

# TIGHAR TRACKS

A PUBLICATION OF THE INTERNATIONAL GROUP FOR HISTORIC AIRCRAFT RECOVERY

## WE DID IT

The analysis of artifacts recovered during last year's expedition has reached the point where we can now say with confidence that we have the proof. Exhaustive research has established that a section of aluminum aircraft skin found on Nikumaroro could only have come from Earhart's aircraft (see page 2, "Artifact 2-2-V-1"). The remains of a shoe discovered on the atoll are identical in all documentable respects to those worn by Earhart on her final flight (see page 4, "Artifact 2-2-G-7"). In each case, an artifact with multiple unique and identifiable features has been matched with those same features on an object which disappeared with Earhart. All reasonable alternative explanations for the presence of these artifacts on Nikumaroro have been eliminated by the island's well-documented history.

Other artifacts, such as a length of late-1930's style aviation radio wire and the cap from a bottle of American stomach medication of the same period (AE was having stomach trouble), provide additional support. Still more objects, such as what appears to be a broken 1930's-style aviation radio face plate, have yet to be identified and may eventually provide additional proof.

And there's more. The Earhart Project has recently brought to light two important documents, each written in 1937, each containing vital new evidence pertaining to the Earhart disappearance, and each previously unknown to researchers (see "Lost and Found," page 5 and "First on the Scene," page 6). These new sources provide confirmation of TIGHAR's deductions in several crucial areas of the investigation and join the rest of what has become an overwhelming array of documented evidence that settles, once and for all, the question of what happened to Amelia Earhart.

In 1988 TIGHAR set out to demonstrate that high academic standards could replace wild imaginings with rational hypotheses, and that strict adherence to scientific method could sort fact from fiction to discover the truth about the disappearance of Amelia Earhart. We did it – with the hard work and perseverance of the Earhart Project volunteers; the generous assistance of scientists,

scholars, and corporations; and most of all, with the support of the people who made it all possible: you, the worldwide members of TIGHAR.



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# ARTIFACT 2-2-V-1 \*

## Found October 18, 1991.

*Submitted to National Transportation Board (NTSB), Washington, D.C. for laboratory examination December 19, 1991.*

The photograph below shows the artifact in situ on Niku's western beach. It is a section of aluminum aircraft skin approximately 25 inches long by 18 inches wide and .032" in thickness. Four parallel rows of rivet holes of one inch pitch (space between individual rivets) evidence 92



TIGHAR Photo by P. Thrasher

rivets with a shaft diameter of  $\frac{3}{32}$ ", one of which is still in place. The skin has failed along a fifth line of 14 rivets of  $1\frac{1}{4}$ " pitch,  $\frac{5}{32}$ " in diameter, except for one section about three inches long where there is an anomaly in the pitch. A detour in the tear at this point (visible in the photo as a "tab" along the top edge) suggests that there was once an external structure which served to reinforce the sheet at this point. Nearby, the letters "AD" are visible; traces of the word ALCLAD in the original manufacturer's labeling.

\* TIGHAR's system of cataloguing artifacts is not as mysterious as it may look. It's just Project code (2, for Earhart Project), Expedition number (2, for second expedition), site identifier (V, for village), and chronological identifier (1, for first artifact found at this site). If the artifact is in several pieces we add a slash number for each piece. The shoe eyelet, for example, is 2-2-G (for grave site)-7/6 (the shoe was the seventh artifact found in the area, of which the eyelet was the sixth fragment found).

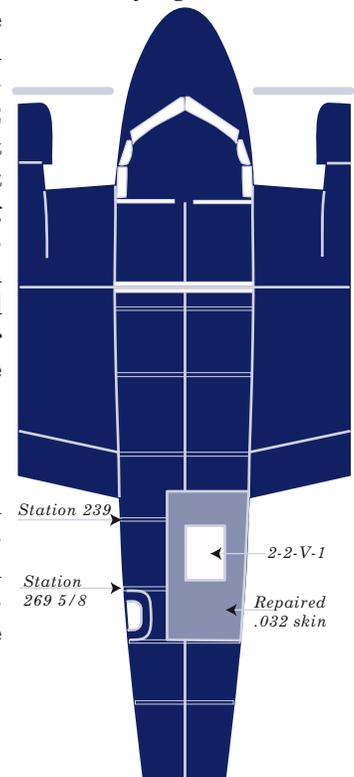
Tangled on one corner of the skin (the upper left in this photo) was a 30 inch length of 22 gauge, single filament copper wire with remnants of rubber insulation surviving in several places (visible only on the original color slide – it's pretty small).

### ALL WASHED UP

The aircraft skin was lying amid the debris of beachfront vegetation torn out and washed up by huge waves which had hit the island's western shoreline sometime between our visit in 1989 and our return two years later. The corrugated metal visible in the upper right of the photo is the collapsed roof of a wooden frame building with "Gardner Co-Op Store 1940" painted over what was once the doorway. In 1989 the building stood intact, surrounded by a jungle of coconut and pandanus trees which extended westward (toward the bottom of the photo) about 50 feet. Beyond, open beach continued another 100 feet to the high tide line. The seaward side wall of the structure was pushed inward by the storm surge and most of the vegetation between the building and the beach was obliterated by the same force. On the first expedition we had thoroughly searched the old store (empty except for a bed frame, some rats, and a very dead cat) as well as the area around it. There was certainly no big chunk of airplane skin lying about at that time. It appears that the extensive beach erosion caused by the storm (apparently the worst in 52 years) churned the artifact up out of the sand and left it where we found it along the high water line. A further search of the beach and areas inland turned up a few more smaller pieces of wreckage which are still under investigation.

