

TIGHAR Tracks



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Mysteries of the Seven Site

The Seven Site is an obscure patch of nearly impenetrable bush on one forgotten corner of an abandoned island in the middle of a vast ocean. It may be the place where Amelia Earhart lived for a time as a forlorn and desperate castaway. It may be the place where she died. If it is, we may be able to prove it – but we need your help.



This was the Seven Site on Day 8 (September 5, 2001) of the Niku III Expedition. The TIGHAR team was doing a final cleanup after a solid week of backbreaking clearing in hundred-degree heat. We were hoping that the archaeological work that could now begin would justify the investment of time and sweat. We were not disappointed.

We were there to test a specific hypothesis:

In 1940, British Colonial Officer Gerald Gallagher found a partial human skeleton at a supposed castaway's campsite somewhere on this end of the island. Our analysis of the available information about that discovery leads us to suspect that the castaway was Earhart and that the discovery was made at the place we call the Seven Site.

Our methodology was designed to answer a number of questions:

1. Is there evidence at the site of the presence of a castaway?
2. Does the site fit Gallagher's specific description of a fire, dead birds, and turtle?
3. Does anything about the site explain the presence of what appear to be man-made trails in a 1938 aerial photo taken before the island was officially inhabited?
4. Is a man-made hole at the site the place where a skull found by a work party was buried and later dug up by Gallagher?

Affirmative answers to some or all of these questions might confirm that we had found the place where the castaway had lived and died, but the biggest question was the last one.

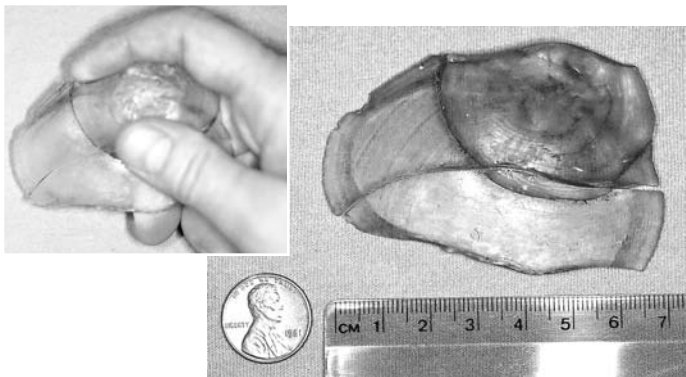
5. Are there human remains or diagnostic artifacts present at the site which make it possible to identify the castaway?

Over the next twelve days, explorations and excavations at the Seven Site revealed a rich and complex array of hidden features. As with most archaeological sites, several kinds of activity over the years have left a jumble of evidence that must be carefully sorted out. It is apparent, for example, that a large water tank and a variety of construction materials were brought to the site by the colonists at some time, probably before the war. Also, during the war, American servicemen from the U.S. Coast Guard Loran station came to the site on one or more occasions for informal target practice with their .30 caliber M-1 carbines (as evidenced by numerous shell casings and the shattered remains of at least two

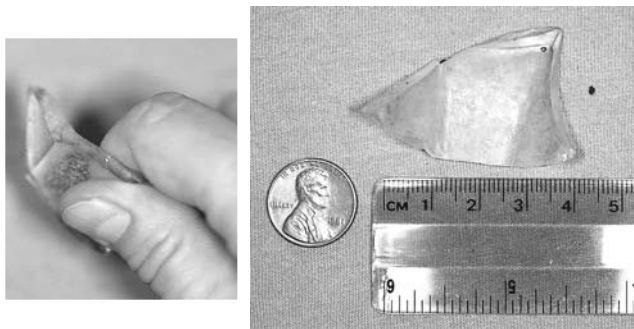
ceramic plates, one of which bears the Coast Guard logo). However, not all of the artifacts can be reliably ascribed to these known activities. Quite the contrary.

Did a Castaway Live Here?

