Tour of Old Hickory Lock and Dam

By Ken Philippart
Images by Ken Philippart and USACE.

Greater Huntsville Section members and families participated in a tour of Old Hickory Lock and Dam on August 13. The tour was organized by the Rocket City Tau Beta Pi Alumni Chapter. Tau Beta Pi invited the members of societies belonging to The Association, formerly known as the Huntsville Association of Technical Societies, to participate as a service to the technical community. Besides members of Tau Beta Pi, eight AIAA members and guests and one member of IEEE participated in the tour, a truly intersociety event.

Participants met for breakfast before carpooling to Old Hickory. Old Hickory is located at Mile 216.2 on the Cumberland River, approximately 11 miles northeast of Nashville.

US Army Corps of Engineers (USACE) Ranger Pam Bacchus welcomed the group to Old Hickory and gave a brief history of the facility. Construction of the dam began in 1952 and was completed in 1954. The lock chamber is 397 feet long and 84 feet wide. During normal lake levels, the lock will lift a vessel 60 feet from the river below to the lake. The lock releases over 15 million gallons of water each time it is emptied.

Ms. Bacchus then gave a guided walking tour of the lock and dam, explaining the operation of each. During the tour, the group watched vessels transiting in both directions and observed the lock being both filled and drained as the boats were raised and lowered.
The tour then proceeded into the Power Station to view the four power generators, one of which was operating at that time. Pam also gave an overview of the USACE Nashville District facilities. She explained how hydroelectric power is generated to supplement other power sources to conclude the 90 minute guided tour.

More knowledgeable about civil engineering but hungry, the group ventured to a local restaurant for a leisurely lunch before heading back to Huntsville.

The Greater Huntsville Section thanks the US Army Corps of Engineers for conducting the tour. We also thank our colleagues in the Rocket City Tau Beta Pi Alumni Chapter for organizing the event and allowing AIAA to participate and The Association for publicizing the opportunity. It was a great way to learn about non-aerospace disciplines and gain a better appreciation for other engineering industries.