

From: david hinkley

To: Nimesh Sangani

Date: February 08, 2021

Subject: Additional Information Request

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Message:

The purpose of "2 Slingshot1 Mission Statement v4" is to update the content in the first paragraph on page 3 that summarizes analyses results of spacecraft hardware reentry survivability. In the "2 Slingshot1 Mission Statement v3," the solar panel substrates on Slingshot1 were surviving reentry with more than 15 Joules (J) of energy but the casualty risk was less than 1:10,000. At the request of IB, we took a deeper look at the makeup of the panel substrates. We requested the part number of the graphite-epoxy solar panel substrates and used the vendor datasheet to extract the mass of the graphite weave – the only component of the solar panel substrate predicted to survive. We updated the solar panel model in AHaB, the Aerospace in-house tool for performing high-fidelity reentry survivability analyses in support of National Security Space missions. The result of the correct mass of graphite weave is a prediction of 1.4 J of energy on impact instead of the 38 J predicted by DAS and 53 J predicted by AHaB when we ran AHaB with the original estimated graphite weave mass fraction.

Please delete "2 Slingshot1 Mission Statement v3." Thank you and regards.