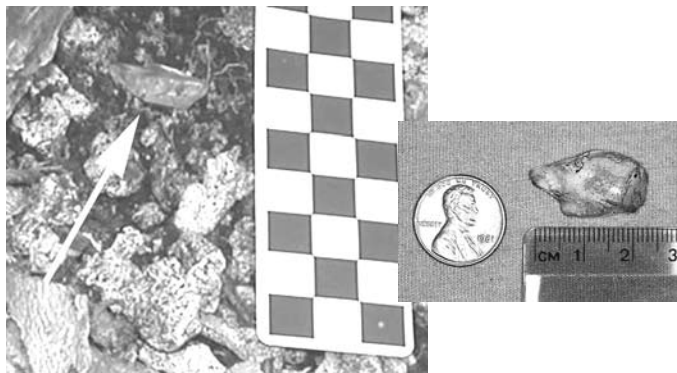
In answer to Question 1, we have recovered a number of artifacts which appear to be “beachcombed” objects that were used as primitive tools. Both the colonists and the Coast Guard had ready access to good, conventional tools so the presence of crude expedient tools might indicate the presence of a castaway. It should be mentioned that all of the artifacts described below were found too far inland to have simply washed up there.



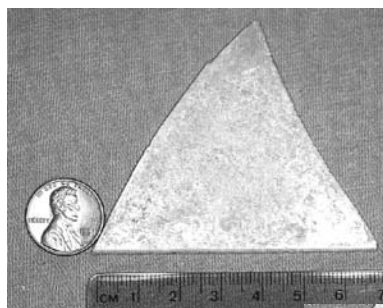
Artifact 2-6-S-21a is a shard of broken glass which appears to be from the top of an old-fashioned glass ball fishnet float. No other piece of glass from the float was found. Whether by coincidence or design, the shard fits comfortably in the hand while presenting a very sharp cutting edge. The edge will be examined by an expert in ancient tools to determine whether there are indications that the surface has been used for cutting.



Artifact 2-6-S-21b is a shard of broken glass which was apparently once part of a small hexagonal bottle. It was found immediately adjacent to Artifact 2-6-S-21a and no other similar piece of glass was found anywhere. This piece also can be held safely and used as a sharp tool. Its edge will also be examined for evidence of wear.

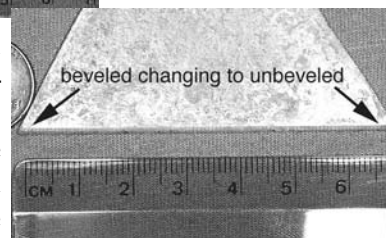


Artifact 2-6-S-16 is a small piece of glass, found by itself and theoretically useful as a tool. The “point”, however, is quite dull. Perhaps expert examination can determine whether that is natural or the result of use.



Artifact 2-6-S-18 is yet another piece of broken glass and, again, is unlike any other object found at the site. Only about 1 mm in thickness, this triangular plate of glass has one straight edge

that was manufactured in a very specific beveled shape that changes across the length of the edge. The weight and thickness of the piece and the straight but complex beveled edge suggest that it may have once covered the rectangular face of an instrument of some kind. Unlike the glass of the artifacts described above, it is difficult to imagine this object as being part of something that had floated ashore.



Artifact 2-6-S-12 is interesting because it is the only “chunky” ferrous object found at the site. There is badly rusted corrugated metal siding or roofing material and there are various rusted-to-pieces ferrous containers in the area, but the weight and condition of this artifact seems much more in character with the wreckage of the S.S. *Norwich City* at the other end of the island. Its shape suggests that it may have once been part of a circular iron cover or lid but this broken fragment has obvious potential utility as a prying tool.

Does the Site Fit Gallagher's Description?

Gallagher, in his October 17, 1940 telegram to the Secretary of the Western Pacific High Commission, says, "Body had obviously been lying under a "ren" tree and remains of fire, turtle and dead birds appear to indicate life." Ren trees (*Tournefortia argentia*) are quite common



on Nikumaroro, so that is not much help, but for what it's worth there is now a rather large ren tree right in the middle of the Seven Site. Near the base of that tree, and at several other discreet locations nearby, we excavated numerous bird, turtle and fish bones some of which showed clear signs of having been in a fire.



