, DOT, DOC, and the Professional Land Surveying and Engineering professions, have all expressed serious reservations in regards to this plan by LightSquared, LLC to build 40,000 ground stations in the U.S. that could cause widespread interference to GPS signals. This network of ground stations will transmit signals within the L-band frequency immediately adjacent to the GPS L1 frequency at more than one billion times the strength of the low-power GPS signal from space. Furthermore, each mobile phone using LightSquared's wireless service would potentially become a portable GPS jamming device by jamming GPS receivers in its immediate vicinity.

High-precision GPS equipment used by Land Surveyors and other geomatics professionals costing thousands of dollars per receiver would be more adversely affected than the consumer GPS devices given their inherent design. Literally, tens of thousands of high-precision GPS receivers are used in the United States. GPS technology has transformed the way we build and manage our infrastructure, adding a tremendous level of efficiency to the design, construction, and maintenance of roads, bridges, commercial properties, residential subdivisions, parks, farms, golf courses, etc. GPS has become an essential tool for design professionals and it is imperative that these GPS signals are not jeopardized by broadband technology.

This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for Pennsylvania, but also for the United States as a whole. The members of the Pennsylvania Association of Professional Land Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Sincerely,

George L. Chemsak, P.L.S.

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JUL 26 2011

FCC Mail Room

SAMPLE PAPLS LETTER TO FCC:

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

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This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for New Jersey, but also for the United States as a whole. The members of the New Jersey Society of Professional Land Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Sincerely, Karl W. Hammond P.L.S.

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July 20, 2011

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Delaware, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for Delaware, but also for the United States as a whole. The members of the Delaware Association of Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Sincerely,

A. Barry Seymour, P.E., P.L.S.
Hidden Village
420 Gardenia Drive
Avoca, PA 18641
570-650-1120

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RDA ENGINEERING COMPANY, INC.

ENGINEERS • LAND PLANNERS • LAND SURVEYORS

14603 MAIN STREET • UPPER MARLBORO • MD 20772-3012

July 21, 2011

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Maryland, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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UPPER MARLBORO, MD
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FAX (301) 952-8204

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Harley Sampson, PE
Mark G. L. Ferguson, RA

Email: rda@rdaengineers.com

Over 30 Years Experience

Roscoe Tippett, PLS
Ben Robertson RLS, PE
Chris Wyvill, RLS

PRINCE FREDERICK, MD
(301) 855 9500
(410) 535-8600
FAX (301) 855-9042

This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for Maryland, but also for the United States as a whole. The members of the Maryland Society of Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

We are currently working on time sensitive projects, such as Reagan National Airport Runway construction where the FAA has mandated GPS usage. Loss of GPS reception would have a serious ripple effect on major transportation networks throughout the Washington Area as well as economic impacts on the construction industry.

Sincerely,

Benjamin P Robertson III

Benjamin P Robertson III, Pres., P.E., R.L.S.

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JUL 26 2011

FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Pennsylvania, Maryland and Delaware, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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Sincerely,

James F. Henry, PLS

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FAX: 609.799.1524
PJEPC@PJEPC.COM
NJ & PA LICENSED

July 20, 2011

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in New Jersey, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for New Jersey, but also for the United States as a whole. The members of the New Jersey Society of Professional Land Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Sincerely,

Ted W. Pivovarnick, NJPLS
Princeton Junction Engineering, PC

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GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

Received & Inspected
JUL 26 2011
FCC Mail Room

July 21, 2011

Mr. Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: LightSquared Nationwide 4G-LTE Wireless Broadband Network

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Pennsylvania and New Jersey, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for Pennsylvania and New Jersey, but also for the United States as a whole. I urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Sincerely,

Stanley J. Kluskiewicz, P.L.S.
Chief of Surveys
Gilmore & Associates, Inc.

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LUDGATE
ENGINEERING
CORPORATION

July 21, 2011

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Pennsylvania, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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Sincerely,

Ludgate Engineering Corporation

Thomas B. Ludgate, P.E., P.L.S.

CIVIL ENGINEERS & LAND SURVEYORS
10 VANGUARD DRIVE, SUITE 90 | READING, PENNSYLVANIA 19606
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HUCK SURVEYING, INC.
1173 Brownsville Road
Wernersville, PA. 19565
Ph: (610) 775-2202 Fax: (610) 693-8318

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JUL 26 2011
FCC Mail Room

July 20, 2011

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

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Sincerely,

John M. Huck, PLS

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JUL 26 2011

FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

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Sincerely

Ramesh C. Batta, PE., PLS (Delaware)

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DEPUTY LAND SURVEYING, Inc.
9408 Kings Highway
King George Courthouse, Virginia 22485
(540) 775-5585

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Professional Land Surveyor in Virginia, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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Sir I am requesting that at a minimum you at least delay implementation until is can be proven that LightSquared's proposal will not impact my livelihood and render my equipment useless.

