

TIGHAR TRACKS

THE JOURNAL OF THE INTERNATIONAL GROUP FOR HISTORIC AIRCRAFT RECOVERY





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About TIGHAR

TIGHAR (pronounced “tiger”) is an acronym for The International Group for Historic Aircraft Recovery, a 501(c)(3) non-profit educational foundation.

TIGHAR’s activities include:

- Investigating aviation and aerospace historical questions and mysteries through archival research, forensic data analysis, and archeological expeditions.
- Producing papers, publications, and videos to further the foundation’s educational mission.
- Providing expert historical and archaeological research to government agencies for evaluation of cultural resources related to aviation/aerospace.
- Advocating for accuracy, integrity and professionalism in the field of aviation historical investigation and the preservation of the material culture of flight.

TIGHAR’s activities are conducted primarily by member volunteers under the direction of a small full-time professional staff. The organization’s research is publicly available via the TIGHAR website.

On the Cover

The guy who started it all. Anson Berry was born in Washington County, Maine in 1880. After the death of his beloved wife Iva in 1906, Anson went West. On the cover is his portrait as a Montana cowboy. Following “a gun scrape,” he returned to Maine and lived alone in the woods near Round Lake. On a foggy morning in 1927, according to local legend, he heard an airplane crash into hills west of the lake - an airplane thought to be the lost White Bird of would-be transatlantic fliers Charles Nungesser and Francois Coli. Berry died in 1936, but his story launched TIGHAR’s first historical investigation in 1985. Read what we’ve learned since then about evaluating eyewitness testimony in “Legends of the Lost” beginning on page 10.

On the Web

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Of Skulls and Bones

“Alas, poor Yorick! I knew him, Horatio.”

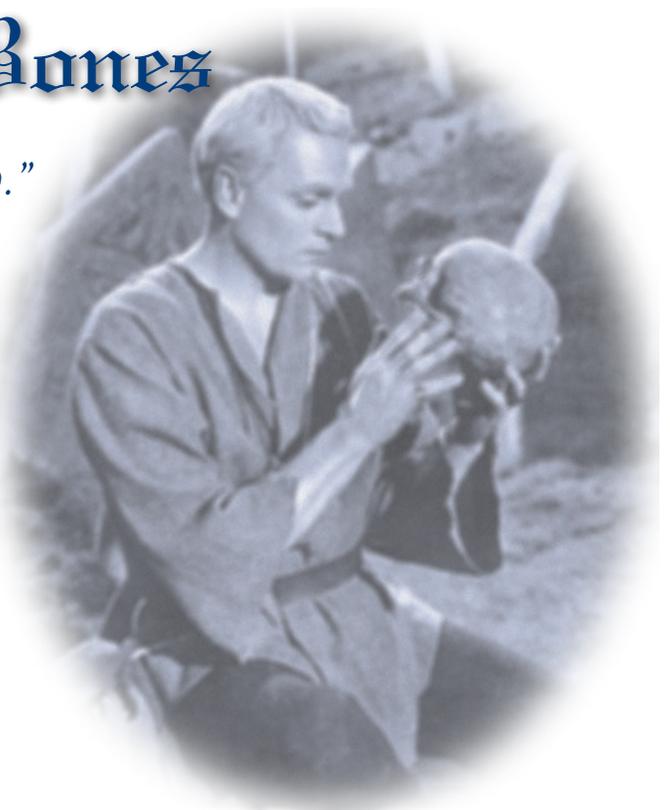
National Geographic has heralded the fragmented skull of an adult female found in the Umwanibong Cultural Centre and Museum in Tarawa as an “enticing clue” in the search for the skull and bones discovered on Nikumaroro in 1940.

Tould the now-broken skull be the one recovered by Gerald Gallagher? Suspected at the time as possibly being the remains of Amelia Earhart, the skull and partial skeleton were sent to British authorities in Fiji for examination. In 1941 a Colonial Service doctor pronounced the remains to be those of a stocky, European or mixed-race male. Dismissed as unimportant, the bones disappeared and survived only as a ridiculed rumor until TIGHAR tracked down the original British file and doctor’s report in 1998. From measurements included with the report, forensic anthropologists concluded that the deceased was probably a female of northern European ancestry.

Erin Kimmerle, the forensic anthropologist who has the fragments, has said, “We don’t know if it’s her or not, but all lines of evidence point to the 1940 bones being in this museum.” TIGHAR is not privy to National Geographic’s investigation, so we don’t know what that evidence is. The skull is reportedly being reconstructed and tested for DNA. The results are expected “in a few months.”

While we wait for the answer, it’s worth reviewing what we know about the remains found in 1940 and what we know about Amelia Earhart that might help determine whether the fragmented skull found in Tarawa is hers.

Three TIGHAR expeditions to Fiji (1999, 2003, and 2011) failed to find any trace of the missing bones. A TIGHAR expedition to Tarawa in 2001 looked at bones in the Cultural Centre and Museum but saw no fragmented skull.



In a peer-reviewed paper published in the journal *Forensic Anthropology* in January 2018, Dr. Richard Jantz compared the measurements in the British report to Earhart’s forensically determined bone measurements and concluded there is a 99.28% probability that the remains were Earhart’s. There was no way to get Amelia’s skull measurements so no comparison with Earhart was attempted.

