Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Re: Ex parte filing in IB Docket No. 12-340; IBFS File Nos. SAT-MOD-20101118-00239; SAT-MOD-20120928-00160; SAT-MOD-20120928-00161; SES-MOD-20121001-00872

Dear Ms. Dortch:

On November 2, 2012, LightSquared filed a petition requesting the Commission to move forward with actions to reallocate 1675–1680 MHz spectrum from NOAA to commercial use (RM-11681). I am writing today to bring three salient items to your attention:

- In an op-ed column in Friday’s Wall Street Journal, Jason Furman, Chair of the White House Council of Economic Advisers, and Megan Smith, U.S. Chief Technology Officer, spotlighted the Commission’s ongoing success in conducting the AWS-3 auction and how that represents “an important step toward President Obama’s goal of freeing up 500 megahertz of spectrum by 2020 . . . .” See Attachment A. The White House advisers then cited specifically the example of NOAA moving its system of satellites to free up spectrum while continuing to operate the satellite system more efficiently and gain important information. As set forth in the above-cited petition for rulemaking filed over two years ago, relocation of NOAA satellites also enables the Commission to reallocate the 1675–1680 MHz band for commercial use.

- It is our understanding that NOAA has caused to be filed with the Commission its plans to transition the 1675–1680 MHz band to commercial use and that the entire Department of Commerce supports that step.

- The Consolidated and Further Continuing Appropriations Act, 2015, passed by Congress and signed into law by President Obama on December 16, also endorses immediate action by the Commission on the 1675–1680 MHz band. Specifically, the Committee Report states:
“The fiscal year 2015 budget request includes the administration’s plan to auction, or assign via fee, the 1675–1680 megahertz band of radio frequency spectrum, which NOAA currently uses for weather balloon communications. This portion of spectrum has been identified as part of [NTIA’s Ten-Year Plan] to make 500 megahertz of Federal and non-Federal spectrum available for wireless broadband use. The Committee is aware that NOAA’s radio frequency requirements can be relocated adequately to another band of spectrum. Therefore, the Committee supports this auction and the expeditious relocation of NOAA’s operations to a different radio frequency band provided that the proceeds of the auction will be used to offset NOAA’s relocation costs.” See Attachment B.

These recent developments underscore the broad, bipartisan consensus that the Commission should move promptly with actions to reallocate the 1675–1680 MHz band to commercial use.

Respectfully submitted,

Gerard J. Waldron
Counsel to LightSquared

cc: Renee Gregory
    Jon Chambers
    Ron Repasi
    Charles Mathias
    Paul Murray
    Jennifer Tatel

Attachments
How to Avoid Spectrum Crunch
The FCC’s $44 billion auction is just one step in a program to facilitate mobile broadband use.

Jason Furman and Megan Smith
The Wall Street Journal
January 22, 2015

America has enormous infrastructure needs that will require the federal government, together with local governments, to make significant, high-value investments. In one critical area—the revolution in mobile broadband communications—the government doesn’t need to invest its own money, but instead can encourage private investment and make a profit for taxpayers along the way.

That is exactly what is happening now at the Federal Communications Commission’s 2015 spectrum auction, as the agency is facilitating the sale of spectrum that will be repurposed for mobile broadband use. Bidding has topped $44 billion, and the proceeds will fund the first-ever nationwide network for first responders, pay down the deficit, and cover adjustment costs for federal agencies that previously used the spectrum. The auction is an important step toward President Obama’s goal of freeing up 500 megahertz of spectrum by 2020, nearly doubling the amount available for mobile broadband use.

Mobile broadband is central to a technological revolution that is transforming the way Americans work and play. As smartphones and tablets become ubiquitous, individuals are using ever-increasing amounts of bandwidth. Wireless data traffic in the U.S. has grown at high double-digit-percentages for each of the past seven years. Absent any change, these trends could create a “spectrum crunch” as the frequencies used to carry this traffic become exhausted. While steps such as increasing the density of cell towers or improving compression technology are helping, they will not be enough without reallocating more spectrum.

Though the laws of physics preclude the production of more spectrum, the laws of economics tell us that there can be large benefits from using a scarce resource like spectrum more efficiently.

For example, the National Oceanic and Atmospheric Administration operates a system of satellites that transmit weather data back to earth, and the spectrum used for those transmissions was originally reserved for NOAA, to avoid any interference from ground-based communications. Under President Obama, NOAA has agreed to reduce the number of ground stations that need to receive the satellite weather data, while private participants in the auction have agreed to respect exclusion zones around the remaining stations. This sharing arrangement contributed to the 65 MHz of newly freed spectrum for the auction, unlocking billions of dollars of value. Because the remaining ground stations can retransmit weather data over the Internet, the public does not lose access to this information.

The success of the auction demonstrates how important it is to continue making bandwidth available. Government agencies, led by the National Telecommunications & Information Administration, will continue to identify ways to improve the use of spectrum or reallocate it, while protecting essential government services.
Some of the biggest gains will come from the private sector thanks to a 2012 law that allows television broadcasters with extra spectrum to voluntarily relinquish some or all of their frequencies in exchange for a portion of the proceeds from auctioning the spectrum. The extraordinary demand for bandwidth revealed by this auction only increases the importance of moving quickly to reallocate more spectrum; the FCC is planning another auction for early 2016. When the spectrum shifts to more valuable uses, broadcasters, wireless companies and taxpayers are all better off—but most important, the workers who build the networks and the consumers who use them also benefit.

