

# MISSING

NGA PARTICIPATES IN MISSION TO RECOVER

## WWII SERVICE MEMBERS

NGA Office of Corporate Communications

### THE NATIONAL GEOSPATIAL-INTELLIGENCE

Agency plans to continue in 2014 as part of a historic U.S. Coast Guard mission to recover three World War II-era U.S. service members entombed in 40 feet of Greenland ice.

The search for Coast Guardsmen Lt. John Pritchard and Petty Officer First Class Benjamin Bottoms, and Army Cpl. Loren Howarth, who have been missing since their plane crashed in November 1942, falls under the auspices of the Joint Prisoner of War/Missing in Action Accounting Command, and includes NGA, NASA and the Naval Research Laboratory. Pritchard and Bottoms are the only remaining MIAs in the Coast Guard according to the service.

The men's disappearance involves three downed aircraft, according to USCG historical reports. First, a U.S. Army cargo plane made an emergency landing Nov. 5, 1942, on an ice cap in Southeast Greenland. Its crew survived and needed to be rescued. A second plane, a modified B-17 bomber, crashed during the search and rescue mission. Several of its crew members were injured, but all survived.

Then, on Nov. 28, a Grumman Duck amphibious biplane, piloted by Pritchard, left USCG Cutter Northland to rescue men from the B-17, according to records. Pritchard and his radio operator, Bottoms, evacuated two men from the site and returned to the crash the next day and retrieved Howarth. Despite weather warnings from Northland, the three took off in the Duck toward the ship.

They didn't make it. The last radio communication from them came nine minutes after takeoff, requesting directions back to the ship.

Several days later, another plane located the Duck and reported it badly wrecked with no signs of life. Since there had been no communication from the first plane's crew for 30 days, the Coast Guard decided to focus its efforts on the B-17 crew. The remaining survivors were rescued in March 1943.

The Coast Guard could not recover the Duck or its crew, but the 1942 report was detailed enough to allow researchers, including NGA, to begin recovery operations again – nearly seven decades later.

Known as "Duck Hunt," there have been four recovery missions since 2010, each yielding incremental success, said Cmdr. Brian Glander, chief of the U.S. Coast Guard Office of Aviation Forces.

The latest recovery team worked from June to September 2013, until weather conditions became too harsh, said Glander. NGA's support allowed researchers to get closer to the crash site.

NGA's involvement included its Department of Homeland Security NGA Support Team, the 3D model shop, and elements of Analysis and Source directorates, said Wayne Stephenson, the agency's Coast Guard liaison. The NST coordinated NGA's efforts, introducing airborne ground penetrating radar imagery surveys from NASA and the Naval Research Laboratory, and providing

analytic support from the Army Corps of Engineers cold weather lab.

The model shop produced 3D models of the crash site and the aircraft, said Stephenson. The Analysis directorate analyzed historic imagery and current data, conducted surveys and deployed an imagery scientist for the 2012 mission. Source provided imagery and foundation data and collection support, and deployed geodetic surveyor Ben Fuchs on the 2013 mission.

"Surveying on the ice cap is like nothing I have ever experienced in my 18 years as a field surveyor," said Fuchs, who works for NGA in St. Louis. "The hardest issue to overcome is the lack of landmarks. Basic orientation is nearly impossible without today's surveying technologies."

Fuchs marked the location of the crash with a 50-by-50 meter grid and oriented the excavation site to use the natural slope of the landscape, minimizing the time and effort used during excavation, he said.

The team used the grid to do radar surveys of the site, said Fuchs, who used the survey data to produce a current topographic map of the proposed evacuation site. He and other team members created an excavation plan indicating the snow and ice to be removed.

"The team assembled to recover the Duck in 2013 was like a modern day 'A-Team,'" said Fuchs. "What a pleasure it was to be a part of such a meaningful mission."\*

### TIMELINE FOR THE INITIAL HUNT FOR THE GRUMMAN DUCK

**Nov. 5, 1942** A U.S. Army C-53 Skytrooper cargo plane makes an emergency landing on an ice cap in southeast Greenland. All five service members aboard survive initially, but are never recovered.