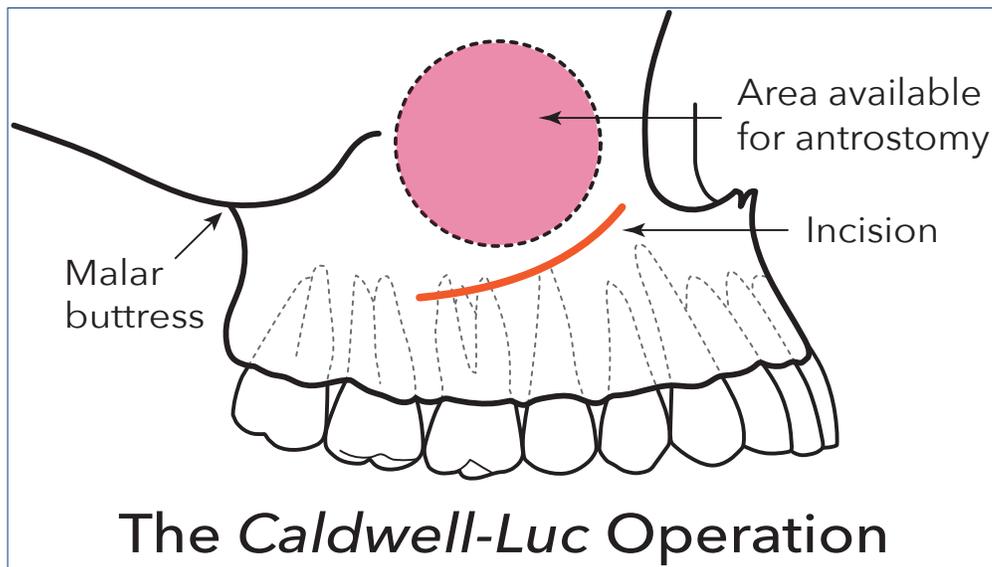
If the skull and bones examined in Fiji in 1941 still exist, how could they be identified and what could they prove?

DNA

A mitochondrial DNA match with a living Earhart relative would be close to 100% proof that the remains were Amelia’s, but without a documented chain of custody it would not prove they were the remains found on Nikumaroro. Nevertheless, even circumstantial evidence connecting them to the Nikumaroro bones would probably close the case in the minds of most.

Surgical

In 1918, while serving as a nurse’s aid in Canada, Earhart contracted a pneumococcal bacterial infection of her frontal antrum (sinus).



Prior to antibiotics, the only remedy was to surgically open and drain the cavity. Known as a Caldwell-Luc procedure, or antrostomy, this involved cutting a small hole in the upper jaw (maxilla) above the second molar.

Sinus infections were a recurring problem for Earhart throughout her life. How many times she had her sinuses drained is unknown, but a Dr. Joseph Goldstein reportedly performed a bi-lateral (both sides) Caldwell-Luc operation on Amelia Earhart at his office in Los Angeles in 1934.

The British doctor made no note of observing such marks, but his report fails to mention many details about the bones he examined. He had no information about Earhart's medical history and, after three years, the holes could be partially, or even completely, healed.

A discovered skull with antrostomy holes might be Earhart's and might be the skull found on Nikumaroro. A discovered skull with no sign of surgery would probably not be Earhart's but could be the skull found on the island.

Measurements

The British doctor's report is quite specific about the measurements of the skull and some of the long bones found on Nikumaroro in 1940. The skull, for example, was 182 mm long by 137mm wide. The eye sockets (orbits) were 38.5mm wide by 33.5mm high. A skull, or reconstructed skull, matching those measurements could be the skull the doctor examined, but without precise measurements

of Earhart's skull, the match would not prove the skull was hers. A skull whose measurements differed significantly from the doctor's notes would probably not be the one found on the island.

Could a discovered skull be "smoking gun" proof that Earhart died on Nikumaroro? An mtDNA match would be near-100% proof the skull was hers but would not prove where it came from. An mtDNA-matched skull with bi-lateral antrostomy marks would further increase the probability the skull is Earhart's but, again, say nothing about how it got to where it was found. Measurements matching the British doctor's notes would be an important, but not iron-clad, link to the Nikumaroro bones.

DNA proof that Earhart died on Nikumaroro would have to come from a bone found on the island. TIGHAR found a small bone, identified as probably a human finger bone, in 2010 at the site where the partial skeleton was discovered in 1940, but attempts to extract usable DNA from it were unsuccessful. On later expeditions, searches using forensic dogs appear to confirm that someone died at the site, but excavating areas where the dogs alerted produced no bones.

Finding Amelia Earhart's skull, regardless of where it was found, would be amazing, but without a documented chain of custody, the skull alone would not establish her presence on Nikumaroro. So far, the best evidence is Dr. Jantz's study of the bone measurements. ■

Understanding 99.28%

The abstract of Richard Jantz's paper "Amelia Earhart and the Nikumaroro Bones – A 1941 Analysis versus Modern Quantitative Techniques," published in the journal *Forensic Anthropology* in January 2018, concluded with a startling statement:

"This analysis reveals that Earhart is more similar to the Nikumaroro bones than 99% of individuals in a large reference sample. This strongly supports the conclusion that the Nikumaroro bones belonged to Amelia Earhart."

How could he possibly know that? Like most scientific studies, Dr. Jantz's paper is not written for the general public. "Mahalanobis distance," "Pearson's formulae," and "subpubic angle" are not in most people's everyday lexicon. Also, his conclusions are based on statistical calculations – a discipline most of us consider akin to alchemy. But the essence of the comparison Jantz did is really quite simple.

All of us humans are pretty much alike, and yet, each of us is unique in the details of our physical features. How unique? That depends on how many physical features you share with others in your community. Let's say you live in a town with 5,000 people and you have brown hair. Chances are, a whole lot of people in your town share that trait. Let's say your blood type is AB-negative. Only .6% of the general population has that blood type, so the number of brown-haired people in your town with AB-negative blood is going to be smaller. Now let's say you have a two-inch scar on the left side of your chin. Chances are the brown hair, AB-negative, scar-face club in your town



is pretty small. Re-locate to a big city and the club will get larger. Move to a 500-person village and you may be the only member.

