

TIGHAR TRACKS

A PUBLICATION OF THE INTERNATIONAL GROUP FOR HISTORIC AIRCRAFT RECOVERY

Artifact Identification and Analysis

The identification and analysis of artifacts recovered during The Earhart Project expedition (September 3 – October 16, 1989) is proceeding well and yielding some intriguing results. The process is greatly aided by the network of TIGHAR members and associates whose expertise is being brought to bear to assure the highest standards of accuracy and thoroughness.

Part No. 28F 4023 4

An excellent example is the positive identification of a box-like aluminum structure recovered from among the rubble of the abandoned village on Nikumaroro. Roughly the size of the proverbial breadbox, its corners had been crudely sawn apart and some kind of riveted-in internal feature had obviously been ripped out. Among the discarded glass jars, corroded cooking pots, and rusted bed frames it was hardly remarkable and yet in it Island Team members John Clauss (TIGHAR # 0142) and Veryl Fenlason (TIGHAR # 0053) recognized hints of aircraft construction techniques. Closer examination revealed what might be a part number so the piece was collected, assigned TIGHAR Accession Number 2-1, cataloged and cleared for export.

With the expedition's return identification of the artifact began with a phone call to wreck-hunter and collector Larry Webster of Shannock, Rhode Island (TIGHAR # 0084) who noted that the number stamped into the piece, 28F 4023 4, fit the alpha-numeric system used by Consolidated Larry suspected the 28 might refer to Consolidated Model 28 -- the PBY Catalina. The San Diego Aerospace Museum further deciphered the number as 28 for Model 28, F for fuselage component, and 4023 for bookcase, navigator's. The final 4 probably indicates installation in an early version of the Catalina since parts lists for later marks such as the PBY 5A show two digit numbers in that position. The New England Air Museum provided excerpts and sketches from PBY Maintenance and Assembly manuals completing the identification.

So a navigator's bookcase from a PBY was ripped out, gutted, sawn apart and ultimately discarded on Nikumaroro. Catalinas were used to resupply the island's Coast Guard LORAN station during WWII and the 25 Coasties who manned the station made weekly trading forays to the village. The presence of the bookcase, while perhaps odd, is hardly mysterious. Most importantly, we now know that artifact 2-1 is not part of a Lockheed Electra and that, frankly, is something of a relief. Everything we have seems to point toward the Electra landing on the dry reef flat and being washed over the edge pretty much intact. An internal structure kicking around the village would be hard to reconcile with that hypothesis.

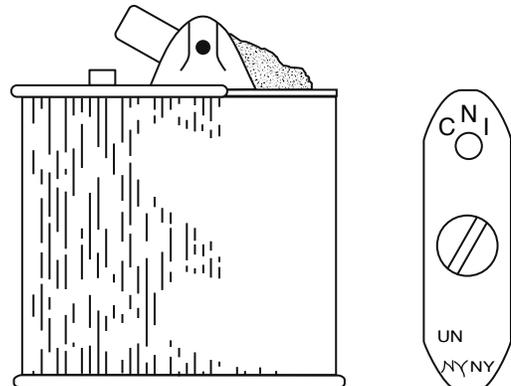
Hit #9

Much more interesting is the cigarette lighter excavated on the southwest beach. A radio transmission on Earhart's frequency received the day she disappeared, but long after she had to be out of fuel, is reported as:

"Earhart calling --- NRUI, NRUI (USCG Itasca's call sign) from KHAQQ (Earhart's call sign) --- On coral southwest of unknown island. Do not know how long we will ---"

That and indications that Nikumaroro's southwest beach may have been where bones were discovered in 1938 prompted a metal detector sweep of the half mile stretch of shoreline on the chance that, if this was indeed where Earhart and Noonan perished and where their bones were later discovered, some piece of evidence may have remained. The southwest beach is in the lee of the prevailing wind and very little debris washes up on its shore. Only eleven metal detector "hits" were found, and most turned out to be shards of heavily oxidized ferrous metal, probably nautical in origin. But Hit #9 was a cigarette lighter. Although it was just the sort of thing we had hoped to find (Noonan smoked, Earhart did not), just where we had suspected we'd find it, there was no inscription "To Fred from your buddies at PanAm," and alternative explanations of its presence seemed to abound. The lighter became artifact 2-7.

Dr. Patrick Nolan (TIGHAR # 0764) at the Hagley Museum and Library in Wilmington, Delaware got the identification process started. A 1934 catalog in the Hagley collection made clear the similarity of 2-7 to Ronson lighters of that period. A Ronson executive, after examining photographs, identified it as a Whirlwind, a design marketed by the company before and after WWII. Then Charles Chiarchiaro, Director of the Owl's Head Transportation Museum (TIGHAR # 0619) in Maine put us in touch with Jack Seiderman of Miami, Florida. Jack is a collector,



dealer and top-notch authority on old mechanical lighters (every mountaintop has its guru) and artifact 2-7 suddenly got a lot more interesting. Our lighter turns out to be a Japanese copy of the Ronson Whirlwind design, and, because of some unique commercial history, it is possible to date its sale with some certainty to the early 1930's in the United States. Here's how it goes. Ronson came out with the Whirlwind design in 1930 but soon Japanese manufacturers deluged the U.S. with cut-rate imitations, secure in the knowledge that the original Ronson patent had expired. Ronson, however, brought suit and, on December 12, 1933, the U.S. Patent Office reissued the Ronson patents. Importation and sale of bogus Ronson lighters became illegal, although imitations of other makes continued right up to, and following, the war. Barely discernible on the base of our lighter is the stamp of a New York importer, confirming that this is one of the Japanese copies brought into the

U.S. before the reissue of the Ronson patents. Nikumaroro was a British colony and early American contact with the island was largely limited to the USS Bushnell's survey in 1939, and the Coast Guard LORAN station from June of '43 to March of '46. The lighter was found far from the marker left by the 1939 Navy survey, and Charles Sopko, officer in charge of the wartime Coast Guard unit, reports that his detachment was made up of "18 and 19 year-old kids." The lighter, found on the opposite side of the island from the LORAN station, was almost certainly purchased in the United States when Sopko's charges were not more than nine years old.

Of course, none of this makes artifact 2-7 Fred Noonan's lighter, but so far the evidence is pointing in that direction. We know the lighter has more to tell us and we'll be tapping the TIGHAR network once more for some hi-tech help.