Ultimately, reaching the president’s 500 MHz goal will require changing the traditional spectrum model of exclusive, licensed use. Many organizations have begun to explore new technologies for sharing spectrum more efficiently and new economic models for allocating this scarce resource. For example, the FCC already designates some spectrum for public use without a license, albeit with limitations on range and power. Home Wi-Fi and garage-door openers are two examples of products that run on unlicensed spectrum.

Another approach to spectrum sharing envisions a priority system whereby, for example, the government can pre-empt other users during rare emergencies but would sell the residual rights to the private sector. Private users, in turn, would allow others to access their spectrum provided there is no interference at a particular point in time. Such a system would rely on new technologies, many of which are already under early development, that would allow communications devices to determine—in real time and without any human input—how best to share the spectrum. And it will require new economic models to allocate these rights to their best uses and to allow taxpayers to capture their share of the value.

The Obama administration will continue to take an all-of-the-above approach to making more spectrum available, one of the most critical infrastructure projects of the 21st century.

*Mr. Furman is the chairman of the White House Council of Economic Advisers and Ms. Smith is the U.S. Chief Technology Officer.*
ATTACHMENT B
tions of the Joint Ocean Commission. The facilities subactivity provides for repair and maintenance to existing facilities, facilities planning and design, and environmental compliance. The Office of Marine and Aviation Operations provides aircraft and marine data acquisition, repair, and maintenance of the existing fleet, planning of future modernization, and technical and management support for NOAA-wide activities through the NOAA Commissioned Officer Corps.

Committee recommendations are displayed in the following table:

<table>
<thead>
<tr>
<th>PROGRAM SUPPORT OPERATIONS, RESEARCH, AND FACILITIES</th>
<th>Committee recommendation</th>
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<tbody>
<tr>
<td>Corporate Services:</td>
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<tr>
<td>Under Secretary and Associate Offices Base</td>
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<td>Facilities</td>
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<td>NOAA Wide Corporate Services and Agency Management</td>
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<td>DOC Accounting System</td>
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<td>IT Security</td>
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<td>DOC Working Capital Fund</td>
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<td>Total, Corporate Services</td>
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<td>NOAA Education Program</td>
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<td>Fleet and Aircraft Operations</td>
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<td>GRAND TOTAL, PROGRAM SUPPORT</td>
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**Corporate Services.**—Within the increased funds for Corporate Services, NOAA is directed to focus on restoring the functionality of its Workforce Management Office and Acquisition and Grant Services.

The Committee remains concerned about administrative costs incurred by NOAA’s corporate staff and line offices, including regional and field offices. The Committee is aware of NOAA’s practice to excise a portion of program funds from line offices to support line office operations and management. In continuing this practice, NOAA shall ensure transparency and equity among all programs charged within a particular line office. In its annual budget request and in its spending plan required by section 534 of this act, the Committee directs NOAA to include any proposed funds taken from each program activity in order to support line office operations and management, and to disclose the total amount of operations and management funding for each line office. During any fiscal year, NOAA shall not make any changes to the amount taken from programs for line office operations unless approved as part of that fiscal year’s spending plan, or the Committee has been notified 30 days prior to any change regardless of the amount. NOAA is reminded of overall direction included in this report to reduce overhead and achieve administrative savings.

**NOAA’s Use of Radio Frequency Spectrum.**—The fiscal year 2015 budget request includes the administration’s plan to auction, or assign via fee, the 1675–1680 megahertz band of radio frequency spectrum, which NOAA currently uses for weather balloon commu-
nations. This portion of spectrum has been identified as part of National Telecommunications and Information Administration’s Ten-Year Plan and Timetable to make 500 megahertz of Federal and non-Federal spectrum available for wireless broadband use. The Committee is aware that NOAA’s radio frequency requirements can be relocated adequately to another band of spectrum. Therefore, the Committee supports this auction and the expeditious relocation of NOAA’s operations to a different radio frequency band provided that the proceeds of the auction will be used to offset NOAA’s relocation costs.

Education.—Within the funds provided for NOAA’s Education Program, $5,600,000 is for competitive educational grants, which includes continued support for Environmental Literacy Grants and for improving geographic literacy; $14,400,000 is for the educational partnership program with minority-serving institutions; and $7,200,000 is for Bay-Watershed Education and Training regional programs, which was touted by the Department of Education as a model program for how Federal and State agencies should collaborate on STEM education.

A full description of the Committee’s assessment and direction regarding the administration’s Co-STEM consolidation proposal is found in the Office of Science Technology and Policy portion of this report. For NOAA’s part, the Committee continues to encourage efforts to streamline STEM education programs across NOAA line offices that make sense and support the internal consolidation of NOAA education programs. However, the Committee does not support the elimination of NOAA’s Teacher at Sea program and the Dr. Nancy Foster Scholarship Program.

Justification Improvement.—NOAA is directed to continue to work with the Committee to reformat the budget justification into a more transparent, informative, and user-friendly document. The Committee also expects the justification to be submitted on time with the rest of the Department’s justifications.

Marine and Aviation Operations.—Any decisions related to laying up any vessels, grounding any aircraft, or decommissioning any capital asset are subject to the standard reprogramming procedures set forth in section 505 of this act. Any changes from the spending plan shall also be subject to section 505 of this act. NOAA shall continue to provide the Committee with a monthly operational status of the fleet and aircraft. NOAA is further directed to provide the Committee with updated long-term management and acquisition plans for the fleet and aircraft within 60 days of enactment of this act.

New Vessel Construction.—The Committee supports NOAA’s plan to construct a new ocean-going survey vessel in an effort to modernize its aging fleet. NOAA is urged to ensure that sufficient funding to commence the new vessel construction is included in its fiscal year 2016 request.

**PROCUREMENT, ACQUISITION, AND CONSTRUCTION**

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