The same principle applies to what Jantz did. Dr. Hoodless provided measurements for several of the bones he examined – the skull, a humerus (upper arm bone), a radius (lower arm bone), and a tibia (shin bone). Jantz worked with TIGHAR to get Amelia Earhart's estimated arm and leg bone measurements from scaled historical photos and examples of Earhart's clothing in the Purdue University Special Collection. There was no reliable way to get her skull measurements, so he used the three long-bone measurements for comparison. Amelia's bone lengths turned out to be nearly identical to the Nikumaroro bones – but how unusual is that specific combination?

To answer that question, Jantz consulted a forensic database containing the precise skeletal measurements of 2,777 individuals. Think of it as a town. It's unlikely that Hoodless' measurements and Jantz's estimates are without error, so a perfect match is unattainable, but there were only 18 people whose bone measurements were closer to Amelia's than the castaway's. In other words, 2,758 people – 99.28% of the citizens of that skeletal town – were excluded from the Earhart/Niku Humerus, Radius, Tibia Club. Jantz wrote, "If the bones do not belong to Amelia Earhart, then they are from someone very similar to her.

But the "town" where the bones were found did not have a population of 2,777. Prior to the discovery of the bones in 1940, the only people known to have died on or near Nikumaroro were the five British seamen and six Yemeni engine room workers who lost their lives in the 1929 Norwich City disaster. The bodies of two Brits and one Arab washed ashore and were buried. The other eight men were presumed drowned or taken by sharks. There is no evidence any of the them somehow made it to shore but were not rescued, nor is there evidence that any the men was a dead ringer (pardon the pun) for Amelia Earhart. Also, some of the artifacts apparently associated with the castaway date from after 1929. An unknown Pacific islander would be even less likely to resemble Amelia. Dr. Jantz's 99.28% is impressive, but the actual probability that the bones examined by Hoodless were Earhart's approaches 100%. ■



What's Next for Niku?

Should TIGHAR return to Nikumaroro? If so, what should we be looking for; where should we look; and how? These are big questions that can only be answered after we know the results of the recent Ballard/National Geographic expedition. The two-hour television special "Expedition Amelia," airing October 20th, should tell us something, but what we really need are the data collected by Ballard and the outcome of any post-expedition testing of recovered artifacts and the skull fragments found in Tarawa. How long it will take to get that information remains to be seen. Once we have it, we'll keep you informed as we assess its impact on the investigation.



SOLE SURVIVOR?



Artifact 2-2-V-1 as discovered October 18, 1991. TIGHAR photo by P. Thrasher.

Is TIGHAR Artifact 2-2-V-1 the sole surviving part of NR16020? Such a claim would be extraordinary and, as astronomer Carl Sagan was fond of saying, “Extraordinary claims require extraordinary evidence.” Our investigation of the artifact must, therefore, be extraordinarily rigorous.

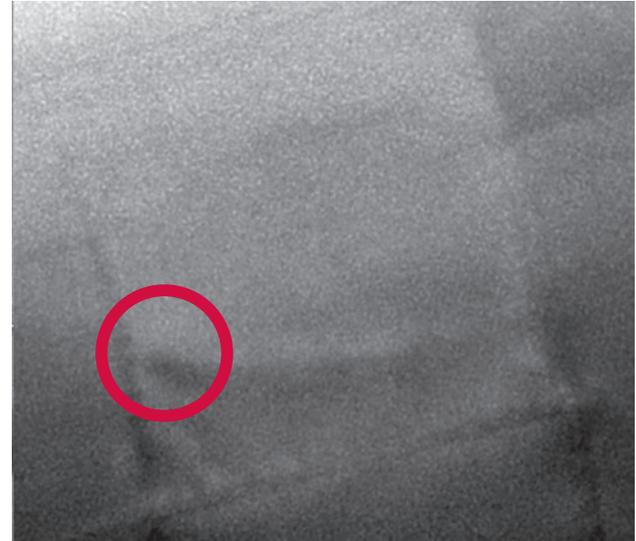
TIGHAR’s forensic imaging expert Jeff Glickman continues to work with super-resolution technology to pull greater detail from the digitized 16mm film. One data point he needed to nail down was a detailed comparison between the curvature exhibited by the artifact and the curvature of the Lockheed Model 10 fuselage in the area where the patch was installed. Measuring the curvature of 2-2-V-1 was easy, but obtaining precise data on the aircraft meant a special trip to Tucson and the cooperation of the Pima Air & Space Museum. On September 6th, with the help of Brad Elliott of the Arizona Aerospace Foundation, Jeff took detailed measurements of the museum’s Lockheed



Brad Elliott steadies the measuring tape on Lockheed 10A c/n 1011 at the Pima Air & Space Museum. TIGHAR photo by J. Glickman.

On August 30th, TIGHAR received a Fractographic Analysis of TIGHAR Artifact 2-2-V-1 report written by metallurgist Veda-Anne Ulčickas, Senior Materials Engineer at Massachusetts Materials Research.¹ The most important take-aways were:

- ❖ A brittle section in the lower left part of the artifact, previously thought to have been caused by heat, is actually due to the “cold-working” or flexing of the metal in that area. If the artifact is from the Miami patch as we suspect, the area corresponds to where we see buckling or flexing of the patch in the digitized 16mm film.



