



## CASE STUDY

# Army Corps of Engineers Upgrades With VideoRay for Safer Underwater Inspections



## The Pittsburgh District of the United States Army Corps of Engineers (USACE)

performs inspections year-round at 39 facilities, including locks and dams on rivers and flood-control reservoirs. Its jurisdiction includes more than 328 miles of navigable waterways, 23 navigation locks and dams, 16 multipurpose flood damage reduction reservoirs, 42 local flood damage reduction projects, and other projects to protect and enhance water resources and wetlands.



### Summary

For many years the Pittsburgh District of the United States Army Corps of Engineers had successfully used Mission Specialist underwater robotic systems to supplement its team of divers and turned to VideoRay once again when it was time to replace aging robots.



### Challenge

The Pittsburgh District owned four VideoRay Mission Specialist systems, purchased in 2008 and 2018, and was looking for a cost-effective solution to replace older robots.

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## Solution

At the time, VideoRay was offering an upgrade/ trade-in promotion. The deal enabled the Pittsburgh District USACE to trade in two aging Mission Specialist Pro 4 systems for two new Pro 5 systems, each equipped with a high-definition video and photo camera, a multibeam sonar, a rotating manipulator arm and a more powerful motor.

The efficient, portable Pro 5 system is designed to handle missions with size, space, weight and deployment speed constraints. All VideoRay Mission Specialist systems have a modular design, so that operators can add new sensors and tooling from a broad range of manufacturers to accommodate a wide selection of tactical, communications and power options.



## Results

USACE Pittsburgh personnel received on-site advanced training and certification with the new Pro 5 systems. Operations are now more effective and efficient with the increased thrust and performance of the Pro 5 systems, which enables personnel to easily operate and maintain position of the robots in strong currents. In addition, only one operator is needed to lower the robot into the water and record video for a preliminary inspection.



**Diver safety is the top priority, and underwater robotic systems keep divers safe. Using robots for a first look is always a better idea. A robot can get lost, but that's so much better than having to write a letter to a lost diver's family.**

— Jay Kochuga, Dive Program Coordinator, U.S. Army Corps of Engineers, Pittsburgh District

