

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.

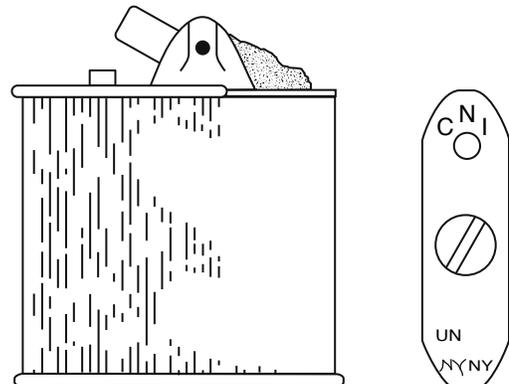
Hit #9

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

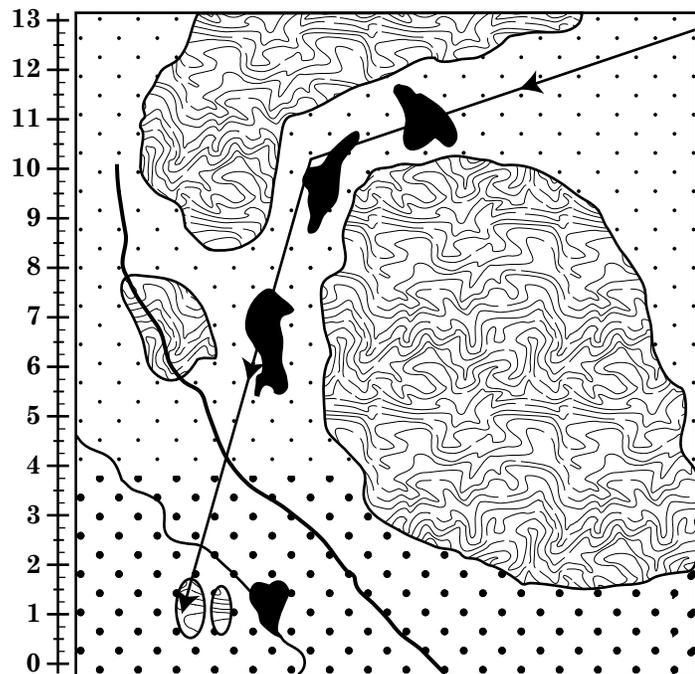
U.S. before the reissue of the Ronson patents. Nikumaroro was a British colony and early American contact with the island was largely limited to the USS Bushnell's survey in 1939, and the Coast Guard LORAN station from June of '43 to March of '46. The lighter was found far from the marker left by the 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. 

PROJECT MIDNIGHT GHOST

From November 20 to December 11, 1989, TIGHAR volunteers conducted one of the most arduous field investigations to date in the on-going search for the crash site of the fabled l'Oiseau Blanc (the White Bird). The 1927 French transatlantic attempt disappeared just twelve days before Lindbergh's New York to Paris flight, and only now, more than sixty years later, is its ironic fate emerging from the forests of eastern Maine.

The answers have not come easily. Time and again TIGHAR researchers have spent weeks, sometimes months, doggedly pursuing a suspected line of evidence and ended up with nothing to show for it but sore muscles, scratches, and bruises. Expedition XVII added frostbite to the list with record-setting snow and frigid temperatures making wilderness operations especially difficult and dangerous. But one by one, the false leads and invalid hypotheses are being weeded out and the pieces of the puzzle are forming a picture.



Nungesser and Coli took off from Le Bourget at 5:17 AM, May 8, 1927. Forecasts for the northeastern U.S. called for clear skies to welcome their arrival in New York the following afternoon. But the forecasts were wrong.

Low clouds covered all of New England and fog shrouded its coasts. Unless forced down earlier by some mechanical or weather difficulty, l'Oiseau Blanc would first encounter this unexpected system shortly after crossing the U.S. border into eastern Maine.

Robert Magoon, 14, was standing near his family's farmhouse (point A on the map) in Crawford Township, Washington County, Maine that afternoon of May 9, 1927. He heard, then saw, a "strange looking white airplane" come out of the northeast very low and circle once before departing. His ten year old sister Evelyn was sick in bed with hepatitis, but came out into the yard at the sound of the airplane and of her father's voice shouting "That plane is right down on the trees." She remembers seeing a white airplane departing to the southwest "so low we didn't think it would clear the trees on the back ridge."

