

Completing the Puzzle

The analogy of the Earhart riddle to a giant jigsaw puzzle is one that we've used many times—and with good reason. Each documentable fact is a puzzle piece that must be fit correctly into the overall picture. Trouble is, the box cover has been lost and we don't know what the picture is supposed to look like. To make matters worse, the pieces of our puzzle are mixed in with those of a hundred other puzzles and must be carefully sorted out before we try to fit them in. Where pieces are missing we have to guess, and we make mistakes. Meanwhile, onlookers jeer that we're merely constructing a fictional picture from random shapes.

But piece by piece, always more slowly than we would wish, the puzzle comes together. As more and more facts replace guesses and speculation, the gaps are filled in and connections are made. We still have to guess and we still make mistakes, but the picture grows more and more solid and the naysayers grow ever more nervous. And as anyone who has put together a jigsaw puzzle knows, the closer we get to the end, the faster it goes.

Let's look at our new puzzle pieces (printed in blue) and see how they fit with the ones we already had.



When the USS *Colorado's* Senior Aviator, Lt. John Lambrecht, flew over Nikumaroro on July 9, 1937 (one week after the disappearance) he reported that “signs of recent habitation were clearly visible” but saw no aircraft. The island had not been officially inhabited since 1892 but Lambrecht didn't know that. The search moved on. (U.S. Navy report dated 16 July 1937 “Aircraft Search For Earhart Plane.”)

Three months later, British Colonial Service officers Henry E. Maude and Eric R. Bevington paid a three-day visit to Nikumaroro with a delegation of Gilbertese islanders to evaluate the atoll for future settlement. On a remote part of the island Bevington noted “signs of previous habitation” which he later described as looking like “someone had bivouacked for the night.” (Eric R. Bevington, diary entry for October 14, 1937.)



On the same part of the island indicated by Bevington, and where local tradition held that bones had once been found, TIGHAR recovered the remains of an American woman's shoe dating from the mid-1930s which matched the size and style worn by Earhart. A second, different heel indicated the presence of another pair of shoes. Excavation of the site later revealed the ash and charcoal of a campfire which contained a partially burned can label. (TIGHAR archaeological investigations 1991 and 1997.)


Gallagher's documented discovery of human remains and artifacts on Nikumaroro in 1940 connects these pieces perfectly. Lambrecht's impression was correct. There was someone on the ground. Bevington was right. Someone had bivouacked there. The legends about bones being found are true. And TIGHAR's discoveries, it turns out, had been preceded over half a century earlier by those of Gallagher who had reached the same conclusion as to their origin.





These pieces show a very clear picture of at least one and probably two individuals marooned on the island sometime not earlier than about 1933 (mid-1930s shoe heel) and not later than July 9, 1937 (Lambrecht's “signs of recent habitation”). One of them is probably an American woman who wears the same style and size shoe as Amelia Earhart. They have very few assets with which to survive, but they do have a nautical sextant with an inverting eyepiece useful in taking sightings from an airplane.


They also have a liqueur bottle and some canned food. No yachts are known to have sunk or disappeared in the area in those years. No means for castaways to come ashore (raft, flotation device, etc.) was ever reported found. The only known missing persons of European decent in the region are Amelia Earhart and Fred Noonan.


The part of the puzzle that shows what happened to the airplane is less clear and more speculative, and yet a number of pieces seem to fit together.


 **B**adly damaged airplane components which appear to be from the Earhart aircraft have been found in the island's abandoned village and were clearly brought there from somewhere else. The section of aircraft skin (Artifact 2-2-V-1) is believed to be part of a patch known to have been installed on the belly of the Electra under the forward part of the cabin. For the sheet of aluminum to have been removed, the aircraft had to be either standing on its gear or lying on its back. (TIGHAR archaeological investigations 1989, 1991 and 1996.)


 **T**he most credible post-loss radio message with intelligible content includes the fragmentary phrases: 281 NORTH HOWLAND...CALL KHAQQ...BEYOND NORTH...WON'T HOLD WITH US MUCH LONGER ... ABOVE WATER...SHUT OFF. It seems reasonable to speculate that, if authentic, this message indicates that the aircraft is somehow threatened by rising water. (Message reported by U.S. Navy Radio, Wailupe, Hawaii, July 4, 1937.)


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 **A** detailed survey of Nutiran district by New Zealand authorities in late 1938/early 1939 found no aircraft debris present at that time. (New Zealand Pacific Island Survey, Gardner Island, report dated 28 March 1939.)

 **T**he two anecdotal accounts of airplane wreckage seen by former residents of Nikumaroro in the late 1950s strongly suggest debris traveling from seaward toward the shore and, in some cases, through the lagoon passage. (Interviews on Funafuti, Tuvalu in March 1997.)

 **A**erial photos taken in 1953 and 1988 tend to corroborate the anecdotal accounts of aircraft wreckage on the reef flat and beach. (Aerial mapping photos, 1953. RNZAF photo, 1988.)

 **T**he recovery in 1971 of an R1340 engine from the reef flat off the western end of an atoll in the Phoenix Group may have taken place on Nikumaroro. (Anecdotal account, March 1997.)

 **A** photograph showing what may be a badly wrecked Lockheed 10E in a Pacific island setting may have been taken on Nikumaroro. The starboard engine missing in the photo may be the one recovered from the reef flat. (Photo of uncertain origin.)



The picture formed by these pieces seems to show an airplane that was landed successfully on the reef flat, sent radio distress calls for a short time, but was washed off the edge of the reef or into one of the many crevasses that penetrate the reef flat. The crew may have been forced to abandon the aircraft and make for the beach with what few essentials they could carry. The wreck seems to have lain undetected for years until storm activity broke it up and began washing pieces shoreward. The wreckage should still be there although now buried in the sand or hidden in the nearly impenetrable beachfront vegetation.