



26 August 2019

Dear Bob Joyce,

Enclosed you will find a Certificate of Commendation from the NASA Orion Program Office for the outstanding service that DynaQual Test Labs provided to the Ascent Abort 2 Flight Test Project. You and your company's personnel were instrumental in the complete success of the Ejectable Data Recorder (EDR) subsystem that flew on the Ascent Abort 2 test flight on July 2, 2019. If you haven't seen the flight, you can watch it in this YouTube video: <https://youtu.be/zrq71ocWMcg>.

Final EDR component installation occurred on March 15, 2019. After final installation and through the flight, the vehicle was powered-on 34 times and the EDR system recorded over 2800 minutes of data (over 430 GB!) from over 900 sensors onto each of the 12 EDR payload recorders. During the flight, the EDR payloads ejected at exactly the right time and in the right succession. They fell from a little more than 50,000 ft, splashed into the ocean without a scratch on them, and floated in the ocean as intended. The beacons inside the payloads started transmitting within 7 minutes of ejection and we recovered the first payload 7 minutes after recovery operations started. Our average payload recovery rate was 4.3 mins and we were able to recover all the payloads within 52 mins. We then retrieved the flight data from the payloads and confirmed that we captured all the data with no dropouts! It was an incredible engineering feat to have the whole system perform flawlessly!

This resounding success could not have been possible without the dedication and support from DynaQual. The EDR team greatly appreciates your team's help and flexibility, which allowed us to overcome our challenges. ***Thank you*** to everyone at DynaQual who supported this project. Every bit of help got us that much closer to meeting our deadlines and being successful. We are extremely grateful for your efforts on this project.

On behalf of the AA2 Project, and the EDR team in particular, congratulations on a successful launch and data retrieval!

A handwritten signature in black ink, appearing to read "Kristina Rojdev".

Kristina Rojdev
EDR Subsystem Lead
Ascent Abort 2 Project
Johnson Space Center
Houston, TX