HYPACK Multibeam Training in Peru with Scholars from THSOA LA

by Carlos Tejada

From October 28th to November 3rd, 2017, we conducted a multibeam training course in Lima, Peru in conjunction with CANOPUS, a Peruvian firm, and Teledyne RESON. It was a complete and intense course that covered all aspects of a multibeam survey, from design to final products created for different applications.

The practical part was conducted on board of the catamaran DRACO. A T-20P system from RESON was installed, with an Applanix POSMV with the WaveMaster option. All of them were facilitated by CANOPUS for the purpose of the training.

The theoretical classes and office exercises were conducted in the Lima Marina Club. This club is located in the Green Coast area of Lima, Peru and has excellent facilities that served very well for the purpose of the course. This was certainly appreciated by students and the organizers of this course.

We received several applications to participate in this training and had to decline several of them due to the fact that we filled out our spots very fast. Sorry folks, we will try to schedule another course soon. It definitely is the time for multibeam survey in Latin America.

One of the highlights of this particular training was that all the organizers were members of the Hydrographic Society of America – Latin America Chapter and as such decided to provide 5 scholarships to members that were interested in learning more about multibeam surveys. By doing so, it fulfilled the main goal of the Society, which is to promote education in hydrography. The scholarships were offered for Spanish-speaking members.

The invitation was sent out through the THSOA web page and quickly we got several candidates. Five were chosen from the pool of applications and we got a very interesting group of hydrographers from several countries in the Region (Costa Rica,

Colombia, Panama, and Peru). Among them, we found hydrographers conducting important surveys for the Panama Canal where soundings need to be really accurate; there is no room for error due to the size of the ships that are navigating through the Canal relative to the size of the channel through the locks, lakes and other bodies of water that comprise the Panama Canal taking ships from one Ocean to the other.

Among the other hydrographers, there were experts in Marine Geology and cable laying, a University professor and private consultant in Costa Rica, an expert in dredging of rivers and coastal areas, and a navy officer in charge of the providing hydrographic information for nautical chart production of the Peruvian ports.

As you can see, we had a very interesting group showing how ample and important the applications of Hydrography are these days.

The interesting part of this group of scholars, that joined the other participants of the training, was the animated discussions that took place in the classes. It was interesting to see them asking questions or providing examples of all of the particular applications of hydrography. This certainly enriched the class and gave all of them a broader view of what they can do with the software to solve all of those situations. I remember one interesting one from the Panama Canal and how to correct soundings for the wake created when the ships pass through the Canal that changed the water surface and affected the measurements of the soundings they were collecting.

Upon the completion of the course, the attendees improved their knowledge of HYPACK® and the tools we have to collect hydrographic data with the highest quality possible. They also learned from each other's experiences, and the particular applications and concerns that each one of them had. So, in this sense, we (the organizers) also think we accomplished our goal of bringing together hydrographers from several parts of the continent. Our hope is that they can help each other since they have similar problems.

Thank you very much to CANOPUS, and the General Manager, Andres Orejas. No one could be a better host for this event. He and his team always gave their best and to make sure everything went smoothly for all the participants. The boat with the multibeam system, as well as other hydrographic equipment that they have, was always available to all participants to play with, which improved their learning experience.

Also our special thanks to the people of Teledyne RESON, they were constantly trying to show all the capabilities of their system, and provided several of the classes in the training. They were always open to any questions that the participants may have had.

Thanks to the Society for allowing us to conduct this exercise, and to the members that support this initiative. It is certainly not easy to find the generosity to support 5 students to come to this special event where we can provide such an intensive and high-quality training to hydrographers.

Everyone was so enthusiastic at the end, and so happy with the results of the training, that we are all committed to providing a similar experience next year. So stay tuned to hear where we are going to have our next training. It could be about multibeam or about any of the other hydrography tools supported by HYPACK®, such as single-beam echosounders, magnetometers, ADCP, ROV, AUV, side scan or many others.