It seems to be the obvious solution is to require LightSquared, LLC to remove to another portion of the spectrum that is distance enough to not interfere with the GPS Signal band.

Sincerely,

David L. Deputy
Virginia Land Surveyor 3-A
Maryland Property Line Surveyor.

DEPUTY LAND SURVEYING, Inc.
9408 Kings Highway
King George Courthouse, Virginia 22485
(540) 775-5585

Received & Inspected
JUL 26 2011
FCC Mail Room

July 21, 2011

Mr. Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a licensed Property Line Surveyor in Maryland, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

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Sincerely,

David L. Deputy
Maryland Property Line Surveyor
Virginia Land Surveyor 3-A.

OS-2 (10-08)

pennsylvania
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

Received & Inspected
JUL 26 2011
FCC Mail Room

Mr. Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: LightSquared and High Precision Global Positioning System (GPS)

Dear Mr. Genachowski,

The FCC has initiated a National Broadband Plan to establish 4G coverage nationwide. The company, LightSquared, has developed a plan to create this network. This plan causes interference with high precision Global Navigation Satellite Systems (GNSS) receivers. The frequency range selected is right next to the frequency range occupied by Global Positioning System (GPS) L1 signal. When you factor in that LightSquared is broadcasting 1500 watts per antenna vs. GPS's 31 satellites, 11,000 miles in space, broadcasting 30 watts, there is considerable interference into the L1 spectrum. Even though LightSquared occupies a different spectrum than GPS L1, the signal generated is powerful enough to degrade GPS performance and/or jam high precision receivers. In tests that were conducted in May 2011 to see the effects of LightSquared's signal on different GPS receivers, all brands were negatively affected. High precision receivers were affected the most. If this initiative is allowed to proceed, at this time, it will cause our high precision GPS receivers to be non-operational and worthless.

GPS is utilized in all of our field data collection. To lose this vital component of our operations would be detrimental to the design and construction schedules of all Pennsylvania Department of Transportation (PennDOT) projects. Add to this the construction industries wide-spread use of Automated Machine Guidance (AMG) systems, which also utilize high precision GPS receivers on their construction equipment, current construction and maintenance operations will be delayed and severely hampered. The effects of this on PennDOT could run into the hundreds of millions of dollars. Equipment costs alone could reach $10 million.

PennDOT is not the only one affected. All Surveyors and GIS data collection that use high precision GPS will be negatively affected by this. Local, State and Federal entities all will feel the negative effects. High precision GPS, in its current forms, is vital to infrastructure construction and maintenance. This technology should not be allowed to be degraded by any other technology, by any degree. LightSquared should use a frequency range far enough away from all GPS signals to eliminate the problem.

Sincerely,

L Bradley Foltz

L. Bradley Foltz, P.L.S.

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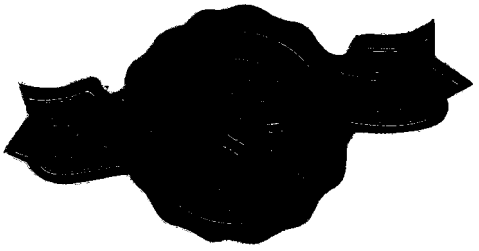
Bureau of Project Delivery – Photogrammetry & Surveys Section | 145 Limekiln Road, Suite 300 | New Cumberland, PA 17070 | 717-346-4278

Merlyn J. Jenkins & Associates, Inc.
Engineers & Surveyors
P.O. Box 297, 412 West Market Street, Pottsville, PA 17901 570-622-7708
fax: 570-622-1118



Received & Inspected
JUL 26 2011
FCC Mail Room

July 21, 2011

Mr. Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Chairman Genachowski:

As a land surveying firm with licensed Professional Land Surveyors operating in New Jersey, I must express serious concerns regarding the Federal Communications Commission (FCC) granting LightSquared, LLC conditional approval to build a nationwide 4G-LTE wireless broadband network (FCC File No. SAT-MOD-20101118-00239). Early testing by GPS technology leaders, Garmin and Trimble Navigation, demonstrated that LightSquared's technology would likely interfere with Global Positioning System (GPS) receivers, degrading their performance in the best case scenario and completely jamming GPS receivers in the worst case scenario.

The Department of Defense, FAA, DHS, NASA, DOI, DOT, DOC, and the Professional Land Surveying and Engineering professions, have all expressed serious reservations in regards to this plan by LightSquared, LLC to build 40,000 ground stations in the U.S. that could cause widespread interference to GPS signals. This network of ground stations will transmit signals within the L-band frequency immediately adjacent to the GPS L1 frequency at more than one billion times the strength of the low-power GPS signal from space. Furthermore, each mobile phone using LightSquared's wireless service would potentially become a portable GPS jamming device by jamming GPS receivers in its immediate vicinity.

