

From: Michael Miller

To: Nimesh Sangani
Date: August 26, 2021

Subject: Additional Information Request

Message:

1. What is the estimated altitude of the spacecraft at the end of the 12 month operational period?

Answer: The operational period of the satellite will be, until it demises. After 12 months, the predicted orbit of the 3U satellite would have an apogee of 489 km and a perigee of 480 km, assuming deployed solar panels.

2. Are there any plans to use the on-board propulsion for collision avoidance or accelerating deorbit at the end of the operational mission timeframe?

Answer: If CURIE operations receives a conjunction notice/warning from the 18th, we will work with them and the other spacecraft owner to execute evasive maneuvers, if possible, and as appropriate. The CURIE propulsion system is NOT capable of significantly accelerating the spacecraft's deorbit.

3. Please describe the design and operational strategies, if any, that will be used to minimize the risk of collision and avoid posing any operational constraints to all inhabitable spacecraft.

Answer: The 3U spacecraft is large enough to be easily trackable by USSF SSA assets. The CURIE team will work closely with the 18th SPS to ensure that the ephemeris data is as accurate as possible, GPS data will be shared with the 18th SPS to assist in tracking. We will coordinate any planned maneuvers with the 18th SPS. If CURIE mission control receives a conjunction notice/warning from the 18th SPS, we will work with them and the other spacecraft owner to execute avoidance maneuvers, if possible, and as appropriate.