### MATCH POINT

This artifact has been matched in every documentable respect to a section on the belly of Earhart's Lockheed 10E between Fuselage





Stations 239 and 269<sup>3</sup>/<sub>8</sub> (see diagram). With the help of NTSB, Alcoa Aluminum, and the National Air & Space Museum’s Paul E. Garber Facility, TIGHAR has identified, documented and matched 12 separate aspects of the artifact with this specific area on the Earhart aircraft.

- Aluminum alloy: 24ST
- Surface treatment: ALCLAD
- Skin dimensions: Fits within those of Skin #35R on the Electra.
- Skin thickness: Identical to Skin #35R.
- Manufacturer’s labeling: Identical to existing Lockheed 10s and unlike that used during World War II.
- Rivet head: AN455 brazier ( a pre-war style largely superceded during World War II by the AN470 universal)
- Rivet alloy: A17ST (code AD)
- Rivet shaft diameter: <sup>3</sup>/<sub>32</sub>”
- Rivet shaft length: <sup>3</sup>/<sub>16</sub>”
- Rivet pattern: Four parallel lines of AN455 AD 3/3 tapering 1/4” over the length of the sheet.
- Failure pattern: The “tab” on the artifact, which indicates an external reinforcing structure, matches the position of the aft belly antenna mast on the Earhart aircraft.
- Antenna fairlead wire: The wire found on the artifact has been identified as aviation antenna fairlead wire of a type standard in the mid 1930s but obsolete and replaced with multistrand wire by World War Two.

Every documentable aspect and feature of Artifact 2-2-V-1 matches the Earhart aircraft.

**But might it also match some other aircraft?**

The manufacturer’s labeling, the rivet, and the wire all confirm that this was a pre-war aircraft. Prior to World War Two, only three airplanes ever came anywhere near Nikumaroro: the 1934 transpacific flight of Sir Charles Kingsford Smith, whose Fokker trimotor “Southern Cross” is now in an Australian museum; a 1939 photo-mapping flight by the U.S. Navy, which was completed without incident; and the 1937 disappearance of Amelia Earhart.

**But what if an aircraft built before the war had been lost in this region during the war?**

Since the island’s first settlement in December 1938, no aircraft has ever been reported wrecked or even dam-

aged at Nikumaroro. The Gilbertese colonists did, however, use shards of aircraft aluminum to make decorative hair combs (like one we found). Although 2-2-V-1 shows no sign of anyone ever trying to turn it into attractive headwear, we need to consider the possibility that it was brought to the island from elsewhere. Total wartime losses within 500 miles of Nikumaroro were:

- March 1943 – A PB5A destroyed on the ground at Canton Island (200 miles northeast of Niku) in a Japanese bombing raid.
- October 18, 1942 – Consolidated PB4Y-1 Bureau Number 32102 lost at sea.
- September 5, 1944 – Martin PBM-3D Bureau Number 45236 lost at sea.
- “[L]ate in the war”, according to a still-unconfirmed report, “a large four-engined aircraft” crashed 200 miles east of Niku on Sydney Island. (See *TIGHAR Tracks*, Vol. 7, No. 5, “The Crash At Sydney Island.”) Extensive research has so far only confirmed that the Sydney Island crash was not a U.S. Navy accident, nor was it a Consairway or United Airlines (carriers under government contract) loss.

None of the first three aircraft was built early enough to contain aluminum labeled with the lettering style we see on 2-2-V-1; no prewar “large four-engined” type ever operated in the region. According to Alcoa, stocks of aluminum sheeting were low when aircraft production began to burgeon in the years immediately preceding the war and the chances of a piece of “old” aluminum ending up in a wartime aircraft are virtually nil.

**THE BOTTOM LINE**

Through laboratory analysis of its physical features, and archival documentation of their significance, Artifact 2-2-V-1 has been shown to be identical, in every knowable aspect, to a particular and unique section of NR16020. At the same time, it has been shown to be unlike any part of any other aircraft known, or even rumored, to have been lost in the region. The conclusion is inescapable. This is a piece of Amelia Earhart’s aircraft.



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## Dissent Into the Maelstrom

You don't solve a fifty-five year old mystery that has turned into a mini-industry without generating some controversy, and the flak from the various Earhart camps is already so thick "you could get out and walk on it." Here's a sampler:

Elgen Long, a retired airline pilot who is convinced Earhart crashed at sea not far from Howland Island has, for many years, been trying to fund a deep water search. To refute TIGHAR's contention that Artifact 2-2-V-1 is from the Earhart plane, he enlisted two structural engineers and an Electra owner. They examined photographs of the artifact (willingly provided by TIGHAR), looked at the belly of a Lockheed 10A in Oakland, California, and decided that 2-2-V-1 "could not have come from a Lockheed 10."

