More than 200 sonar targets—some of which may represent parts of aircraft or debris fields—were found in August as underwater archaeologists continued their search for U.S. Navy aircraft lost in training exercises more than a half century ago off the coast of Patuxent River Naval Air Station, Maryland.

The underwater archaeology team with the Naval History and Heritage Command’s Underwater Archaeology Branch followed up on its field work conducted last August. At the time, an FJ-1 Fury lost in 1947—the year the fighter entered service, becoming the Navy’s first operational jet—was among the aircraft on the search list. This year the archaeologists returned still searching for the Fury, and added an HOK-1 Huskie helicopter lost in 1956.

While those aircraft were the two of most interest to the team, led by underwater archaeologist George Schwarz, the search extended further south in the Chesapeake Bay, where an XF8F-1 Bearcat was downed in 1945. Possible aircraft marked on previous surveys include a SNC-1 Falcon lost in 1943, plus an F9F Panther and TV-2 Shooting Star.

Naval History and Heritage Command (NHHC) Underwater Archaeology Branch archaeologist George Schwarz and Institute of Maritime History (IMH) volunteer Dave Howe review sonar targets Aug. 2 while searching for sunken aircraft in the Chesapeake Bay off the coast of Patuxent River Naval Air Station, Md. (U.S. Navy photos by Jeff Newman)

The survey, conducted from July 25 through Aug. 3 aboard a 25-foot research vessel, consisted of scanning the seafloor with a side scan sonar, looking for objects with distinct, straight lines indicative of man-made, forged material. Schwarz and his team used a GPS tracker to follow a strict grid pattern and ensure complete coverage of the search area, which spanned roughly 3 square nautical miles.

The imprecise mishap reports and other documentation used to identify downed aircraft that went unrecovered in the bay necessitated a large search area, Schwarz said. For example, a report on the downed Fury simply said it crashed about 1 mile off base, so the archaeologists made the search area a wide swath of water extending 1 mile from the runway the Fury took off from.

Each time the sonar picked up something that looked like it could be part of a downed aircraft, one of the team members jotted down their location within the grid. Those positions were then relayed to a second research boat owned by Dave Howe, a retired Navy lawyer and current secretary of the nonprofit Institute of Maritime History (IMH), whose three-person crew of volunteer divers checked out the objects picked up by Schwarz’s sonar scans.

Two of the divers, Dan Lynberg and Bill Isbell, believed they may have found part of the HOK-1 during an early afternoon Aug. 2 dive. Upon returning to the surface, Lynberg, a former Marine, said they found a 58-inch piece of channeled, structural metal, likely aluminum or steel, that could have been a piece of a helicopter frame or tail boom. “We found a lot of stuff,” Lynberg said. “None of [the finds] were completely intact airplanes, but several of the fragments down there are definitely structural, metal fragments, so I think the survey was very successful.”

Howe and his team then moved on to another dive site relayed by Schwarz’s team, but once he learned the location, Lynberg was certain that what the archaeologists had found was not aircraft wreckage, but that of the Cato, a Revolutionary War vessel sunk in January 1781 after a British flotilla intercepted it and three companion ships off of Cedar Point—now the northeastern tip of the air station.

IMH volunteer Dan Lynberg dives into the Chesapeake Bay as part of a NHHC survey of sunken aircraft.(U.S. Navy photos by Jeff Newman)

Carying cargoes of flour meant to help fund the war effort, the crews of the Cato and two of the sister ships ran their vessels ashore in hopes of avoiding capture. The British boarded the Cato and Hawk, burning the latter. But while they were searching the Cato, its magazine detonated, killing sailors on both sides, and sinking the ship in pieces.

Lynberg said he and other local historians spent a year and a half diving and searching for the Cato until he discovered what he is certain is the vessel’s remains in January 2007. He and Kompel Kaur, a University of Oxford student who crossed the Atlantic to intern with Howe this summer, dove to confirm that Schwarz’s sonar target was indeed the suspected Cato wreckage.

Lynberg, left, and Kaur, center, remove their gear while discussing their dive with volunteer Bill Isbell.(U.S. Navy photos by Jeff Newman)

Schwarz and his team will now take their data and the observations collected by Howe’s team back to the lab for analysis and determine whether to send out additional dive teams to confirm any findings as downed aircraft. He expects to make at least one more trip to Patuxent River next summer to continue sweeping the bay’s depths for lost-but-unforgotten aircraft.

“Our week and a half on the Chesapeake was very successful, thanks to our colleagues at IMH and Navy partners at NAS Patuxent River,” Schwarz said. “We have more than 200 sonar targets of interest to further investigate. We plan to process the sonar data and prepare for a follow up survey to ground truth the most promising of these targets, and to search in a few other areas to the north that we did not get to this summer. Ultimately, we hope our work will help us locate and protect these few remaining 1940s and 50s sites of training craft tested by Navy pilots during these developmental years of Naval Aviation.”

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