



News Release

US Army Corps
of Engineers
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U.S. Army Corps of Engineers continues search for Kanopolis impact sites

KANOPOLIS, Kan. -- Experts from the U.S. Army Corps of Engineers, Kansas City District, used a sonar survey this week in an attempt to find nine 500-pound inert Air Force bombs that fell into Kanopolis Lake on July 19, after being dropped by an Air Force B-52 bomber en route to the nearby Smoky Hill Air National Guard bombing range.

The Kansas City District survey boat, Frank W. Straub II failed to locate the impact sites in its first search Monday. Sonar surveys continued on Tuesday and Wednesday.

Glen Bellew, a geotechnical engineer with the U.S. Army Corps of Engineers, Kansas City District, Geotechnical Design and Dam Safety Branch, said the survey is a final safety check on the dam's condition.

He said sonar equipment will help locate the inert bombs and determine if there is damage to the "clay blanket" that controls water seepage beneath the dam's foundation.

He said it is possible the bombs did little or no damage, but it is hard to say until the impact sites are found.

"The goal of a dam is to have high water on one side, and no water on the other. Kanopolis is built over sand, and it has what we call clay blankets both above and below the dam, to make the water take a longer path. If it were punctured or damaged, we'd want to know," Bellew said.

"We've checked the instrumentation at the dam, and that was our first sign that everything seems OK, but the lake is very low right now," he added. "It's possible that the impacts just damaged the clay blanket, and if the water rose and caused higher pressures there could be a problem, so we want to examine the sites to make certain everything is safe."

Air Force Lt. Col. Jeff Jordan, commander of the Smoky Hill range, said the bombs, dropped in groups of three, struck the water at more than 700 feet per second, but should have slowed rapidly before striking the bottom.

"We've had some great help from the Navy, and they've told us that hitting water slows the bombs considerably. Their tails could be above the silt," Jordan said.

Finding the practice bombs isn't necessarily easy. Although Americans have a view of "smart" bombs drilling into specific targets, Jordan said that isn't how these munitions work.

"These aren't guided in any way. They are a bomb casing filled with a concrete mixture to give the same aerodynamic performance as a live bomb," he said.

Jordan said there is also no radar track of the bomber's course. "The best thing we've got to go on is the eyewitness account," he said.

To this end, the Kansas City District dispatched the survey boat Frank W. Straub II to make a detailed sonar study of the impact area.

The first order of business was, of course, to put the boat in the water, a tricky proposition as no boat ramps are currently available at Kanopolis Lake.

“We’re 5.8 feet below our multipurpose pool because of the drought,” said Dan Hays, a natural resources manager at Wilson Lake who helped with the survey. “None of the boat ramps here are useable.”

The crew at Kanopolis adapted, using a front-end loader equipped with the ball from a towing hitch to push the 25-foot boat into the water, where it launched easily.

Larry Bolton, sonar operator with the district’s Napoleon, Mo., office, said his equipment makes soundings at 80 points, through a sweep of 120 degrees, to create a detailed picture of the bottom of a body of water. “The side scan shows either side of the boat,” he said. An additional view shows the area beneath the boat, creating a continuous strip showing the lake floor.

The survey crew normally maps the contour of the Missouri River, and found it had to use new techniques, including driving at slower speeds, to get the best images in Kanopolis Lake. Ultimately, the Straub’s sonar was able to locate a five-gallon bucket of cement, normally used as the anchor for a navigational buoy that was dropped into the lake as a test target for the sonar.

“It was encouraging that we could find a target that small,” Bellew said Wednesday. “That increases our confidence we’ll be able to locate the impacts.”

Jordan said working with the Corps and with area residents has been wonderful.

“We’ve received great cooperation from the people at the Corps and area residents,” he said. “The folks around here have been very supportive and it’s been very encouraging to talk to people as we looked into this.”

He said the cause of the accident is under investigation by Air Force officials.

Note to editors: Photos of search activities are available from the U.S. Army Corps of Engineers Public Affairs office. Please call (816) 389-3486 to receive photos.