Released in 2017, the “RAFT” (Restricted Access Flexible Tool) is the latest in PICA’s line of state-of-the-art pipe inspection tools. It is specifically designed to non-destructively assess the steel cylinder embedded within concrete pipes.

The RAFT’s unique collapsible design enables technicians to insert the nine sections of the tool through small access locations that are only 19 inches in diameter, eliminating the need to excavate and cut the pipeline to gain access.

The tool is completely self-contained with battery power, data storage and distance tracking all integrated on the tool itself. Target pipe applications are Cement Mortar Lined and Coated (CML&C) Steel Pipes and Bar-Wrapped Steel Cylinder Concrete Pressure (AWWA C303) Pipes.
In early 2017, the RAFT tool completed a five-mile (8 km) inspection of 36-inch bar-wrapped concrete cylinder pipeline that carries millions of gallons of water per day to a water treatment plant for processing. Installed in the late 1940's, the feeder main is a critical part of the local water system and asset managers wanted to perform a detailed, non-destructive condition assessment.

The inspection identified several areas of thinning of the steel cylinder, which if left untreated would have resulted in serious pipeline failures in the near term. Even though the liner showed no signs of distress locally, the verification efforts revealed a compromised steel cylinder.