Exhibit 2
OET STA Form
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Supplemental Antenna Information and Justification for Bandwidth Exemption for Emission Designator 6M40G7D

Lockheed Martin Corporation provides the following supplemental antenna information and justification for bandwidth exemption are provided in support of the requested special temporary authority:

1. Data Acquisition and Video System (DAVIS) S-band Telemetry (TLM) System

Manufacturer P/N: T-714

The Atlas V DAVIS TLM system monitors several hundred launch vehicle parameters in addition to guidance and navigation data prior to launch and throughout all phases of flight. The telemetry downlink will utilize the two S-band Patch Antenna elements on this mission. The telemetry antennas are located on the Centaur stage.

Justification for Bandwidth Exemption for Emission designator 6M40G7D with respect to NTIA Manual § 10.8.2.A, Supplemental Information for Space Systems Using Necessary Bandwidths Greater Than 5 MHz for Transmissions from Space in the Band 2200-2290 MHz

The Atlas V vehicle RF design is based on the need to utilize both USAF and AFSCN ground assets and NASA TDRS satellite assets to support mission data requirements. TDRS requires a BPSK or QPSK modulation, and ULA utilizes the more BW efficient QPSK method for all high bandwidth phases of flight. The system utilizes a single RF downlink with both record/playback and real-time techniques to transfer mission data and video to the various stations with maximum Bandwidth efficiency and minimum airborne/ground hardware resource utilization and cost. During early flight phases (less than 15 minutes) the real-time data is essential to investigation of flight anomalies, and maximizing the amount of data acquired up to an anomaly is vital to problem resolution as recorded data is not recoverable after failure. After the early boost phase has ended and the first burn of the second stage has started with no catastrophic anomalies the risk of data loss from a record/playback technique is much lower, and also the booster data is no longer needed so the bandwidth can be greatly reduced for the remaining period of flight. The telemetered data in early flight includes mission critical Range Safety, vehicle performance, Guidance computer, dynamic environment, and video information. The data is used to provide mission assurance to the customer ICD requirements, vehicle health and status information vital for anomaly resolution and clearing the next flight which can be days

later, Range Safety tracking information for public and asset protection, and inflight video for satisfying customer requirements and assistance in identification of abnormal events or excess debris liberation.

The reason an alternative modulation technique (more bandwidth efficient, such as 8PSK) is not utilized for this single link is that the receiving assets do not support more efficient techniques currently, TDRS is only compatible with BPSK or QPSK modulation, not PCM/FM so even though these could be more efficient for ground stations they would not work later in flight for TDRS.

2. GPS Metric Tracking (MT) S-Band TLM System

Manufacturer P/N: TTS-3000-5W-BPSK

The GPS Metric Tracking System is used to determine the real time position and velocity of the Atlas V launch vehicle. The GPS S-Band downlink will utilize the two Tri-Band Antennas on this mission. The Tri-Band antennas are located on the Centaur stage.