

From: Rebecca Yoder

To: Doug Young

Date: October 20, 2014

Subject: Request for Info - File #0594-EX-PL-2013

Message:

The following was discussed with NASA via email:

From: Sham, Catherine C. (JSC-EV111) [mailto:catherine.c.sham@nasa.gov]

Sent: Tuesday, September 30, 2014 10:06 AM

To: William Thompson; GALBRAITH, VINCENT SCOTT (GSFC-4500); ZUZEK, JOHN (GRC-MS0)

Cc: Douglas.Young@fcc.gov; Becky Yoder

Subject: RE: SST-US OTB Spacecraft FCC Application Questions

Thanks Will. I will talk with Sharon and get back to you.

Thanks

Cathy

From: William Thompson [mailto:WThompson@sst-us.com]

Sent: Tuesday, September 30, 2014 11:04 AM

To: Sham, Catherine C. (JSC-EV111); GALBRAITH, VINCENT SCOTT (GSFC-4500); ZUZEK, JOHN (GRC-MS0)

Cc: Douglas.Young@fcc.gov; Becky Yoder

Subject: RE: SST-US OTB Spacecraft FCC Application Questions

Hi Cathy,

My point of contact at the Johnson Space Center is Sharon Marston, with her contact information below.

Name	Organization	Phone #	E-Mail
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Sharon Marston	NASA JSC ESTL Manager	281-483-2256	sharon.s.marston@nasa.gov
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V/R,

Will

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Will Thompson

Project Manager

Surrey Satellite Technology US LLC

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From: Sham, Catherine C. (JSC-EV111) [mailto:catherine.c.sham@nasa.gov]

Sent: Tuesday, September 30, 2014 9:38 AM

To: William Thompson; GALBRAITH, VINCENT SCOTT (GSFC-4500); ZUZEK, JOHN (GRC-MS0)

Cc: Douglas.Young@fcc.gov; Becky Yoder

Subject: RE: SST-US OTB Spacecraft FCC Application Questions

Hi Will:

Can you send me your NASA Johnson Space Center POC regarding the ground station frequencies you

mention below?

Thank you
Cathy

From: William Thompson [mailto:WThompson@sst-us.com]
Sent: Tuesday, September 30, 2014 10:12 AM
To: GALBRAITH, VINCENT SCOTT (GSFC-4500); Sham, Catherine C. (JSC-EV111); ZUZEK, JOHN (GRC-MS0)
Cc: Douglas.Young@fcc.gov; Becky Yoder
Subject: RE: SST-US OTB Spacecraft FCC Application Questions

Mr Galbraith,

Thank you for reviewing our application. I have confirmed that the NASA Johnson Space Center will be filing shortly for the ground station frequencies. I will update the FCC correspondence with the filing/application number allowing for an easy cross-reference, when I receive it.

With regard to the emission bandwidth limitation for space missions, I'm afraid that I was unaware of the regulation limiting the bandwidth.

- To make sure I fully understand the requirement, is there any chance that you could point me to the rule?

- While being an experimental platform, one of the mission objectives is to demonstrate that the downlink can be transmitted at a faster data rate and significantly reduce the contact time required.

- o To meet the maximum allowed bandwidth, the data rate would need to be reduced. Is there any chance that the bandwidth can be waived and expanded to 6.5 MHz for this mission?

V/R,
Will

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Will Thompson
Project Manager
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From: GALBRAITH, VINCENT SCOTT (GSFC-4500) [mailto:vincent.s.galbraith@nasa.gov]
Sent: Wednesday, September 24, 2014 10:03 AM
To: William Thompson; Sham, Catherine C. (JSC-EV111); ZUZEK, JOHN (GRC-MS0)
Cc: Becky Yoder; Douglas.Young@fcc.gov
Subject: RE: SST-US OTB Spacecraft FCC Application Questions
Importance: High

Will,

I apologize for not responding sooner, but I was away much of August and I do not find the original email copied below.

The information provided to NASA for original coordination did not contain sufficient technical information to allow a review of the request. I note from information which we just obtained that some of the necessary information was provided to the FCC and I believe we now have a copy of that. We do need to know the complete link details for operation of the spacecraft. I have noted two frequencies requested for space-Earth communications, but I have not found reference to any uplink or TT&C from

Earth-space. How will the downlinks be controlled? I have also not noted specification of a ground site for the Earth end of your communication links. Can you provide this information? It also appears that the requested emission bandwidth does not comply with the regulatory maximum of 5 MHz allowed for space missions. Details are required in order to review for the potential of interference to existing operations.

Regards,
Scott Galbraith

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Vincent Scott Galbraith
NASA Goddard Space Flight Center
Spectrum Manager, Mail Code 450
8800 Greenbelt Road
Greenbelt, MD 20771
Ph. (301) 286-5089 Cell: (240) 472-6429
Fax (301) 286-1724
e-mail: vincent.s.galbraith@nasa.gov

From: William Thompson [mailto:WThompson@sst-us.com]
Sent: Tuesday, September 23, 2014 4:55 PM
To: Sham, Catherine C. (JSC-EV111); GALBRAITH, VINCENT SCOTT (GSFC-4500); ZUZEK, JOHN (GRC-MSCO)
Cc: Becky Yoder; Douglas.Young@fcc.gov
Subject: SST-US OTB Spacecraft FCC Application Questions

Hello,
We have been contacted by the FCC and understand that there are questions with regard to the SST-US OTB Spacecraft FCC application. Please find the request from the FCC below.

Is there a question that I can help answer, or provide additional information?

Regards,
Will

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Will Thompson
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