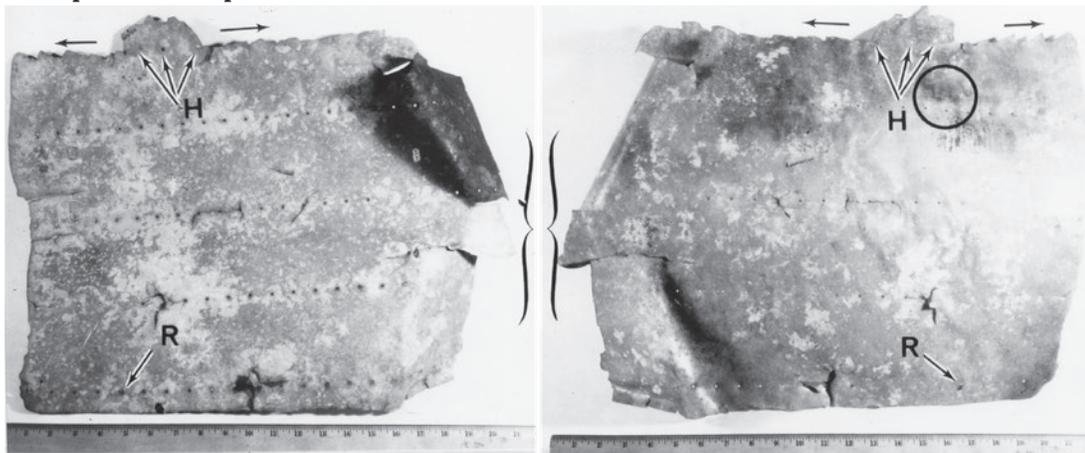
Sample from circled area shows evidence of “cold working.”

Circled area shows corresponding location on patch on image from 16mm film.

- ❖ The fractured edges of the artifact were damaged by corrosion and mechanical rubbing from decades of scrubbing around underwater, thereby erasing the tell-tale microscopic features that would reveal precisely how each edge failed, but it appears safe to say three of the edges failed due to “fatigue cracking” and the bottom edge failed from “overloading.”
- ❖ It is not possible to tell metallurgically in what order the edges failed.
- ❖ The force required to cause the failure of each of the four edges was within the ability of a human to exert.

The results of the National Transportation Safety Board Laboratory analysis in 1991 found the fracture geometry along the line of rivet holes at the “overloaded” edge of the artifact is “consistent with tearing separations in both directions away from the area of the intact holes.”

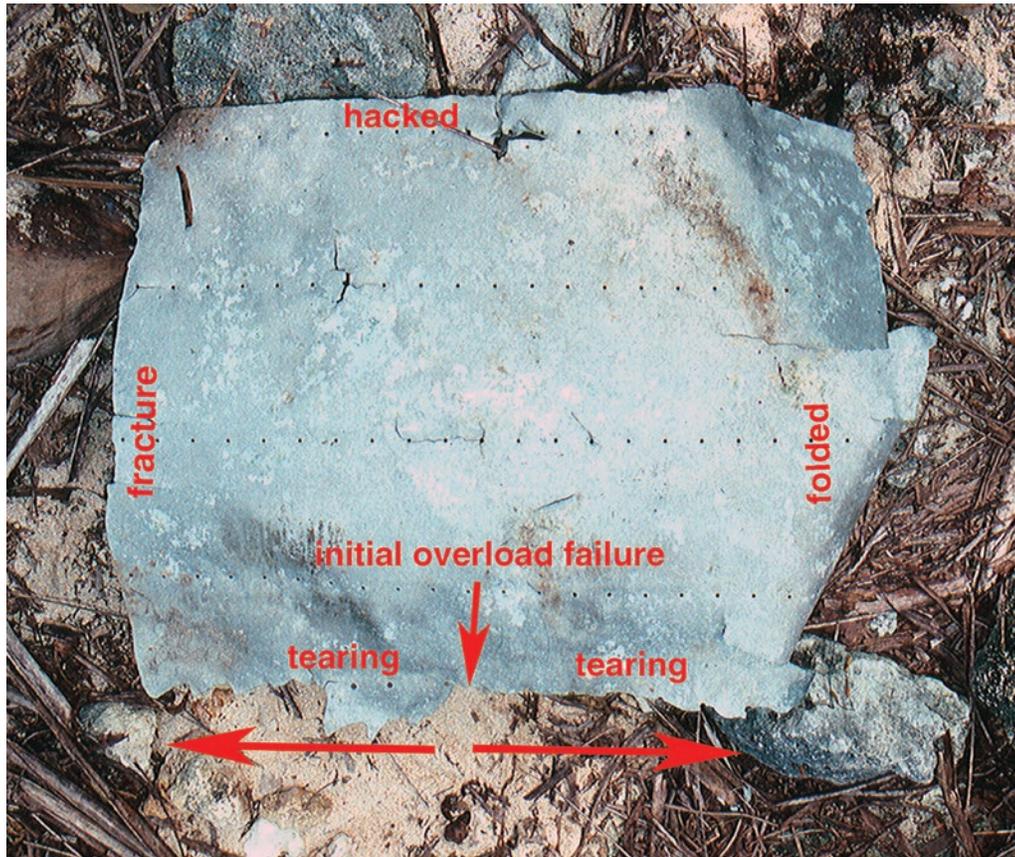
The NTSB also found the deformation adjacent to the fracture line located along the right-hand edge of the artifact “indicated that the sheet had been folded 90 degrees toward the convex side prior to separation.”



Concave internal side.

Convex external side.

The arrows in this illustration from the 1991 NTSB analysis, show the direction of tearing along what we now call the bottom edge. “H” indicates the intact rivet holes. “R” is the existing rivet. The brackets indicate the edge that failed from being folded.



Combined with the new information provided by the MMR Fractographic Analysis, the NTSB findings suggest how the artifact separated from the surrounding structure.

- ❖ The overloaded edge failed in the center and tore both ways. It is difficult to imagine any way that could happen from human action. This edge probably failed first from forces exerted on the aircraft during takeoff, flight, or landing.
- ❖ Likewise, the fatigue cracking that caused the fractured edge probably occurred during operations and as a consequence of the failure of the first edge.
- ❖ The “top” edge exhibits damage consistent with repeated hacking by a person equipped with a sharp-edged tool.
- ❖ The edge that failed by folding could only have been folded if the other three edges were free, so it was the last edge to fail and was probably the result of human action.

If we apply the suggested sequence of failures to the hypothesis that 2-2-V-1 is the Miami patch, we can reasonably speculate that the bottom overloaded edge and the fractured edge failed as a result of forces exerted during takeoff, in flight, and/or during landing on the reef.