**Nov. 9, 1942** A B-17 bomber, modified for search and rescue and designated PN9E, crashes during an attempt to locate the downed C-53. All nine aboard survive.



B-17 crew. Back row: William O'Hara, navigator; Armand Monteverde, pilot; and Harry Spencer, co-pilot; front row: Alexander Tucciarone, assistant engineer; Loren Howarth, radio operator and Paul Spina, engineer. Photo courtesy of Peter Tucciarone and family.

**Nov. 28, 1942** A Grumman Duck from USCG cutter Northland, piloted by Lt. Pritchard, rescues two members of the B-17 crew.



A Grumman Duck piloted by Lt. John Pritchard taxis away from USCG cutter Northland. Pritchard and his radio operator, Petty Officer 1st Class Benjamin Bottoms, flew to the Koge Bay glacier and retrieved two of the nine crewmen from the B-17 crash. U.S. Coast Guard photo, courtesy of Charles Dorian.

**Nov. 29, 1942** Pritchard and Bottoms return to the site of the downed B-17 to rescue more men. Despite weather concerns and warnings from USCG cutter Northland, the two left the glacier with Army Cpl. Loren E. Howarth. The plane never made it to the Northland.

**Dec. 5, 1942** After 30 days with no communication from the C-53 crew, rescue and recovery efforts for the cargo plane are halted. The five men were never located.

**Dec. 7, 1942** A B-17 bomber piloted by Capt. Kenneth Turner locates the Grumman Duck and reports, "Grumman located. No sign of life. Badly wrecked."

**March 1943** The final survivors of PN9E are rescued.

**August 2013** Efforts to recover Pritchard, Bottoms and Howarth continue.

### WHO THEY WERE: THE MEN OF THE GRUMMAN DUCK

Compiled from U.S. Coast Guard News

U.S. COAST GUARD PHOTO



**Coast Guard Lt. John A. Pritchard Jr.**  
Pritchard was born on Jan. 12, 1914, in Redfield, S.D. He graduated high school in Beverly Hills, Calif., and served an enlistment in the U.S. Navy. In 1938, he graduated the U.S. Coast Guard Academy, received his commission and became an aviator. His sister, Nancy Pritchard Morgan Krause, was in college when her brother went missing. Krause described her brother as confident, self-assured, gentle and caring, according to Mitchell Zuckoff's book, *Frozen in Time*. The pilot was 28 when he died.

U.S. COAST GUARD PHOTO



**Coast Guard Petty Officer 1st Class Benjamin Bottoms**  
Benjamin Autrell Bottoms grew up in Marietta, Ga. While assigned to the Coast Guard air station at Salem, Mass., he met his wife, Olga. In 1942, Bottoms was assigned to Coast Guard cutter Northland as the radio operator of the J2F-4 Grumman amphibious plane, known as the Duck. Bottoms was 29 when his plane disappeared. He was survived by his wife and a stepson.

U.S. ARMY PHOTO



**Army Cpl. Loren Howarth**  
Loren Howarth was born in 1919 and hailed from Wausaukee, Wis. He enlisted in the Army in 1942 after attending La Crosse Teachers College. He was a radio operator on the B-17 bomber that crashed in Greenland Nov. 9, 1942. Rescued by Pritchard and Bottoms, he was aboard the Grumman Duck when it disappeared. His obituary in the Wausaukee newspaper read, "The sadness and sacrifice of war has fallen on a mother who now must carry Wausaukee's first gold star ... Taps for Corporal Loren Howarth, a fine boy and a hero." Howarth was 23 when he disappeared.

A forensic anthropologist from the Joint POW/MIA Accounting Command checks the placement of bore hole markers at the excavation site near Koge Bay, Greenland, Aug. 13. The team used a subsurface camera to look inside the holes for evidence of the crew of the Grumman Duck aircraft that reportedly crashed there in 1942. Photo by U.S. Coast Guard Petty Officer 2nd Class Jetta H. Disco. Read more: [www.davidshub.net](http://www.davidshub.net)

