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October 2, 2023

**VIA ELS AND ELECTRONIC MAIL**

Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, NE
Washington, DC 20554

**Re: Apex Technology, Inc.**
**File No. 1370-EX-CN-2023**

Dear Ms. Dortch,

By this letter, Apex offers an update regarding the above referenced Apex Aries 1 experimental satellite license application. The supporting technical annex (table 3) indicates the Apex Aries 1 satellite may host certain payloads, and the legal narrative (page 2-3), technical annex (footnote 18), and orbital debris assessment report ("ODAR") (various sections) indicate the Apex Aries 1 satellite may host a propulsion system. The satellite will not host the RAFTI and SPARK payloads and propulsion system and, in their absence, will carry fully demisable (aluminum) mass simulators.

For the payload removals, below is the updated technical annex reference.

* * *

*Table 3: Payloads*[7]

| Payload | Function |
|---|---|
| ~~RAFTI~~[8] | ~~grapple fixture flight heritage (but no docking using Apex Aries 1)~~ |
| ~~SPARK~~[9] | ~~camera and computer sensor suite for on-orbit RPO, as described below~~ |
| ~~SPARK Visible Camera~~ | ~~visible camera for RPO~~ |
| ~~SPARK Long-Wave Infrared Cameras~~ | ~~two long-wave infrared cameras for RPO~~ |
| ~~SPARK Computer~~ | ~~computer module calculating the RPO algorithms on-board~~ |
| Astroscale Docking Plate | docking plate flight heritage |

~~[7] None have radiofrequency components requiring licensing except the power amplifier.~~

~~[8] RAFTI is Rapidly Attachable Fluid Transfer Interface.~~

~~[9] SPARK is Smart Prox Ops and Rendezvous Kit.~~

| Payload | Function |
|---|---|
| Apex Payload Camera | diagnostic camera for solar array deployment verification |
| Ubotica XE-2 | edge compute processor for in-space computation demonstration |
| Ubotica CogniSAT | diagnostic camera for wide field-of-view imaging of solar array deployment verification |
| Northrop Grumman Power Amplifier | X-band power amplifier technical demonstration |

* * *

For the propulsion system removal, this correspondence confirms that the Apex Aries 1 satellite will not host a propulsion system, notes the filed ODAR already considers all non-propulsive scenarios, and asks that the application's other propulsion references not receive further FCC consideration.

Given these changes, the satellite will only demonstrate functionality for each subsystem and validate satellite performance (*e.g.*, communications, data handling, high accuracy pointing control, etc.) on orbit with no propulsion system testing or rendezvous or proximity operations occurring.

Please contact me with questions. Thank you.

Respectfully submitted,

*/s/ George V. John*

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