The crux of the question is how NR16020 was repaired after Earhart's March 20, 1937 groundloop in Hawaii. Lockheed Engineering Orders describing the repairs include no drawings; and photos with sufficient detail apparently do not exist. Those repairs left the belly of Earhart's airplane different from all other Electras, but no one can say with certainty just how it looked. Retired Lockheed shop foreman Herman Stevens, who spent 37 years implementing such Engineering Orders, says that the rivet pattern on Artifact 2-2-V-1 conforms exactly to "the only way you could do it" according to the old and obsolete Lockheed Design Standards he was familiar with.

Frank Schelling, who is head of the P-3 Aircraft Structures Branch at the Naval Aviation Depot in Alameda, spoke to LIFE Magazine for Elgen Long. His opinions appear in a sidebar to the Earhart article in their April issue. Schelling's statements amount to "That's not the way I would do the repairs." (A point-by-point rebuttal is available from TIGHAR on request.) Long also got an opinion from a metallurgist on the way the aluminum failed. What he said agrees entirely with TIGHAR's and the NTSB's assessment.

Fred Goerner wrote *The Search For Amelia Earhart*, the 1966 best seller that portrayed Amelia and Fred as spies who died at the hands of the Japanese on Saipan. In a February Associated Press wire story he is quoted as saying, "Gillespie and TIGHAR are slicing the baloney a little thicker this year. Finding a piece of metal on one of those islands is no trick at all. ... It's just another step in the aggrandizement of Gillespie and the TIGHAR organization."

*Air Classics* magazine seems to be on some sort of campaign to discredit TIGHAR, and apparently we've got somebody so upset that they're willing to risk doing time for mail fraud to attack TIGHAR's credibility (see "Mailbox," p. 8, and "An Open Letter," pp. 10 & 11).

It's a shame to have to devote time and space to dealing with this kind of stuff but the alternative seems to be to either let falsehoods go unchallenged or just make sure we never upset anybody with the truth. If we did either of those things TIGHAR would be unworthy of your support.

## Artifact 2-2-G-7/1-9

Found October 16, 1991

*Submitted to the Cat's Paw Division of Biltrite Corporation, Waltham, MA for identification on January 31, 1992.*

The photograph below shows the reassembled fragments of a rubber sole from a left shoe. Evidence of stitching along the edges indicates the former presence of leather uppers and the tight spacing between stitches indicates that this was part of a woman's shoe. The size appears to be about a woman's size nine. A brass eyelet found in the same location is  $\frac{5}{16}$ " in diameter with an opening for the lace of  $\frac{1}{8}$ " diameter, too small to accommodate the woven cotton lace of a man's shoe. Also in the same location was



a rubber heel (see photo page 5) with the remains of eight nails in place. The washers (which keep the nail from going too far up into the shoe) are of a long-obsolete type and are consistent with 1930's construction. The interior of the heel carries the words "Guaranteed, Pat. Pending, Cat's Paw Rubber Co., USA" molded into the rubber. Several coded letters and numbers establish that this is a left heel of a size consistent with a woman's size nine shoe. The date code is worn off but the style and other coding is consistent with the mid-1930s. This is a replacement heel.

### A GIFT FROM THE CRABS

The shoe parts were found in the same area with the grave which proved to contain the bones of an infant. The grave is in a clearing surrounded by trees, about 150 feet from the lagoon shore on the island's south side. The ground under the trees is littered with fallen leaves and other rotting vegetation. Insect life abounds. It was in this litter that the first trace of the shoes was found by accident at 8:30 A.M. on Wednesday, October 16. Commuting to work on Nikumaroro means getting your feet wet, and Dr. Tommy Love was changing his boots in the shade that morning, prior to resuming the excavation of the grave. Casually watching one of the island's innumerable crabs scuttle by, he saw it knock aside a leaf, exposing something dark on the ground. It was the Cat's Paw heel. The entire surrounding area was then cordoned off and other pieces were recovered by searchers on hands and knees carefully removing each leaf, stick and rotting palm frond. Then the top layer of dirt was carefully removed and screened



TIGHAR Photo by P. Thrasher

for additional artifacts. It was this painstaking process which produced the eyelet. The next day a second shoe heel was found just outside the boundary of the cordoned off area (confirming the First Law of Field Investigation, “No matter where you draw the border of the search area, the find will occur

just outside that line”). The second heel, although apparently of similar age, is not a replacement heel and is probably from a second pair of shoes.

From photographs taken prior to and during Amelia Earhart’s attempted world flight it is possible to draw some conclusions about her footgear. She seems to have had two pair of shoes with her – a pair of two-tone saddle shoes with light colored soles and heels which she sometimes wore when she was not flying, and a pair of Blucher-style Oxfords with ten brass eyelets which she wore to fly. Her shoe size, ascertained from photos and from the size worn by her sister (who is of similar height and build), appears to have been about a size nine. Most significantly, photos taken during preparations for the first world flight attempt in early 1937, when compared to photos taken during the second attempt in June/July of that year, clearly show that her flying shoes had replacement heels put on prior to her departure from Miami on June 1 (see photo at right; note clear demarcation of new bottom on left heel which is not present in photos taken prior to first attempt).