Desiring to create better ventilation in the excessive heat while sending distress calls, and confronted with a patch that had failed on two sides, Earhart or Noonan could have hacked the top edge free using the “Marbles No. 2 nickel-plated hand ax” inventoried following the accident in Hawai‘i (assuming it was still aboard for the second world flight attempt). With three edges free, the fourth edge could have easily been folded until it failed from metal fatigue. If the section of the patch was removed before the rest of the aircraft went over the reef edge, it could explain why it’s the only surviving part of the plane.

Further research may confirm, or may yet disqualify, 2-2-V-1 as the Miami patch, but the more we learn the more the data support the hypothesis that we have a piece of the patch. ■

1 The complete analysis is on the TIGHAR website at <https://www.tighar.org/Projects/Earhart/Archives/Research/ResearchPapers/Artifact2-2-V-1/2-2-V-1.html>

LEGENDS OF THE LOST

A TIGHAR Guide to Evaluating Eyewitness Testimony:

Part 1 of 2 Parts

"I saw it with my own eyes."

What is more compelling than an eyewitness? And yet, more than three-quarters of criminal convictions later overturned by DNA evidence relied on faulty eyewitness testimony.¹ For the historical investigator, the problem is compounded by the fact that eyewitness testimony is always years, and usually decades, old. The term "testimony" itself is a problem, because it evokes images of courtrooms and sworn oaths when, in fact, in the context of historical investigation, "eyewitness testimony" is virtually never obtained under those circumstances.

Recorded reminiscences are often termed "oral histories," but that label too can be misleading. A person's memory of past events is a history of the way they now remember it, not a history of what really happened.

At TIGHAR, we refer to any undocumented description of a long-past event as an "anecdotal recollection." It might be absolutely accurate, totally false, or somewhere on the spectrum between the two. In thirty-four years of often-bitter experience we've developed criteria for evaluating anecdotal recollections in deciding whether the effort and expense of a physical search is justified:

- » Are there disqualifying facts, meaning is there reason to think the alleged event could not have happened?
- » Is the principal informant credible, meaning is there reason to think the story might be an intentional fabrication?
- » Are there credible corroborating informants?
- » Are there later credible anecdotal sightings?
- » Is there photographic corroboration?
- » Is there contemporaneous written corroboration?

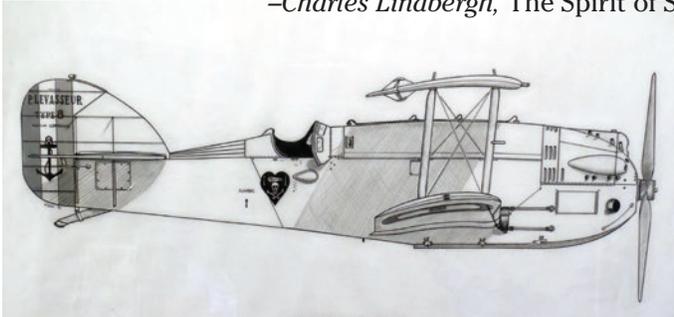
Presented here is the first part of a two part series applying these criteria to TIGHAR projects. Part One addresses TIGHAR's earliest investigation, Project Midnight Ghost.

¹ American Bar Association, Selection of Litigation, Trial Evidence " Is Eyewitness Testimony Inherently Unreliable? <https://apps.americanbar.org/litigation/committees/trialevidence/articles/winterspring2012-0512-eyewitness-testimony-unreliable.html>

Part 1: Project Midnight Ghost

"It's May 9th. Step by step newspaper headlines have followed Nungesser and Coli ... only to have them vanish like midnight ghosts."

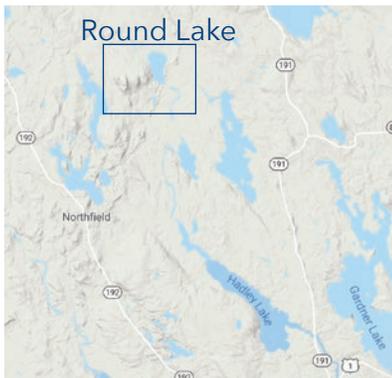
—Charles Lindbergh, The Spirit of St. Louis



Nungesser and Coli's Levasseur PL-8 L'Oiseau Blanc.

The Crash in the Round Lake Hills

From 1985 to 1992, based solely on an uncorroborated legend, we searched the Round Lake Hills of Washington County, Maine for l'Oiseau Blanc (the White Bird) of lost transatlantic flyers Charles Nungesser and François Coli.



May 9, 1927. As related to us in 1985 by 89 year-old Albert Mattatall, suddenly "the motor went to sputterin'" and a few moments later there was "a faint rippin' crash" somewhere in the three hills that rise like stair-steps to the west of the lake.

In a general sense, the Round Lake Hills are on the aircraft's possible course

The legend behind the search in Maine held that woodsman and hermit Anson Berry was fishing on Round Lake when he heard an airplane pass low overhead on the foggy morning of

from Paris to New York and Anson Berry is known to have had a camp in the Round Lake area at the time of the flight.

Anson Berry died in 1936, but speculation that he heard "that French aeroplane" became enshrined in the folklore of Washington County. A 1980 article in *Yankee Magazine* titled "The Unfin-



Anson Berry



ished Flight of The White Bird” recounted the legend and ended with a challenge. “Perhaps someday a searcher will come upon the White Bird’s rusted engine; and with that discovery will be solved one of the longest standing, most puzzling mysteries in aviation history.” A newly-formed TIGHAR took up that challenge in 1985.

The first step was to try to corroborate the legend with contemporary written records – letters, diaries, police reports, newspaper articles, etc. – but the archival search came up dry. Nevertheless, convinced that such a well-established legend must be rooted in fact, we began combing the Round Lake hills for any sign of the lost aircraft.