Literally hundreds of bones were collected from meticulously excavated archaeological "units" (gridded areas). These will be examined by faunal experts to determine the size, number, and species of the animals and fish consumed at the site. Any information about methods of preparation or cooking will also be noted. If, for example, we find that the bones of deep ocean fish are present, that would argue against the fish being caught by a castaway. If, on the other hand, the bones represent fish that, although perhaps easy to catch on the reef or in the lagoon shallows, are not favored by Pacific islanders, that would argue for a castaway.

The End of the Trail

Almost two years ago, February 23, 2000, a research bulletin entitled "Signs Of Recent Habitation" was posted on the TIGHAR web site (http://www.tighar.org/Projects/Earhart/Bulletins/2_23_00.bull.html) and began with the following statement:

There appears to be photographic evidence of recent human activity on Nikumaroro prior to the arrival of the island's first settlers. There are marks on the ground, visible in an aerial photograph taken on December 1, 1938, which are identical in appearance to known trails or footpaths appearing in later aerial photos. The apparent footpaths in the 1938 photo appear in a location we suspect as being the site of the castaway's campsite where human remains were found in 1940.

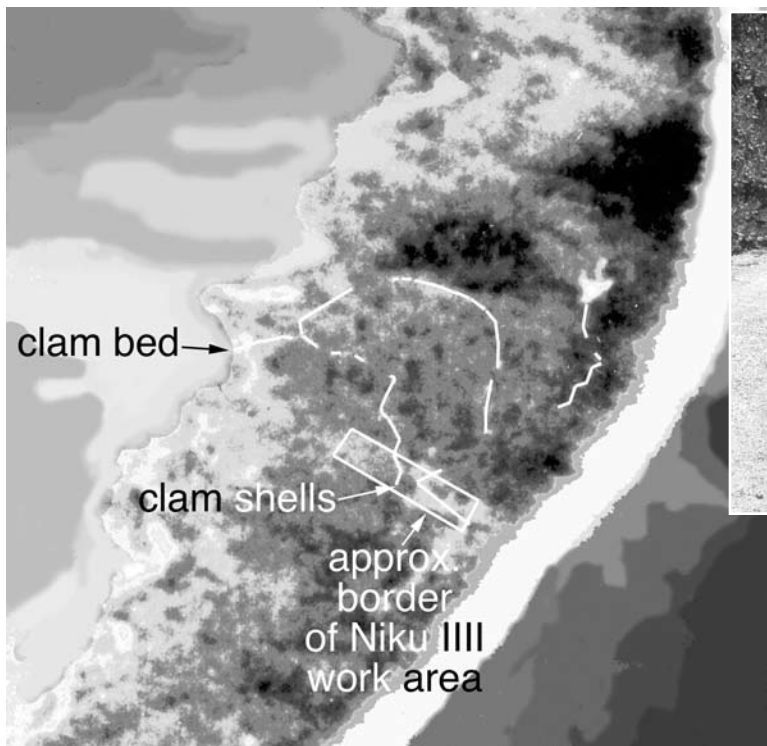
We also said:

It is, of course, possible that the features which resemble trails are some naturally occurring phenomenon that we do not at present understand, but if they are evidence of human activity the implication is that someone was active on a remote section of the island in the years immediately prior to 1938.



Our subsequent work on the island has not turned up any natural cause of the "trails" but we have identified a possible explanation for at least one of them. Among the signs of human activity at the Seven Site are two locations, each of which contains the shells from exactly 15 giant clams (*Tridacna gigas*).

Several of the shells are broken in a manner that suggests that some of the clams were bashed rather than pried open.



One of the apparent trails leads from the part of the Seven Site where the clam shells were found, through the buka forest, to a specific point on the shore of the lagoon, where there was once a clam bed. It's the only place along the shoreline on that part of the island where evidence of a former clam bed has been found.

In retracing the trail on the ground, matching the 1938 aerial photo to current satellite photography, we found that the route follows the easiest path in terms of terrain and vegetation between the two points.

In light of those observations it is very difficult to see the feature in the 1938 aerial photo as anything but a man-made trail connecting an exploitable food source with an occupied campsite where the food was consumed. Other apparent 1938 trails lead into the buka forest where birds abound and to the ocean shore where turtles come ashore to lay their eggs.