So what do we know for sure? We know that sometime a long, long time ago, a woman’s shoe, about size nine, with brass eyelets, and with an American Cat’s Paw replacement heel, ended up on Nikumaroro in a place two miles from the island’s only boat landing. We know that the shoe matches, in general and in particular, a shoe Earhart was wearing at the time she disappeared. We also know that the 50 to 80 Gilbertese islanders who lived on the atoll from late 1938 until 1963 did not wear shoes; that the 25 American servicemen stationed at the island’s southeastern tip (another two miles away) from July 1944 to November 1945 did not wear women’s shoes with replacement heels and neither did the British colonial administrators who visited Nikumaroro from time to time. We also know that, unless you have the broad, leather-tough feet of a Gilbertese, good shoes are second only to your canteen as your most treasured possession on Nikumaroro. A shoe, or a pair of shoes, abandoned in this place is remarkable in the extreme. The second and dissimilar heel (consistent with Noonan’s shoes) indicating that, in fact, two pair of shoes rotted away here, completes

a pattern of circumstantial evidence so strong as to be overwhelming. But there’s more.

In the same area we found a 2<sup>5</sup>/<sub>8</sub>” length of broken medical thermometer and a threaded aluminum bottle cap 1<sup>7</sup>/<sub>8</sub>” in diameter. No markings were left on the thermometer which might help establish its age, but the bottle cap had the faint remains of a distinctive logo. Through exhaustive research at the U.S. Patent Office by Paul Harubin, TIGHAR #1322, and with the help of the Warner-Lambert pharmaceuticals company, the cap has been identified as having come from one of three over-the-counter medications sold by the William R. Warner Co. in the U.S. in the 1930’s. These were all liquids: Agarol, a laxative; Alka-Zane, an antacid; and Cal-Bis-Ma, for nausea. Earhart is known to have suffered from an upset stomach during the world flight.



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## Lost And Found

One of the great areas of contention among Earhart researchers has always been what went on in Lae, New Guinea between Earhart and Noonan’s arrival there on June 29 and their departure for Howland Island on July 2. Why the delay? What preparations were made for the hazardous Howland leg? How much fuel was aboard when they left? The only reliable report has always been an all-too-brief letter written August 28, 1937 by James A. Collopy, District Superintendent for Civil Aviation at Lae. The closing sentence in that letter states, “Mr. Chater advised me that he forwarded a comprehensive report dealing with the aircraft’s stay at Lae, work carried-out, radio messages received, etc., to Mr. Putnam.”

Eric H. Chater was the General Manager for Guinea Airways at Lae. The airline operated Lockheed Electras similar to Earhart’s and their maintenance people assisted Amelia and Fred with preparations for the flight. Chater’s “comprehensive report” would settle the questions once and for all, except the report disappeared. It didn’t go to the Purdue archives with Putnam’s papers and it has never turned up in U.S. government records nor among the various other collections of Ameliana (new word) in private hands. Eric Chater was killed when he walked into a propeller four months after he wrote the report. The Chater Report was lost.

Now it has been found. Soon after TIGHAR’s return from the Pacific, Hugh Leggatt, Manager of Corporate Communications for Placer Dome, Inc. in Vancouver,



## TIGHAR IN THE NEWS

The Earhart Project has been covered by the media since its inception, usually in a news format. Many of you have very kindly sent us clippings from your local papers, and we hope you'll continue to do so. Now here are some things for you to look for outside of the traditional newspaper/news t.v. format:

March 16, 1992 – *LIFE* magazine's April issue goes on sale with a major article by Ric Gillespie about the Earhart Project; photos by a *LIFE* photographer and by Pat Thrasher. *LIFE* is available at all news stands and often at grocery and convenience stores.

Between April 6 and April 20 – NBC News Productions' two hour documentary, "Untold Stories: The Search for Amelia Earhart" on Earhart and the Earhart Project will air on syndicated television in the States. Sales to Europe, Australia, and Asia are also expected. Check your local TV listings for exact day, time and channel in your area. VHS videotapes will be available in the States; PAL system tapes elsewhere. The good news is that TIGHAR will get a percentage of each videotape sale. The bad news is that you'll have to wait for the video distribution deal to be set up to get a tape, as we're outside that loop. We'll keep you posted.

Other coverage possible/probable: news magazines; morning news programs on network television; news programs on radio and television in the U.S. and Canada; newspaper coverage in the U.S., Canada, Europe, Japan; talk shows on U.S. and Canadian radio programs. Help us keep track of what's out there – if you happen to hear or see something, copy it or note the time and station, and drop us a line. Thanks!

British Columbia called to say that he had come across an interesting document relating to Amelia Earhart in the company's old files. His description of the document made it clear that what he had was the lost Chater Report and he offered to send TIGHAR one of the two "flimsies" which accompanied the original report, and photocopies of the various telegrams and letters which document its transmittal.

The odyssey of the report goes like this: Following the failed search for Earhart, W.T. Miller of the U.S. Bureau of Air Commerce wanted to find out what had happened in Lae. He knew that his friend Frank Griffin of the Canadian gold mining firm Placer Development had connections in New Guinea where the company had a large operation so he asked Griffin to help him get information. Griffin was an old friend of Eric Chater of Guinea Airways so he asked Chater to prepare a report for the U. S. government. Chater sent his eight page report, quite naturally, to his friend Griffin who forwarded a copy to Miller at the Bureau of Air Commerce in Washington. What became of Miller's copy is still a mystery, but the original and two flimsies remained in the Placer company's files until recently found by Mr. Leggatt. Following TIGHAR's announcement that the Chater letter had been discovered, author Fred Goerner told an Associated Press reporter that "he has had a copy of the report for 30 years" and was quoted as saying, "The Chater report has been around forever. Somebody finally sent [TIGHAR] a copy of it after all these years." Yet the Chater letter does not appear as a source or as information, in any Earhart book or article TIGHAR has seen, including Goerner's own book *The Search For Amelia Earhart* published in 1966.