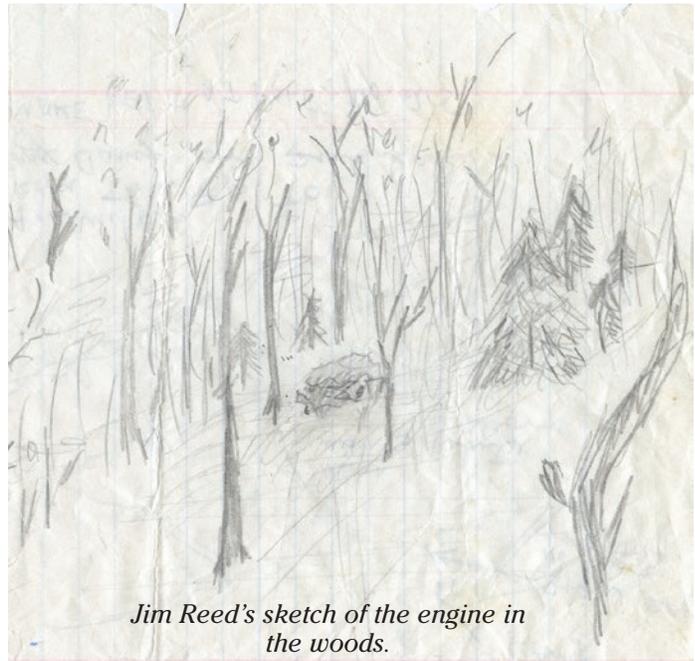
Inevitably, media coverage of TIGHAR’s investigation of the legend brought out more stories. In 1987, Harold Vining, then 78, remembered as a lad of 18 being excited by news reports of competing transatlantic fliers in New York preparing to takeoff for Paris. He was, therefore, surprised when he heard an airplane pass low overhead in the fog, headed the wrong way –southwest toward New York. His parent’s farm was four miles northeast of Round Lake. It was the first airplane he had ever heard. Here was a living witness who could place his recollection in time and in a place that fit the legend.



Harold Vining: “It was headed the wrong way.”

Engines in the Woods

Jim Reed was sure he could take us right to it. He had stumbled across a moss-covered engine while deer hunting years before and it had struck him as odd that such a large piece of machinery should be abandoned in such a remote location. When he heard that our search for the lost French transatlantic flight was focused in the same woods where he had seen the engine, he felt compelled to come forward. Jim was clearly sincere and he had no reason to lie.



Jim Reed’s sketch of the engine in the woods.

We eagerly followed him through the woods as he tried to re-locate the engine which, the more he thought about it, came to resemble the 12 cylinder W-configuration of the White Bird’s engine. But he couldn’t find it.

After several similar experiences we joked about publishing a Field Guide to the Engines of Washington County.

In the end, a total of 20 search expeditions over seven

years found lots of logging debris and a few unidentified artifacts we tried to convince ourselves might be associated with the aircraft or crew, but no identifiable piece of the missing plane ever turned up.



Jim Reed: “I can take you right to it.”

Round Lake Hills – Summary

- » Disqualifying Facts: none
- » Credible Principal Informant: Anson Berry
- » Credible Corroborating Informants: Albert Matatall, Harold Vining, and others
- » Credible Later Anecdotal Sightings: Jim Reed, and others
- » Photographic Corroboration: none

- » Contemporaneous Written Corroboration: none
- » Search Results: negative

Saipan Syndrome

Although we didn't fully understand it at the time, Harold Vining, Jim Reed, and other "eyewitnesses" were examples of a phenomenon well-known to psychologists who study human memory. It begins with a memorable but inexplicable experience. Over time, the details of the incident fade, as do all memories. This is known as "memory transience."¹ After many years, often decades, the individual becomes aware that the unexplained event may be related to a famous mystery. Their mind fills in gaps in their recollection of the event with details that fit the mystery. This is known as "memory bias."² We all do it in other contexts. We tend to remember events the way we want them to have happened. Memories of other events may be transposed onto the incident if they strengthen the connection to the mystery. This is known as "misattribution."³

The result can be a completely sincere but totally false recollection. There is no intention on the part of the individual to fabricate or elaborate. It is, rather, an honest willingness to provide useful information and a natural desire to feel important. The positive attention the individual gets for "solving" the famous mystery reinforces their conviction that their unwittingly embellished memory is accurate.

Perhaps the most well-known manifestations of this phenomenon are the multiple variations on the theme that Amelia Earhart and Fred Noonan were abducted (always characterized as "captured") by the Japanese. Despite dozens of stories told by Micronesians who recall seeing a white woman and man in Japanese custody, or American veterans who remember finding evidence during WWII, no document, photograph, or artifact has ever emerged to corroborate the legend. Because so many of the remembered incidents occurred on the island of Saipan, we have dubbed the false-memory phenomenon "Saipan Syndrome."

Saipan Syndrome must be considered as a possible factor in any anecdotal recollection related to a famous mystery.

The Plane In The Pond

In 1992, we turned our attention to Newfoundland. Like Maine, Newfoundland had eyewitness accounts of sightings and hearings of what might have been the French flight, but there was an important difference. The Newfoundland reports are actual testimony – affidavits sworn before local magistrates within days of the event. Seventeen sightings trace the progress of a large white aircraft that comes in off the North Atlantic at the northern end of the Avalon Peninsula and passes over the tiny settlement of Gull Island at about 9:15 A.M. on May 9, 1927. It then flies down the coast and over the town of Harbor Grace shortly after 9:30 A.M. (the times and distances compute correctly for l'Oiseau Blanc's 100 mph cruising speed) and continues on to the southwestward. So when the Newfoundland Museum in St. John's sent us photos of two pieces of aircraft debris recently found in the marshy backcountry of the Avalon Peninsula alleged to be wreckage from l'Oiseau Blanc, we were interested. Initial comparisons of the museum photos with photos of the Levasseur PL-8 looked promising so we went to Newfoundland for a closer look. Upon in-person inspection, however, the airplane pieces at the museum proved to be from a WWII crash, probably a PBV Catalina. But while we were there we learned of yet another legend.