Treetop height at that location is 350 feet MSL.

About seven miles to the southwest Everett and Abigail Scott were on the Township 19 road (point B on the map) when they heard an airplane pass over low "headed toward Round Lake."

The exact location of the final witness, woodsman Anson Berry, has never been confirmed but Berry's nephew believes he was on the East Machias River just north of Round Lake (point C on the map) when he heard an airplane approaching from the northeast. It was foggy on the water and Berry never saw the airplane he later reported to he heard crash into the Round Lake Hills which rise to the west of the lake.

By correlating these witness reports, the line of flight they suggest, Coli's planned route, the typical weather patterns in Washington County, and the topography of the area, a pattern emerges which describes a classic aviation accident scenario of continued visual flight into instrument weather conditions. On December 10, 1989 TIGHAR researchers flew this route at treetop altitude (albeit in good weather) and the relationship between the route and the terrain were confirmed. More importantly, this new line of flight opens up the "back" or western side of the third and tallest (515') of the Round Lake Hills as a search site. Expedition XVIII, now set for April, 1990, will be dedicated to the examination of this still untouched area. 



RESEARCH NEEDED

The Earhart Project needs to track down the answers to some specific questions. We need documented fact, not opinion, on a variety of topics including:

Batteries -- How many and what kind of batteries were aboard NR16020 at the time of its disappearance? Photographs or manufacturer's illustrations are essential for comparison with batteries found at Nikumaroro.

Airplane Wreck on Sydney Island -- A former New Zealand Navy sailor has told TIGHAR that he saw a wrecked airplane in the island's central swamp-like lagoon shortly after WWII. An anonymous caller had previously told us of a four-engined airplane wrecked on Sydney during the war. Now known as Manra, the island is one of the Phoenix group; and, while the aircraft is probably a wartime casualty, any report of an old airplane wreck in that area needs to be checked out.

Seaman 1st Class J. L. Marks -- Marks was the observer who flew with Lt. John O. Lambrecht on the morning of July 9, 1937. Their Vought O3U-3 Corsair, catapulted from the battleship U.S.S. Colorado, flew over Gardner Island (Nikumaroro)

searching for Amelia Earhart. Lambrecht, in his official report, says that although no airplane was seen, "signs of recent human habitation were clearly evident." Lambrecht was so sure there was somebody on the ground that he made "repeated attempts to elicit an answering wave," but when he got no response he returned to the Colorado. No further attempt was made to investigate the island. What did Lambrecht see on an atoll whose last recorded human contact at that time was in 1881? And on what part of the island did he see it? John Lambrecht died in 1972, but his observer, listed only as Seaman 1st Class J. L. Marks in Colorado's log, may still be alive.

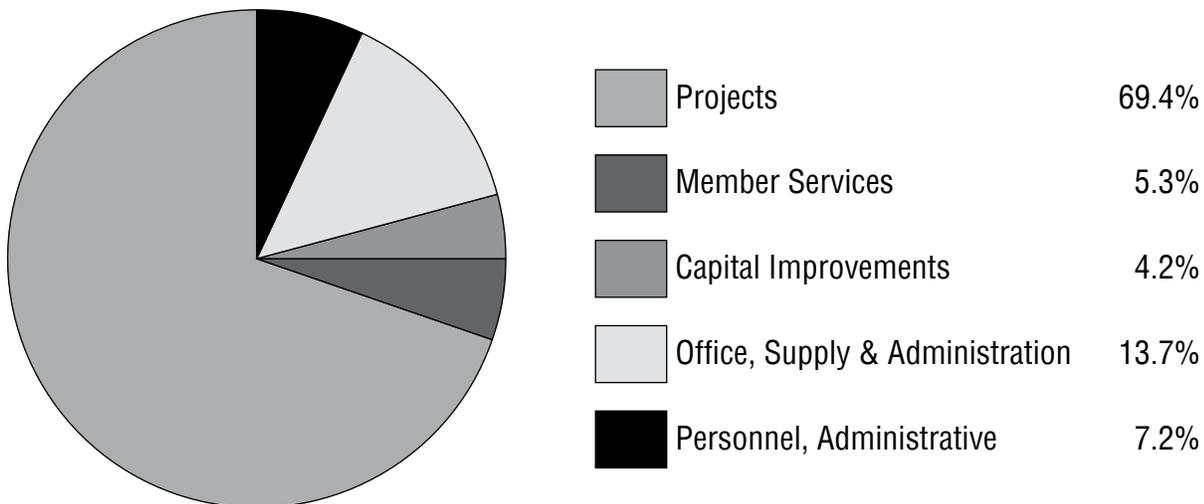
Frederick J. Noonan -- There is a great deal of rumor and speculation about Earhart's navigator which needs to be cleared up. We would very much like to find individuals still living who knew Fred Noonan personally. We'd also like to see more photographs, biographical information, or official records pertaining to him than appear in the run-of-the-mill Earhart books.

