

Monthly Meeting (December 2021)

Date: January 15, 2022
Time: 11:00 am - 12:35 pm EST
Location: Park Seismic Office
Attendees:

In the office: Choon Park (CP) and Jin Park (JP)
Via Zoom: Nils Ryden (NR) [Josefin Starkhammar (JS) absent]

1. Administrative Topics Related to Packing and Shipping of the Completed System at Norrfee Tech:

- CP and NR discussed what to do with recent video clips NR and JS made during the Joint Field Test with the completed 2D system (JFT-2D) and about the 2D array system.
- CP and NR discussed how to pack all parts for shipping, especially the 2D array.
- CP discussed the impact source, and NR would put spare parts in the shipping. NR mentioned the Homedepot would carry most of them at low prices.
- JP discussed the overall shipping cost estimation. NR and JP exchanged information about international shipping, HS code, custom duty, tax, etc. NR mentioned that all items are not new and not resellable and therefore should not be subject to any tax. Both agreed to keep exchanging information for the next few weeks.
- CP mentioned it is important to properly describe the contents at the time of shipping to avoid unnecessary expenses and time for customs clearance.
- JP and NR discussed what to do with insurance and exchanged their information.
- NR presented his research on the boxes and packing methods available. All agreed NR will procure a big Pelican case to hold fragile items such as the PXI system and MEMS microphone arrays. All other parts like cables and connectors will be shipped in a common sturdy box if necessary.
- CP and NR discussed power converters for all components, including PXI and arrays.
- JP mentioned she would send a reference document about making international shipping to NR soon.
- CP mentioned that this monthly meeting is the last meeting scheduled. From now on, anyone can request an ad-hoc meeting whenever necessary in the future. He also mentioned that he would ask everyone to contribute when preparing the final report sometime in April or May.

2. Technical Topics:

- CP asked NR if there would be any noise issues if the 2D array were encased with sidewalls for protection purposes. NR mentioned unexpected resonance might occur.

- CP and NR discussed the hitch-height adaptor. NR mentioned it might not be necessary as far as the height of the array is less than 8 inches (20 cm). Currently, it is 12 cm. NR also mentioned the height might not be so critical in terms of data quality.
- CP and NR discussed how to flip the channel order of each array.
- CP and NR discussed the JFT-2D survey route as depicted from the GPS data.
- CP asked about the entire procedure of running the acquisition system. NR mentioned it is important to turn on the PXI system by using its own physical switch and then turn it off through the ParkSEIS-HMA (PS-HMA) software on the laptop computer. NR mentioned how to check the PXI system software through a remote desktop connection. CP asked for a quick manual of running the PXI software.
- CP asked about how important to properly set up the triggering level in the PS-HMA. NR mentioned it would be only necessary to update it whenever the asphalt temperature changes significantly; for example, +/- 20 degrees in Celcius. NR mentioned it becomes more sensitive when asphalt gets warmer.
- CP and NR discussed the mechanism of the impact source. NR mentioned the longer strap (ziptie) would make the stronger impact. NR also mentioned it should not be shorter than the current length of 12 cm, which will then make the impact source drag on the pavement surface without making impacts.
- CP mentioned he is extremely happy with the excellent data quality obtained by using the 2D system. NR also mentioned it would be a nightmare if the approach required multiple sources.

3. Agreed:

- JP and NR will exchange information about the shipping of the completed system.
- NR will purchase a Pelican case soon.