The report itself confirms that the delay in Lae was caused entirely by difficulties in getting an accurate time check for Noonan's chronometers. It describes a test flight AE made on July 1 in which she could not get the Radio Direction Finder to work and assumed the problem was her proximity to the ground station. And the report settles forever the question about fuel. There were 1100 U.S. gallons of fuel aboard the aircraft when it departed for Howland. Also, Earhart left without waiting for the current weather report. Although it was sent to her by radio later, there is no confirmation that she received it. All in all, the report describes a series of events and decisions which suggest that Amelia Earhart died of "get-home-itis" – a malady that has always killed impatient pilots.

### *First On the Scene*

Critics of TIGHAR's work have held that Earhart and Noonan could not have landed at Nikumaroro because nobody who came along later found them. It is a visit by British colonial authorities in October 1937 that has been most loudly touted as proof that TIGHAR is wrong. According to a "History of Gardner (Nikumaroro) Island" by Osborne Publisher, the visit was made by "Professor Henry [sic] E. Maude and a team of British surveyors" who "spent 3 days on Gardner, conducted a full investigation of island and lagoon"; "No evidence of Amelia/Fred was found."

According to the official report of the trip, the British delegation that visited Gardner on October 13 – 15, 1937 was made up of Lands Commissioner Harry Maude, Cadet

Officer Eric Bevington, and 19 Gilbertese islanders. The purpose of the visit was to evaluate the island for future colonization. To that end Bevington, on the first day, took a walk around the atoll with some of the Gilbertese. The second and third days were mostly spent digging wells at the island's west end in an attempt to find potable water.

Harry Maude is skeptical that Earhart and Noonan ended up at Gardner; but it was Eric Bevington who had the best look at the island in 1937, so we were delighted when an article about the Earhart Project, which appeared in *Pacific Islands Monthly* magazine, brought the news that a diary which he kept of his visit to Gardner Island mentions "signs of previous habitation" seen on the island. The magazine's Washington Bureau chief, David North, was able to get us a current address and phone number for Eric Bevington, and we interviewed Mr. Bevington at his home in England on January 22 & 23, 1992.

Bevington cheerfully allowed us to copy his photographs and diary. We were particularly interested to learn anything he might remember about the "signs of previous habitation" he saw. As best he could recall "it wasn't much ... like someone had bivouaced for the night" but he was quite certain of where he had been on the island. With no knowledge of what we had found on Nikumaroro or where, he marked the spot on the map where we recovered the remains of the shoe.



Photo courtesy Eric R. Bevington

**Eric R.  
Bevington**  
**1937**



TIGHAR photo by P. Thrasher

Eric Bevington's diary completes the sequence:

- July 9, 1937 Search planes see "signs of recent habitation."
- October 14, 1937 Eric Bevington sees "signs of previous habitation."
- December, 1938 While clearing underbrush, the first Gilbertese laborers find "the skeleton of a woman ... with size nine American shoes."
- September, 1944 Coast Guardsmen find an unexplained "water collection device."

Traces of Earhart and Noonan were seen by virtually every group that came to the island in the seven years after the disappearance.



## NIKUMARORO, PART III



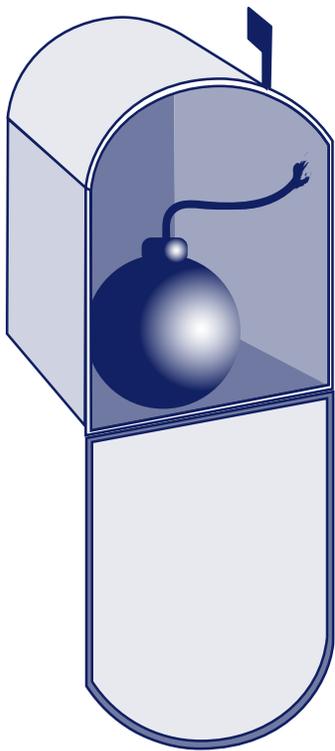
At this time we are planning a third trip to Nikumaroro to depart July 2, 1993. Fund-raising and the search for a suitable ship will begin immediately. Anyone interested in participating in the expedition should complete the following steps:

1. Join TIGHAR.
2. Participate for a minimum of one week in field work with TIGHAR. Opportunities to do so will be scheduled at least three times between now and May of 1993.
3. Take TIGHAR's Introductory Course in Aviation Archeology. See the 1992 Schedule included with this newsletter for the current schedule.

In addition, we require people who are participating in an expedition of this difficulty to meet the following qualifications:

1. Be a non-smoker.
2. Be able to participate in the full expedition, including any training or familiarization procedures. There will be no opportunity to come late or leave early. We expect the expedition to last four weeks, San Francisco to San Francisco. We also expect a minimum of two long weekend training sessions prior to departure, one on each coast of the U.S.
3. The obvious corollary to the above – be able to be gone from home and ordinary pursuits for the entire period of the expedition, recognizing that no option exists for returning home for emergencies once embarked.
4. Pass a rigorous physical, designed and by preference administered by the team physician who will have the responsibility for your health while on a desert island three and a half days from the nearest hospital.
5. Sign the required releases and assignments on selection as a team member.