Skullduggery



The fourth question we asked of the Seven Site was whether the hole that we noticed when we first found the site in 1996 might be where the work party buried the skull that was later exhumed by Gallagher. We reasoned that a careful excavation of the hole might provide clues to its purpose and, if it was really the "skull hole",

meticulous screening of its contents might even turn up teeth that had become dislodged from the skull in the process of burying it and digging it up. It was a long shot, but the possibility of obtaining a DNA sample from a tooth was worth the effort.

As we excavated the hole it became apparent that its original shape fit the "skull hole" hypothesis very nicely. It appears that there were two holes – an original



hole of fairly small proportions, and a subsequent larger hole that was not centered over the original one. Unfortunately, no teeth were found but neither can we

be certain that we got to the bottom of the original hole before we ran out of time.

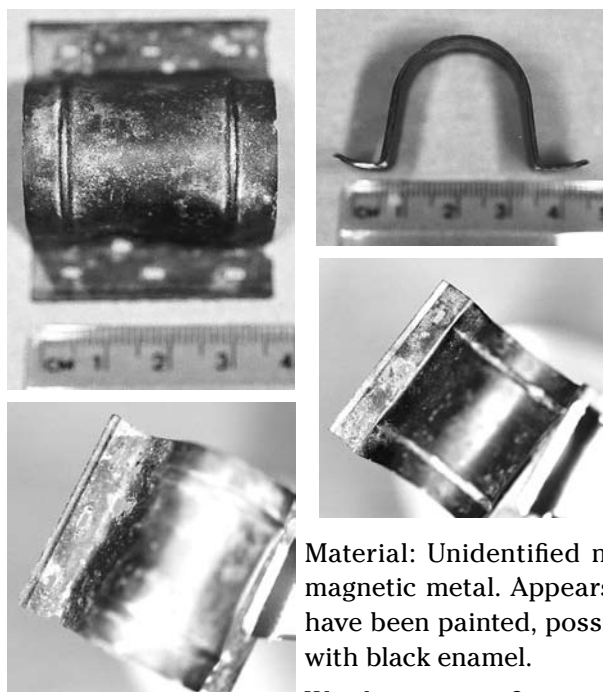
Smelling for Gunsmoke

Our last and most important question is whether any of the artifacts found at the Seven Site provide clues to the identity of the castaway – and this is where we need your help. Some of the artifacts shown and described below are distinctly technological in nature and seem to be entirely out of place at the Seven Site. Perhaps they all come from the same instrument, machine or device – perhaps not. Once identified, it may become obvious that their source was the colonists or the Coast Guard, or we may discover that we have something far more interesting.

Please look at them and think about them. If you have a hunch, check it out. If you think you can identify one or more of them, please contact Ric Gillespie by email at TIGHARic@aol.com, by phone at (302) 994-4410, by fax at (302) 994-7945 or by mail at:

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ARTIFACT NUMBER: 2-6-S-43



Material: Unidentified non-magnetic metal. Appears to have been painted, possibly with black enamel.

Weight: approx. .2 oz.

Condition: Excellent. Some small holes. The metal is still “springy.” No part of the object appears to exhibit wear except some minor upward plastic deformation in the outside edges of the three small rectangular holes in each of the flanges.

Speculation: This appears to be a spring clip used to hold a replaceable cylindrical object securely in place against a flat surface. The strength and springiness



of the metal suggests that it may be a non-magnetic type of stainless steel. The three rectangular holes in each side of the flange may have fit over pins to prevent longitudinal movement of the clip while the raised edges of the flanges may have fit under a lip to prevent lateral movement.

Could this be a clip to hold an accessory (such as an inverting eyepiece) securely in a sextant box? In his telegram to the resident commissioner of September 23, 1940, Gallagher says the sextant that was once in the box he found was “probably painted over with black enamel.”

ARTIFACT NUMBER: 2-6-S-21F

Material: Lightweight magnetic metal. No indication of paint but the metal seems to exhibit a faintly gold



color.

Weight: approx. .1 oz.

Condition: Good. Broken and somewhat deformed. No rust.

