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September 1, 2021

Marlene H. Dortch Secretary Federal Communications Commission Washington, D.C. 20554

Re: Experimental Licensing File No. 1059-EX-CN-2020

Dear Ms. Dortch,

Due to a change in circumstances, Applicant AST&Science LLC ("AST") will use a new launch provider for the BlueWalker 3 ("BW3") test satellite that is associated with the abovenoted application. As a result, the BW3 will "rideshare" to space, and will be placed into an orbit at a circular altitude of between 375 and 425 km above the earth. It also will operate at an inclination of between 51 and 55 degrees.

Accordingly, AST is filing updates to responses and exhibits associated with this application that are affected by these changes to the satellite's operations (*i.e.*, orbit and inclination). The chart below details what documents are being updated:

Exhibit Title	Date of Filing	Updated Information	Comments
Orbital Debris Statement and Updated Supplemental Orbital Debris Response	1/14/21 and 6/2/21	Updates to Tables 1- 3, Figures 4-7, the propellant budgets, and deorbit maneuvers	AST has pulled together prior relevant responses on end-of-life and orbital debris to present a unified responsive document
Updated PNG license	5/19/21	Update to BW3 orbital location	
Technical Annex	1/14/21	Relevant PFD tables were updated to reflect the new orbit and inclination; mention of the 2200- 2290 MHz frequency (for use outside of the	PFD for user links are the same, as power levels will be adjusted so that the same PDF will be maintained on the surface of the earth

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		U.S.) was eliminated to avoid confusion.	
Supplemental Interference Analysis	5/20/21	Updated latitude and longitude locations for in-line events to GSOs, and revised some path loss calculations	Relevant changes are highlighted in yellow
NTIA Space Record Form – Second Update	4/9/21	Modified orbit and inclination information in strings and removed the 401 MHz frequency	Mention of the 401 MHz frequency was eliminated from AST's application <i>via</i> a modification to the Form 442
Revised Narrative	3/11/21	Updated orbit and approximate launch date, and removed mention of 401 MHz frequency range	Mention of the 401 MHz frequency was eliminated from AST's application <i>via</i> a modification to the Form 442

Please direct any questions to the undersigned.

Sincerely,

/s/ Laura Stefani Laura Stefani Attorney for AST SpaceMobile, Inc.