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,
the pieces of the puzzle are forming a picture. False leads and invalid hypotheses are being weeded out and situations especially difficult and dangerous. But one by one, the 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.

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.

Visibility approx. 2 miles, ceiling 350 feet MSL
Visibility 1 mile or less, ceiling obscured
Terrain above 350 feet MSL

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 remembered 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 be 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.