Speculation: This appears to be a complex, highly specialized component from some kind of lightweight technology.

ARTIFACT NUMBER: 2-6-S-32

Material: Unknown non-metallic porcelain-like material with a magnetic metal pin set in it.

Weight: approx. .1 oz.



Condition: Good. The nonmetallic material is broken and the pin is bent. The pin has a small glob of metal at the unattached end possibly indicating that it was welded or soldered to something.

Speculation: This appears to be an internal component from some piece of lightweight technology. The scallops may be detents for a rotating cam that was part of some kind of variable adjustment.

ARTIFACT NUMBER: 2-6-S-45

Material: Non-magnetic silver-colored metal beneath rust-colored exterior. The exterior edge has small grooves and there are letters (worn and, so far, illeg-

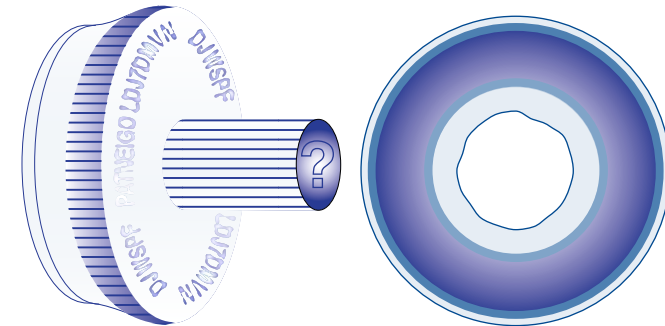


ible) on the upper surface which may include patent information. There is a separate internal channel around the interior surface.

Weight: approx. .2 oz.

Condition: Good. Bent and broken.

Speculation: This appears to be a knurled adjustment knob. There may have been a separate, smaller concentric knob that turned a disk that rotated within the internal channel. This suggests a knob for making coarse and fine adjustments to some kind of small instrument or machine. If we can decipher the letters on the exterior surface we might be able to make a positive identification.

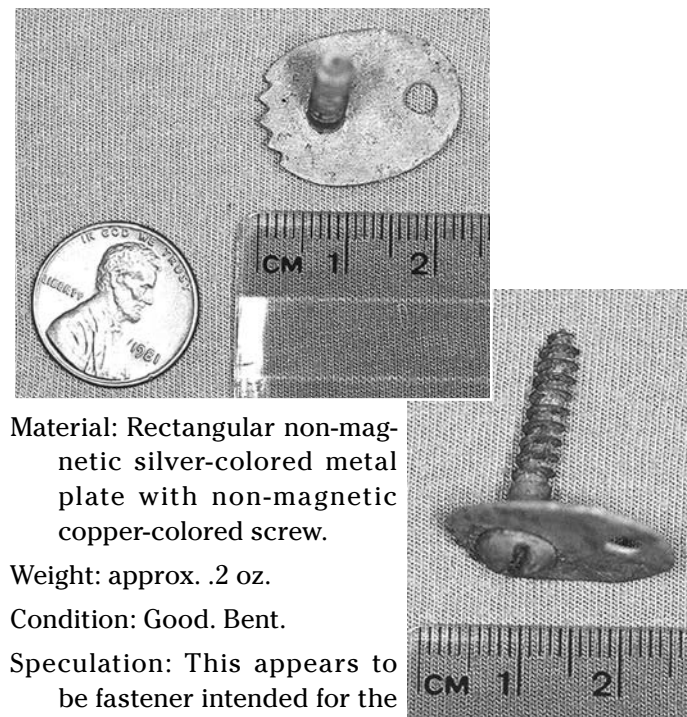
ARTIFACT NUMBER: 2-6-S-O3A

Material: Disk-shaped, non-magnetic silver-colored metal plate with non-magnetic copper-colored screw.

Weight: approx. .1 oz.

Condition: Good.

Speculation: This is a low-tech fastener intended for a very specific purpose. The screw appears to be a wood screw and the teeth may be designed to bite into wood and prevent rotation of the plate which is attached to a surface by means of some kind of pin that goes through the hole in the plate.