The team will be selected from among those TIGHAR members who have expressed a serious interest and have met all of the above criteria. Anyone who is interested and willing to make the commitment to TIGHAR and to the project is invited to participate in the selection process. Once selected, volunteers are not required to pay their own way or any portion of the expedition's expenses. Ability to contribute financially to the expedition is NOT a consideration in the selection process. If you have any questions, please feel free to call or write Pat Thrasher at TIGHAR headquarters.



If you have been a member of TIGHAR for more than one or two years, you may have recently received an unusual piece of mail. Several members have called and told us that an envelope, postmarked Marina Del Rey, California, and with “TIGHAR” (and nothing else) in the return address space, arrived in their mailboxes during the week of February 24. Assuming this was from us (after all, who else sends out TIGHAR mail?), they opened the envelopes to find three items: a photocopy of “A History of Gardner (Nikumaroro) Island” from a newsletter published by Osborne Publisher, Inc., of Santa Clara, California; a copy of an AP newspaper article quoting Earhart author Fred Goerner’s disparaging comments about TIGHAR; and a copy of a nasty letter to the editor of *Air Classics* (which is a separate issue, addressed on pp. 10 and 11 of this *TIGHAR Tracks*).

We suppose that this sort of silly attack is flattering, in a bizarre way – after all, we must be pretty important for someone to spend that kind of time and energy, not to mention money, on trying to upset our members. However, for obvious reasons, we couldn’t just let it slide. We have asked the Postal Inspector to investigate this mailing under the federal laws prohibiting mail fraud, and that investigation is in process. Please help us out by sending us any item like this which you receive, including the envelope, unopened if possible. The more evidence we can provide the

Postal Service of a widespread, fraudulent, and potentially damaging mailing, the better their case will be. Thanks for your help.

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## IN APPRECIATION

An investigation as large and complex as The Earhart Project could not be done at all without the help of many people and companies around the world. This list is necessarily incomplete, especially in naming the individuals who have helped with research; but we hope to show some small measure of our gratitude here by publicly recognizing those who have done so much to make The Earhart Project the success it is.

### **Organizations – Donations to the Expedition:**

The Pacific Society, Tokyo, Japan  
Robbins Engineering, Gloucester City, NJ  
Stihl, Inc., Virginia Beach, VA  
United Airlines, Chicago, IL  
White’s Electronics, Sweet Home, OR

### **Organizations – Post-Expedition Research:**

Alcoa Aluminum, Pittsburgh, PA  
The Biltrite Corporation, Waltham, MA  
National Transportation Safety Board, Washington, D.C.  
Oceaneering International, Inc., Houston, TX  
Paul E. Garber Facility, NASM, Suitland, MD  
Warner-Lambert Company, Morris Plains, NJ

### **TIGHAR Members – Post-Expedition Research:**

Norm Chipps, #1329, Hyattsville, MD  
Veryl Fenlason, #0053CE, St. Cloud, MN  
Bill Harney, #1309, Manomet, MA  
Paul Harubin, #1322, Southeastern, PA  
Walt Holm, #0980C, Swarthmore, PA  
Russell Matthews, #0509CE, N. Hollywood, CA  
Dennis McGee, #0149E, Annapolis, MD  
Alan Olson, #0119CE, Wexford, PA  
Gary Quigg, #1025CE, Crawfordsville, IN  
Mike Serafin, #1306, North Beach, MD

### **Individuals – Post-Expedition Research:**

Eric Bevington, Burley, Hants., Great Britain  
Elgen Long, San Mateo, CA  
Paul Matthias, Narragansett, RI  
Helen Schroyer, Purdue University, W. Lafayette, IN  
Herman Stevens, Leonardtown, MD  
Bob Wanagel, Andover, CT

Our heartfelt thanks to each and every one of you who has helped us over the past few months. We couldn’t have done it without you!

## *Psst – Buddy! Need a Rivnut?*

A very generous offer from the Merit Fasteners Corporation will benefit aviation restorers and TIGHAR as well. After many years in the aviation fasteners business Merit has decided to concentrate on other industries and is liquidating its extensive stock of aviation nuts, bolts, clamps and fittings, rivets, bushings, spacers – well, you get the idea.

At the suggestion of their Director of Finance, Robert B. Reese (TIGHAR #1084), Merit is offering these parts to aviation mu-

seum and restoration facilities at substantial discounts. From the sale of their aviation inventory Merit will donate 10% of the gross receipts to a TIGHAR project.

Spread the word. This is a real opportunity for cost savings in restoration projects and a chance to help TIGHAR at the same time. For a complete inventory of the many high quality aviation fasteners available call Merit Fasteners Corporation toll free at (800) 432-0642 or fax 'em at (407) 331-5015.