According to 69 year-old Patrick McGrath of Patrick's Cove, a village on the Cape Shore peninsula, in the spring of 1927 his father, Nicholas McGrath, was trapping muskrat on the Branch River when he heard three distant explosions in rapid succession. The next

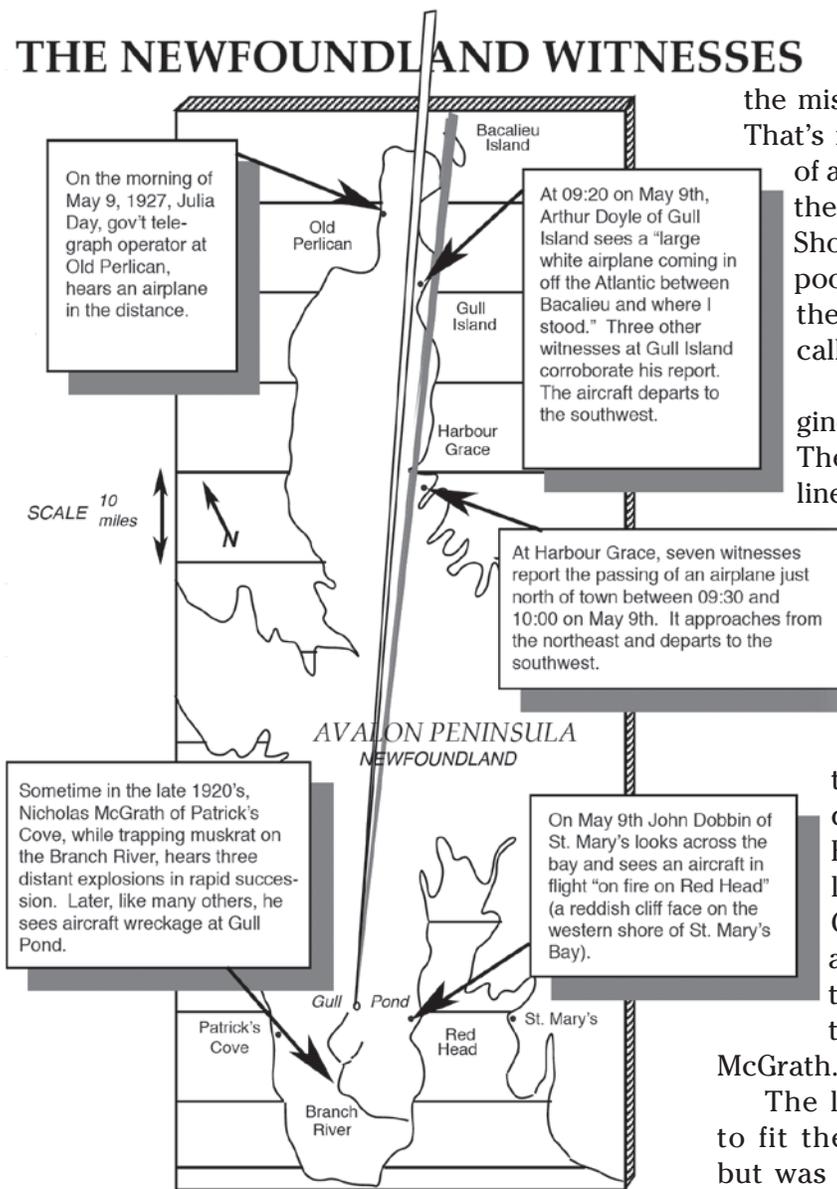


1 *The Seven Sins of Memory* by Daniel L. Schacter, Houghton Mifflin, 2001.

2 *Ibid.*

3 *Ibid.*

THE NEWFOUNDLAND WITNESSES



year, Nicholas and others saw airplane wreckage on the small rocky island in the Gull Pond, a shallow body of water on the desolate high muskeg of the peninsula's interior. The island is inaccessible except when the pond is frozen and few people ventured out into "the country" in winter. Word of "the plane in the pond" spread locally but no one connected it with



The Gull Pond

the missing French flight until many years later. That's not surprising. Prior to the establishment of an American naval base at Argentia in 1941, the coastal fishing villages that ring the Cape Shore were isolated from the outside world by poor roads, no rail service, no electricity and the insular nature of the working-class ethnically Irish population.

Was the "plane in the pond" another "engine in the woods" or a lead worth following? The Gull Pond is on an extension of the flight line documented in the sworn sightings. The final witness saw what he took to be an aircraft on fire "trailing white smoke" over the Cape Shore, but burning aircraft trail black smoke. What he saw might have been steam. The White Bird's engine was liquid-cooled. A rupture in the coolant system would cause the aircraft to trail a cloud of white steam and would quickly result in a seized engine. The White Bird was designed to land on water and a large pond might appear attractive, but the Gull Pond has a shallow rocky bottom and a landing could drive the hot engine back through the three large fuel tanks, causing the three rapid explosions heard by Nicholas

McGrath.

The legend seemed to fit the known facts, but was there corroboration? A search of the Newfoundland archives turned up 1948 correspondence between the Newfoundland Civil Aviation Division and one Patrick Judge who reported recently seeing "parts of an airplane" on the island of "Great Gull Pond, nine miles south southeast of Gooseberry." (There is no pond nine miles SSE of Gooseberry. The Gull Pond is eight miles ESE.) Judge wondered if the wreck could be the plane called "the Bluebird, as it has spots of blue paint still on it."

He felt sure that "it must be fifteen or twenty years ago since the plane fell as the iron is rusted out."