ARTIFACT NUMBER: 2-6-S-O3B

Material: Rectangular non-magnetic silver-colored metal plate with non-magnetic copper-colored screw.

Weight: approx. .2 oz.

Condition: Good. Bent.

Speculation: This appears to be fastener intended for the same purpose as 2-6-S-03a

but of slightly different design and somewhat heavier construction. In this case the surface to which the

ARTIFACT NUMBER: 2-6-S-46

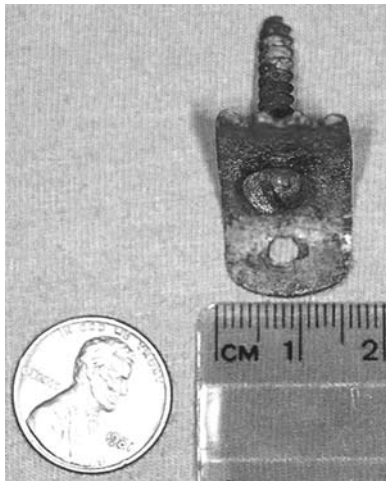


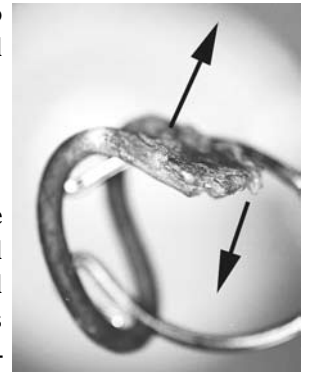
plate was attached seems to have rotated ninety degrees with sufficient force to bend the plate.

Material: Looped heavy duty non-magnetic wire that was once welded (?) to another non-magnetic metal surface.

Weight: approx. 3 oz.

Condition: Good.

Speculation: This may have been the handle of a small metal cup. If so, the metal to which the handle was attached failed in compression at the bottom edge and in tension at the top edge – as if the cup was being used as a digging tool.

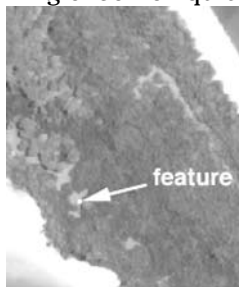


All of these photographs, and a few more, will be mounted on the TIGHAR website (in color, of course) by November 23. Please visit <http://www.tighar.org> and click on any link for the Earhart Project to navigate to the Help page and to Research Bulletins for constant updates on progress in identifying these artifacts.

And a New Mystery...



Perhaps the strangest discovery of the Niku III expedition was a figure near, but not at, the Seven Site. It is apparently man-made, laid out on the ground in brilliantly white pieces of coral in one corner of a bare patch of dark gray coral rubble. The white coral pieces that make up the figure are, in most cases, only one piece deep and no portion of an underlying gray piece is white (so it does not appear to have been made by the spilling of some liquid bleaching agent). Other identical white coral pieces occur randomly throughout the area but are widely scattered. White coral pieces of similar size but exhibiting a much smoother and eroded appearance may be found in abundance on the ocean beach about 150 meters away. Our impression is that someone at some time and for some unknown reason, gathered up several hundred pieces of white coral from the immediate area and laid them out in this design on a low mound of gray coral that appears to be the backfill of a shallow



depression. There are other similar depressions in the area but we don't know their age or their origin. Test holes dug in the area reveal no underlying layer of white coral that could have been dredged up by a burrowing crab. We have never seen anything remotely resembling this feature on any part of the island.

The figure's shape can be variously interpreted. Some describe it as a "6" or it could be a drawing of a fat-headed snake, but it seems to most resemble a printed capital letter G. There are no snakes in the Central Pacific and the language of the people who lived on the island has no words with an initial letter G (Gallagher was "Karakā" or "Kela").



At only about a meter in height it seems awfully small and ambiguous to be intended as a signal to aircraft, and it's too far back in the bush to be seen from the shore or indeed by anyone who doesn't happen into the clearing. A metal detector sweep found a few flakes of rusted metal in the clearing about three meters from the feature but no other sign of human activity.

Perhaps it's only a random drawing by a bored child or maybe it has a more profound significance. As if we didn't have enough mysteries to contend with.....