If you can help please contact Richard Gillespie, Project Director, at TIGHAR.



WHERE DOES THE MONEY GO?

1989 -- Where It Went



This chart represents the total cash expenditures of TIGHAR during calendar year 1989. Please feel free to call with any questions. TIGHAR's financial statement will be printed in the August newsletter after the close of our fiscal year

STRICTLY BUSINESS

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Well, the year is over and sooner than you know it'll be tax time (da da da dum). Here's some information you may find useful: TIGHAR is a non-profit public charity, tax exempt under Section 501(c)(3) of the IRS Code. All direct contributions in cash are tax-deductible within the limits of the law. Other contributions may also be deductible, such as money you spent in order to participate in a TIGHAR expedition. Save your receipts for airline tickets and the like, and check with your tax professional for the final word on this front. In general, you cannot deduct the value of your time which you donated to a TIGHAR project -- the loss of your revenue is considered deduction enough. Contributions of stock may give you an advantageous position re capital gains tax. Again, check with your tax professional. If you received a book, a T-shirt, or other item as a premium for your cash contribution, please check with your tax professional before deducting the entire amount. If desired, TIGHAR can tell you what portion of your contribution went to pay the cost of the premium itself. Happy New Year!

TIGHAR (pronounced "tiger") is the acronym for The International Group for Historic Aircraft Recovery, a non-profit foundation dedicated to promoting responsible aviation archeology and historic preservation. TIGHAR's activities include:

- Compiling and verifying reports of rare and historic aircraft surviving in remote areas.
- Conducting investigations and recovery expeditions in cooperation with museums and collections worldwide.
- Serving as a voice for integrity, responsibility, and professionalism in the field of aviation historic preservation.

TIGHAR maintains no collection of its own; neither does it engage in the restoration or buying and selling of artifacts. Instead, the foundation devotes its energies to the saving of endangered historic aircraft wherever they may be found, and to the education of the international public in the need to responsibly preserve the relics of the history of flight.

TIGHAR Tracks, published nine times each year, is the official publication of The International Group for Historic Aircraft Recovery. A subscription to TIGHAR Tracks is included as part of membership in the foundation (minimum donation \$35.00 per year). The editors welcome contributions of written material and artwork. Materials should be addressed to: Editors, TIGHAR Tracks, 1121 Arundel Drive, Wilmington, DE 19808 USA. Telephone 302/994-4410. Photographs and artwork will be returned on request.

Editors: Patricia R. Thrasher and Richard E. Gillespie

MEMBERSHIP FORM

I would like to join TIGHAR. Enclosed is my donation of —

- | | |
|--|--|
| <input type="checkbox"/> \$35.00 for a one year membership | <input type="checkbox"/> \$60.00 for a two year membership |
| <input type="checkbox"/> \$125.00 for a five year membership | <input type="checkbox"/> \$1,000 for a life membership |

As a member of TIGHAR, I will receive the following benefits:

- Annual subscription to TIGHAR Tracks
- Membership patch, directory and catalog
- Expedition and educational opportunities

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Please return this form with your membership dues to TIGHAR, 1121 Arundel Drive, Wilmington, DE 19808 USA; Telephone 302/994-4410, 9 a.m. to 5 p.m. EST/EDT, M-F. ALL DONATIONS TAX-DEDUCTIBLE WITHIN THE LIMITS OF THE LAW.