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## **HOLLINGER SCHOLARSHIP AVAILABLE**

TIGHAR is very pleased to be able to offer a \$500 scholarship for graduate study in aviation history and museum studies in the name of Chris Hollinger, TIGHAR #0834, who died a year ago in an aviation accident. These are the terms under which this scholarship will be administered:

- 1.) The scholarship will be known as "The Chris Hollinger Memorial Scholarship."
- 2.) TIGHAR will distribute the entire amount of the scholarship fund as a scholarship for graduate level study in aviation history and/or museum studies. Should this scholarship become an annual fund, TIGHAR will continue to distribute the entire amount until such time as there is \$10,000 available to the fund, at which time TIGHAR will begin administering the fund as a perpetual scholarship and will distribute only the interest or income from the fund.
- 3.) TIGHAR will select the recipient from applications made directly to TIGHAR. No employee of TIGHAR will be eligible for the scholarship.
- 4.) The criteria for the award of this scholarship are: A demonstrated interest and ability in the fields of aviation history and/or

aviation museum studies; acceptance at an accredited graduate school; a transcript of undergraduate grades, and of graduate grades awarded to date in the field; and two letters of recommendation addressing the applicant's academic ability and commitment to the field. In awarding the scholarship TIGHAR will follow the non-discriminatory guidelines published by the U.S. Government for equal opportunity educational institutions.

- 5.) The scholarship will be awarded for the first time for the September 1992 school term. TIGHAR will pay the funds directly to the school to ensure proper use.

We are very grateful to the family of Chris Hollinger, who have made this scholarship available in his memory. Anyone who wishes to apply for the scholarship should write to Pat Thrasher at TIGHAR for more particulars, or call (302) 994-4410 during normal business hours. Deadline for applications is July 31, 1992.

Additional donations to this scholarship fund will be gratefully accepted and administered according to the guidelines set forth above in point #2.

# AN OPEN LETTER

...To the readers of *TIGHAR*

*Tracks*, by Richard E. Gillespie,  
Executive Director of TIGHAR.



In its February 1992 issue, *Air Classics* magazine published a letter to the editor from Mr. Roy Stafford of Jacksonville, Florida. In the letter, Mr. Stafford charged TIGHAR, and me, with a variety of unethical practices. No attempt was made by *Air Classics* to investigate or verify any of the allegations with TIGHAR before the letter was published. Our initial impulse was to ignore the letter but, at the request of several members, a brief reply was sent to the magazine. The reply appeared in the April issue. In response to inquiries from others in the aviation press who are less familiar with TIGHAR, and to answer questions friends might be too polite to ask, we have answered Mr. Stafford's numerous charges in detail below.

Mr. Stafford begins by relating a story about a telephone call he made to me challenging press reports he had seen indicating that our organization (which he refers to as Tighair) was going to Papua New Guinea to recover a B-17E. He had recently been in PNG discussing aircraft recovery with Bruce Hoy, curator of the National Museum's aircraft collection, and had heard nothing about such a project. Mr. Stafford says that I told him I "was taking a group to New Guinea to do the deed" and that he could "be a part of this historical event, in return for a substantial contribution." He says I told him that we had "excellent political connections in the U.S. and that PNG would do whatever (we) wanted." He says he asked me if I had ever heard of Bruce Hoy and that I said I hadn't. Stafford says, "At this point, I suspected a con job and told him so. He became indignant and told me that they were so well-connected that, in the future, they would become the single entity that anyone would have to deal with if they wanted to recover any US aircraft. They were already working with various senators and congressmen to have Tighair [sic] so designated through legislation."

Here are the facts. The phone call from Stafford came in the fall of 1985. TIGHAR was founded in January of that year, and since May had been trying to find a way to recover B-17E 41-2446 from the Agaiambo Swamp in Papua New Guinea. On September 5, 1985 we made our initial inquiry to Bruce Hoy concerning the B-17E and asked what the government's policies were regarding aircraft recovery. It was about this time that we learned that the Travis Air Force Base Historical Society was also interested in the aircraft and, reportedly, was close to putting together a recovery expedition but needed help.

On September 13, 1985 I called the society's president, Curtis Burgan. I was told that they had permission to recover the aircraft, an agreement with the RAAF for helicopter support, and approval for USAF C-5 airlift to bring the bomber back to the United States. All that was needed was funding (estimated at \$100,000) for the civilian recovery team but they were having trouble raising the money. I offered TIGHAR's assistance and partnership in the project, which was eagerly accepted.

On September 17, 1985 I spoke with the Travis Museum's active duty USAF liaison officer, a Lieutenant Colonel (who shall remain nameless here as a courtesy to the Service) who was handling all diplomatic and operational arrangements for the project. The officer was emphatic that TIGHAR should not enter into any direct communication with Hoy or anyone else in the Papua New Guinea government as he was "handling all that."

On October 1, 1985 Hoy replied to my September 5 letter outlining Papua New Guinea's recovery policy at that time. At the insistence of the Air Force officer I did not reply.

Throughout October and November TIGHAR arranged National Geographic television coverage for the expedition which was slated for January 1986, and then capitalized on that commitment to solicit the needed funding from various corporations. Meanwhile the liaison officer gave us repeated assurances that operational and diplomatic preparations were well in hand.

It was sometime during this period that the call came from Roy Stafford. Believing that the USAF had been telling me the truth, I may well have responded to Stafford's incredulity about the prospective B-17 recovery with assurances that all the proper bases were being covered. This is perhaps the origin of his allegation that I made statements about "excellent political connections in the US" and, at the time, I believed that we had the full cooperation of the government in PNG. I honestly don't remember whether I tried to recruit his participation in the expedition in return for a "substantial contribution" but I rather doubt it; at that stage in the planning, the recovery team was being assembled by the Travis group. His claim that I had never heard of Bruce Hoy is denied by my letter to Hoy which predates the call. Stafford says that he "suspected a con job and told [me] so" and that I "became indignant." Again, I have no direct memory of the conversation but if he indeed called me a crook I certainly would have become indignant. But that I would tell him that TIGHAR was aspiring to be some kind of U.S. government Agency for the Allocation of Airplane Recovery Rights to Groups Historical (let's see, that would be AAAR-RGH) is ridiculous.