The Civil Aviation Division agreed with Judge that the wreckage might have been there fifteen or twenty years "as we have no knowledge of any civil aircraft being missing in this area in recent years. It will be recalled that there were a number of aircraft



Patsy Judge

left Europe about twenty years ago no trace of which has since been found.” Having acknowledged that the plane in the pond might be an historic missing flight, the Civil Aviation Division wrote, “It appears that we cannot or need not take any action for further investigation.” Not our job.

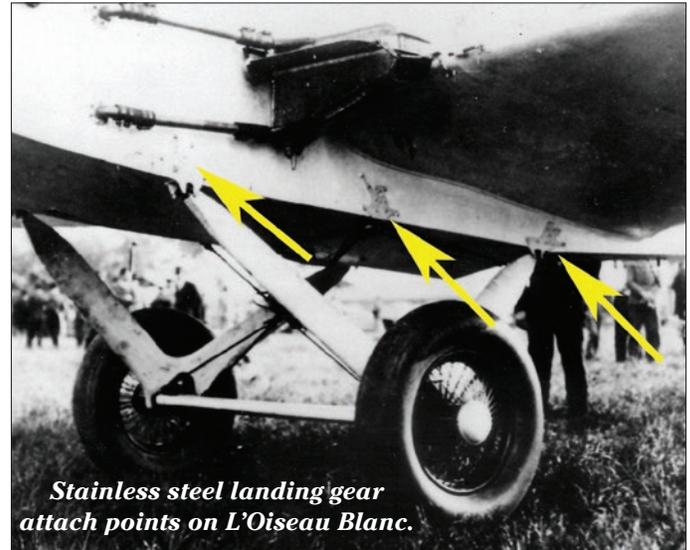
“Patsy” Judge was not telling the government all he knew. He had first collected parts of the plane in 1932 and, in 1947, gave a piece to an Englishman named Ralph Martin who was visiting the Cape Shore. In 1974, Judge was in a dispute with locals about whether he had been the first to investigate the plane in the pond. He wrote to Martin asking him to verify that he had received the piece back in 1947 and had given it to “a place in England and they in turn wrote me a letter saying it was undoubtfull a part off the under carriage off the plane called either the Blue Bird or the White Bird” (spelling as in the original). Judge had apparently lost the letter, couldn’t remember the name of the plane, and was asking Martin to authenticate his story. There was no transatlantic plane called the Bluebird.

Martin wrote back, confirming that he had given the piece to aviation experts at an Avro Lancaster factory near his home in Yorkshire and that they had written directly to Judge, but he had not seen a copy of the letter. “However, I understand that the Manufacturers concerned have had a fire since writing to you and I believe that the correspondence in question was destroyed.” We have since confirmed that there was an Avro factory near Martin that produced Lancaster bombers and suffered a fire on October 3, 1959 that destroyed large sections of the production and office facilities.

Patrick Judge died in 1989. TIGHAR’s Ric Gillespie interviewed Ralph Martin by phone in 1993. He remembered that Judge believed the piece to be “from an undercarriage.” Martin felt that it “looked like a support piece.” He described the piece as being about 12 to 14 inches long, about 3 inches at its widest part, comparatively light and made of either aluminum or stainless steel as it showed no corrosion and was bright and shiny. It was “bent and somewhat crumpled, with a lot of strange numerals stamped on it.”

The White Bird’s landing gear was jettisoned after takeoff, but stainless steel undercarriage attach points that fit Martin’s description remained attached to the hull. Judge’s statement that some pieces of wreckage had “spots of blue

paint still on it” also fits the White Bird. The parts catalogue for the Levasseur PL-4, of which The White Bird was a modification, calls for many internal components to be painted blue (*bleu*) and gray/blue (*gris bleu*). The jettisoned landing gear of the White Bird, now on display at the Musée de l’Air is, in fact, painted blue.



In October 1992 we did a metal detector sweep of the small rocky island in the Gull Pond and found a badly oxidized half-cylinder of ferrous metal roughly 15 cm x 5 cm with what appears to be remnants of bluish-gray paint on its exterior surface and what may be traces of oil on its interior surface. In accordance with Canadian law, the artifact (TIGHAR Artifact #1-21-1) was turned over to the Newfoundland Museum in St. John’s for safekeeping and conservation.

Subsequent searches of the pond bottom and the surrounding area failed to turn up other wreckage. The current hypothesis is that there was never actually a plane in the pond, at least not in the part of the pond near the island. In the winter of 1927/28,



Ric Gillespie (L) and TIGHAR diver Lanny Lanoue (R) on the small rocky island in the Gull Pond, October 25, 1992. Lanny is where the artifact was found buried in the mud.

someone who had found the crash site moved useful pieces of wreckage to the island as a way of making sure no one else got them. Over the years, the original finder and other locals salvaged the metal. TIGHAR found the last remaining piece.

If the hypothesis is correct, the crash site must be within a reasonable distance from the Gull Pond for the salvageable wreckage to be moved by horse and sled. The engine of the White Bird weighed a thousand pounds and would be of no value as salvage. Whatever remains after more than 90 years is probably still at the original crash site which must be sufficiently difficult to see to avoid casual detection.



After cleaning and drying, it was apparent the metal had been painted gray/blue.

Plane in the Pond Summary

- » Disqualifying Facts: none
- » Credible Principal Informant: Patrick McGrath
- » Credible Corroborating Informants: none
- » Credible Later Anecdotal Sightings: Patrick Judge, Ralph Martin, and others
- » Photographic Corroboration: none
- » Contemporaneous Written Corroboration: 1927 affidavits, 1948 letter, 1974 letter
- » Search Results: positive but inconclusive ■



These photos of the artifact were taken immediately following recovery.

In the next issue of *TIGHAR Tracks*:

LEGENDS OF THE LOST

A TIGHAR Guide to Evaluating
Eyewitness Testimony
Part 2 - The Earhart Project



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