

## Question and Answer, May 10, 2023:

1 – need exact weights and dims for all items really being shipped. 1 container vs 2 containers?.

Answer: We do not have this information right now and will not have it until we get closer to the shipment. Right now we have an estimate of the dimensions for the three containers and 44 crates we plan to ship. I do not have weight estimates for every crate, and it's possible the final number is closer to 50 crates. Can confirm we will only be sending three 20' containers as part of this shipment (IDs 1A, 1B, 1C on the spreadsheet). Attached is a document (LCA-18395-A\_CrateBOM) with the estimated dimensions of the 44 crates and 3 containers that we plan to ship but this information is not final.

2 – need exact date shipment will be ready for pickup i.e. exact date of charter please?

Answer: We do now have this information right now and will not have it until we get closer to the shipment. The current estimated ship date is October 6<sup>th</sup>, but that could change (i.e. be delayed) in the next few months.

3 – need MSDS sheets for all dg items and full list of type, how many, all dg details for data transmitters per container/per each item moving on this charter please?

Answer: Assuming dg items is referring to the data loggers.

We will have digital data loggers to measure vibrations and accelerations in one container and one crate. None of the other containers or crates will have a digital data logger for this purpose. Using the IDs on the attached spreadsheet, container 1A will have qty 4 of the [Shinyei G-MEN DR-20](#) (each powered by 2xAA alkaline batteries) and crate 4A will have qty 8 of the [Aspion G-Log2](#) (data sheets attached; these are unrestricted for air travel).

In addition to these acceleration data loggers, we plan to put a GPS device into every container and every crate. Since we currently have a total of 3 containers and 44 crates, that is 47 devices total. That number will increase if we add more crates to the shipment. We plan to use the 7P GD100MG single-use GPS tracker (spec sheet attached), which is [pre-approved](#) for most major airlines.

4 – Will the vendor be filing AES or will AURA?

Answer: AURA will file.

1. According to Paragraph 2.7 of Section I, Offeror's proposal shall be valid for 120 days beginning with the Closing Date of May 24<sup>th</sup> meaning it shall be valid until September 21<sup>st</sup>, 2023. Yet, Paragraphs 8.2 *Road Transit(s)* and 8.3 *Intercontinental Air Cargo to SCL* of the *Logistics Plan* indicate that the project is to be commenced sometime in October. Can you please clarify what the planned ship date for this project is?

The 120 validity period refers to the validity of the quote/proposal in order to bring a vendor under contract during that time. However, the shipping date is currently an estimate. The planned ship date is early October, currently October 6<sup>th</sup> in the schedule but that specific date may change as the planned shipping date nears.

2. Paragraph 8.6 *Transit Contingencies* of the *Logistics Plan* refers to FMEA, which shall accompany the RFP along with some other documents. Can you share the FMEA and other documents listed in Paragraph 16 of the *Logistics Plan*?

1. Here is a [link to a google drive folder](#) with some documents for you, most importantly including LCA-18312: Failure Modes and Effects Analysis (FMEA), two SPIE conference papers (2020 is mostly design and less interesting to you, 2022 is more interesting and has results from our test shipment), and RTD-1002: Mass Simulator Shipment Acceleration Analysis.
  - a. I also added the documents from the list in section 16, but I would like to highlight that anything that says “Mass Simulator” is from the test shipment will be updated with a final Camera version before the real shipment.
  - b. Also note that LCA-18853 and 18854 were miswritten and should be 18953 and 18954, so the correct documents are in the folder.
  - c. We do not have a stowage and securing diagram, and in fact I would assume that the forwarder and/or airfreight carrier would be responsible for that since they are the experts in loading planes.
  - d. The details for the data recorders and GPS trackers are in LCA-18931. There is no MSDS because they’re AA alkaline batteries, not lithium, so not restricted.
  
3. Do you know the weights of the two 20ft containers with Camera Hardware and the dims and weights of the 44 packages? If you don’t have exact numbers, your best guess should work for now.

I do not know the final weights of the other two containers, nor have we finalized the dims and weights of the other 44 crates (which could very well be more like 50 crates when we’re all packed up). I have added to the google drive folder a document called “LCA-18395: Crate BOM” which is my current best guess at that information and includes total footprint (assuming no stacking, which is a conservative assumption) as well as total volume. [Ignore the ‘unpacking order’, that helps keep track of where each crate needs to go at the observatory upon arrival.]