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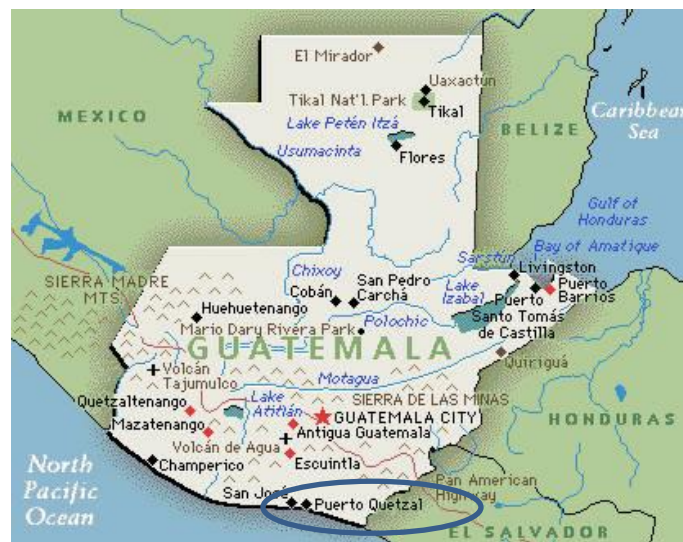
Subj: AFTER-ACTION REPORT: LREC TRAVEL TO GUATEMALA ON 18-24 FEB 2014

1. **Executive Summary:** Four USNA Midshipmen and one USNA faculty member spent 18-24 Feb 2014 in the Republic of Guatemala, hosted by the Guatemalan Navy. The trip was a unique combination of a traditional LREC trip with an ocean engineering capstone design project. As a result, the trip had three main goals:

- (a) to collaborate with Guatemalan authorities to address coastal erosion problems east of the Guatemalan Pacific Naval Base at Puerto Quetzal,
- (b) to establish contact and cooperation between USNA and the counterpart institution in Guatemala, the Escuela Naval de Guatemala, and
- (c) to provide USNA Midshipmen with meaningful international exposure and cross-cultural experiences in a part of the world they were unfamiliar with.

All objectives were met and the trip was judged a great success by all participants. Details of each objectives are provided below.

2. **Itinerary:** The USNA team landed in the capital, Guatemala City, and were greeted by Guatemalan Navy officers LT Raxon and Ensign Guizar who stayed with us the entire trip. We then met with the US Military group representative, LT Stampfler, USN, for an in-brief. Transportation was provided by the Guatemala Navy in the form of a van, driver, and armed escort soldiers. The USNA team traveled to the Pacific coast to the port of Puerto Quetzal (see map) which is the home of the Guatemalan Pacific Naval Base and the Guatemalan Naval School. We spent three days on base working on the engineering project, staying in housing supplied by the Guatemalan Navy and eating in the officers ward room. We then returned to the capital for and toured important cultural sites, including the former Spanish colonial capital of Antigua Guatemala.



Map of Guatemala

3. **Technical Visit for Ocean Engineering Capstone:** The USNA team visited field sites at Puerto Quetzal, and 5 to 10 km east of the port at the small towns of San Marino and Iztapa. These areas have eroded badly since port construction in 1983 with many homes and buildings lost to erosion. The Mids collected beach survey data using a laser range finder to document the extent of coastal erosion caused by the construction of the port. Pictures below show the field site with erosion of the shoreline, and the small boat we rented from a local fisherman to take us out to the barrier island.



Meeting with Guatemalan Navy
and Port Authority



Local fisherman taking Mids to
coastal project site in Iztapa



Evidence of erosion at project site,
house in water



US and Guatemalan Mids jointly
conducting a beach survey

The USNA team gave a two-hour out-brief on their findings to students and leaders of the naval school, the local port authorities, local community officials, and other interested parties. The Mids spoke in either English with translation or in the case of one Mid who was fluent, in Spanish. The local parties showed great interest in the USNA team and were genuinely appreciative of the coastal engineering experience brought by the USNA team. As an after action, the USNA Midshipmen will prepare a written capstone design report in April as part of the EN462 Ocean Engineering Capstone Design course. Their report will be translated into Spanish and provided to our Guatemalan contacts to outline possible solutions to the erosion problems.

- 4. Navy-to-Navy Cooperation:** The USNA team visited several times with senior Guatemalan Navy leadership, including the base commander, Captain Bonilla Mendez, and the Director (Superintendent) of the Naval School, Captain Sanchez Muniz. The USNA team also interacted on a daily basis with junior Guatemalan naval officers, especially Ensign Guizar Castillo a 2013 graduate of the USNA from Guatemala. Guatemalan Midshipmen worked alongside USNA Midshipmen during technical site surveys, and during several social engagements. Prof Kriebel and base leadership each gave Command Briefs on the respective institutions, promoting greater understanding of the missions of each. The USNA team experienced warm hospitality from the Guatemalan Navy by staying on-base with housing and meals provided by the Guatemalan Navy thus experiencing some of the daily life of officers and students at the naval school. Prof Kriebel extended an invitation for the Guatemalan Naval School to reciprocate by sending a delegation of students and faculty to visit USNA. The Guatemalan leadership seemed genuinely interested in establishing closer relationships, especially the Midshipmen-to-Midshipmen relationships.



USNA Team at Escuela Naval de Guatemala



USNA Team meeting Superintendent of Escuela Naval and Guatemalan Mids



Base housing provided to USNA Team



USNA Team departing Pacific Naval Base on last day

5. **USNA International Exposure:** The USNA gained an important exposure to Latin America. None of the USNA team had ever been to Guatemala or anywhere in Latin America before. None of the Midshipmen had ever been in a developing country before, and in fact two had never been outside the US before – this was their first international trip. The trip thus provided an important international exposure prior to the USNA Midshipmen graduate and join the fleet. The USNA team visited modern areas of the capital, a national history museum, and the UNESCO world heritage site of Antigua Guatemala to appreciate the Spanish colonial period, worked at coastal sites in small fishing villages to appreciate a traditional rural Guatemalan way of life, and also saw upscale parts of the capital to appreciate the rapid economic advancement in the country.



USNA Team with Guatemalan officers in Antigua



USNA Midshipmen with Guatemalan Ensign Guizar (former USNA international Midshipman)

6. **Why the Matters:** The USNA Midshipmen gained confidence in their ability to carry out a technical mission in a foreign country while interacting with a foreign military. The trip established a ground work for closer cooperation between the USNA and the Guatemalan naval school. USNA Midshipmen worked and lived alongside their Guatemalan counterparts, gaining new friends and understanding their shared traditions as soon-to-be naval officers.



USNA Team with Guatemalan officers and Midshipmen for formal end-of trip banquet on Pacific Naval Base