High-precision GPS equipment used by Land Surveyors and other geomatics professionals costing thousands of dollars per receiver would be more adversely affected than the consumer GPS devices given their inherent design. Literally, tens of thousands of high-precision GPS receivers are used in the United States. GPS technology has transformed the way we build and manage our infrastructure, adding a tremendous level of efficiency to the design, construction, and maintenance of roads, bridges, commercial properties, residential subdivisions, parks, farms, golf courses, etc. GPS has become an essential tool for design professionals and it is imperative that these GPS signals are not jeopardized by broadband technology.

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This situation has the potential of becoming a tremendous public safety issue and an economical disaster not only for New Jersey, but also for the United States as a whole. The members of the New Jersey Society of Professional Land Surveyors urge you to reject the LightSquared application until such time that all tests conclusively demonstrate there is no risk of interference.

Very truly yours,

MERLYN J. JENKINS & ASSOCIATES, INC.

Merlyn J. Jenkins
President

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Chairman
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445 12th Street SW
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Sincerely,

William A. Burch PLS

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FCC Mail Room

July 20, 2011

Chairman Julius Genachowski
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Chairman Genachowski,

Our firm, Surveying And Mapping, Inc. (SAM, Inc.), is a leading provider of geospatial solutions for governmental, business and industry clients across the U.S. Our services are essential to support America's objectives of improving our national infrastructure for energy and transportation. Vital industries for oil and gas production, renewable energy development, electric power generation and transmission, and the national transportation network all depend on companies such as ours.

The national Global Positioning System (GPS) is a critical resource for our industry and we depend on it for virtually every aspect of our core operations. High-precision surveying and mapping requires specialized equipment and we have invested several million dollars in technology that relies on the existing GPS signal profile. The continued reliable operation of our GPS system and its compatibility with industry-standard equipment is absolutely essential to our mission. We cannot afford any disruption of GPS data fidelity or the burden of accelerated equipment replacement costs.

We are therefore concerned about the pending LightSquared network permit, due to its well-documented disruptive interference with high-precision GPS operations such as ours. Lightsquared's own recent technical study, prepared for the Federal Communication Commission, clearly identified and confirmed these problems. If the LightSquared network is allowed, then the use of existing high-precision GPS receivers will effectively have to be suspended. There is no current filter technology available to mitigate these issues. This is certain to have a major negative impact on the geospatial service industry and the critical national objectives they support. Consequently, we are asking for the Commission and members of Congress to deny the final permit for this network until these issues can be corrected.

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Our firm is not single-mindedly opposed to changes in the management of the GPS system. We understand the importance of developing broader communications services as part of our national growth and recognize that the evolution of GPS will likely play a role. However, so many of our national priorities depend on the continued reliable operation of the GPS system we believe a less disruptive approach is required.

Thank you for your consideration of this issue.

Sincerely,

Samir "Sam" G. Hanna, RPLS
President, Surveying And Mapping, Inc.

cc: Commissioner Michael J. Copps
Commissioner Robert McDowell
Commissioner Mignon Clyburn
Commissioner Meredith Attwell Baker

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July 20, 2011

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Washington, DC 20554

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Sincerely,

Samir "Sam" G. Hanna, RPLS
President, Surveying And Mapping, Inc.

cc: Commissioner Michael J. Copps
Commissioner Robert McDowell
Commissioner Mignon Clyburn
Commissioner Meredith Attwell Baker

RECREATIONAL BOATING ASSOCIATION *of* WASHINGTON

Voice of Northwest Boating

Mailing Address - P.O. Box 23601 • Federal Way, WA 98093-0601

Received & Inspected

JUL 26 2011

FCC Mail Room

July 21, 2011

The Honorable Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: LightSquared Subsidiary LLC; Request for Modification of its Authority for an Ancillary Terrestrial Component, SAT-MOD-20101118-00239; Call Sign: S2358
FCC IB Docket No. 11-109 Interference with GPS Signals

Dear Chairman Genachowski:

On behalf of the Recreational Boating Association of Washington (RBAW), representing the more than 265,000 registered boaters in the State of Washington, we are greatly concerned over the proposal to grant a conditional waiver to LightSquared Subsidiary, LLC which permits a dramatic expansion of land-based use of the mobile satellite spectrum. We are opposed to any change which would negatively impact the safety and welfare of boaters which this proposal appears to do by interfering with the Global Position System (GPS). RBAW does support the recommendation of the National Coordination Office for Space-based Positioning, Navigation, and Timing contained in its report to the FCC.

The RBAW, on behalf of the Washington recreational boating community, urges the Federal Communications Commission to withhold authorization for LightSquared Subsidiary, LLC to commence commercial operations until all valid concerns of agencies, organizations, and individuals relying on the reliable performance of the Global Positioning System have been resolved.

Sincerely,

Edward J. Jennerich
President

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