STA FILE NUMBER	0119-EX-ST-2024
DATE	29 March 2024
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Cessation of Emissions

The RS1 vehicle cannot be commanded by ground station to cease transmissions. The RS1 vehicle has a pre-programmed, time-based, command to cease transmissions at the end of useful mission. The duration of the transmission from launch is T+0s to T+3951s. There is one timeframe where RS1 will not transmit due to the vehicle's elevation angle being below the horizon level of the ground stations. This will be between the Hawaii and South Africa pass (T+1248s to T+3088s). Additionally, in compliance with 47 CFR §25.207, the vehicle will passivate - draining all battery life within two hours of the launch. This will fully ensure definite cessation of emissions.

Battery Discharge

During flight operations, the launch vehicle's second stage will be powered solely by internal, vehicle batteries. There are no systems onboard the vehicle (during flight) capable of generating power and increasing the batteries' capacity. The launch vehicle will proceed with the mission and once complete, will enter a state of passivation required by 14 CFR § 450.171. The batteries will continue to discharge until all capacity is depleted, at which time vehicle power will be disconnected. Based on Monte-Carlo analysis, this will take less than two hours for full battery discharge. This ensures there will be no power left onboard to provide voltage to any of the vehicle's systems, including the S-Band transmitters.

S-Band transmitters will also be commanded off after the vehicle's pass over the South Africa ground station based on the above times.

Concerns of Interference

Concerns on potential interference should be coordinated before launch operations begin with ABL Launch Safety (reg_ops@ablspacesystems.com) and Austin Courtney (acourtney@ablspacesystems.com +1 (424)-321-5033).

During flight operations, the Safety Official console operator will have a continuous presence, ready to answer the phone in the event of interference. To reach the Safety Official during launch operations call +1 (424)-321-5033.