In December, the Air Force officer made a trip to Papua New Guinea ostensibly to inspect the airplane and make final arrangements for its recovery. Upon his return he informed us that there were still some details which needed to be worked out and the expedition would need to be postponed until February or March. Shortly thereafter it all hit the fan.

In mid-January we received a letter from Bruce Hoy which made it apparent that we had been lied to from the outset. There was no permission to recover the airplane and no agreement regarding RAAF helicopter support, nor were there any arrangements for C-5 airlift. At that point we took matters in hand and established direct communication with Hoy and disassociated ourselves entirely from the Travis AFB Historical Society. We had raised \$50,000 from commercial sponsors and, with their permission, used the money to defray some of the expenses TIGHAR had incurred and made a trip to Papua New Guinea in April of 1986 to repair some of the diplomatic damage. We met and developed an excellent working relationship not only with Bruce Hoy (who is no longer in that job) but with his boss Soroi Eoe, Director of the National Museum, with whom we still correspond concerning historic

preservation issues. The eventual fate of the B-17E is still unresolved and, as far as we know, the authorities in Papua New Guinea have made no decision regarding the airplane. The unpleasant experience with the Travis Historical Society is, of course, documented with voluminous correspondence which we'll be happy to provide to anyone who is interested. In retrospect, the whole affair taught us a valuable lesson in our first year of operations. Ever since then, TIGHAR has insisted on maintaining direct control over all aspects of projects in which the foundation is involved.

Stafford's letter to *Air Classics* does not stop there, however. He says that he has seen "documentaries and press releases" about how we "found a piece of wood in a Maine forest that proves Nungesser and Coli made it across the Atlantic before Lindbergh" and how we "found a PBY junction box on Howland Island in the Pacific that is irrefutable proof that Amelia Earhart crashed there."

TIGHAR has, of course, never said anything of the kind. The "piece of wood" is a fascinating artifact which is still a mystery, and while we openly speculated that it seemed consistent with material from the Nungesser/Coli aircraft, it is not, nor did we ever say it was, proof of anything. Likewise, the "PBY junction box found on Howland Island" (actually a PBY navigator's bookcase found on Nikumaroro) was never offered as "proof that Amelia Earhart crashed there." We did prove that it was never installed in a PBY in the specified way, and the FBI helped us determine that it could have come from the Earhart aircraft, but it was never represented as anything but what it is – an intriguing possibility that prompts additional research. It has been the foundation's policy to openly share its speculations and working hypotheses with anyone who is interested, but we try to make a clear distinction between fact and theory. If there have been occasions when we failed to make that distinction clearly enough, we regret them.

Stafford says that TIGHAR claims to have recovered "over a thousand rare aircraft," that we say we're "the authority on aircraft recovery and restoration," and that we claim to be "the world's leading aviation archeologists."

TIGHAR has never claimed to have recovered "over a thousand rare aircraft." When asked about the organization's size we often reply that we have about a thousand members worldwide and I can only guess that this is the root of Mr. Stafford's error. As for claiming to be an "authority on aircraft recovery and restoration," TIGHAR rarely gets involved in the physical removal of aircraft. We are not and have no intention of being an engineering or salvage firm. The principle purpose of The International Group for Historic Aircraft Recovery is no more to recover historic aircraft than is the primary purpose of the Experimental Aircraft Association to build experimental airplanes. TIGHAR is a service organization for the entire aviation historic preservation community and our principle purpose is to encourage the genuine preservation of the relics of aviation history. We do this, in part, by tackling the most difficult aviation historical mysteries as a way of setting a public example in responsible research. We also work closely with government agencies, both foreign and domestic, to encourage a regulatory environment that is friendly to the preservation of historic aircraft and aviation-related properties. And we pursue an ongoing program of public education through publications, courses in aviation

archeology and seminars in the principles of aviation historic preservation. I can find no TIGHAR publication where we have claimed to be "the world's leading aviation archeologists" but Mr. Stafford may have seen us referred to that way.

Mr. Stafford also charges that TIGHAR "has attacked the nation's leading aviation museums, suggesting these institutions are inept and incompetent and if they'd just send their staffs to Tighair's [sic] seminars (for a fee, of course) they'll straighten their staffs out."

TIGHAR has, from time to time, both criticized and praised the policies and practices of various air museums not just nationwide but worldwide. We will continue to do so in the hope of encouraging responsible aviation historic preservation. When TIGHAR conducts a course or seminar at an air museum, members of the museum staff are always invited to attend free of charge.

Mr. Stafford continues, "They have attacked Warbird owners in general, wanting to ground all Warbirds."

Absolutely untrue. TIGHAR led the call for better safety in the operation of ex-military aircraft with a 1987 editorial in *TIGHAR Tracks*. The editorial cautioned that unless the safety record improved, the FAA might take regulatory action that could severely restrict the operation of this category of aircraft. The then president of Warbirds of America misread the article and circulated a letter alleging that TIGHAR wanted to "ground all Warbirds" thereby propagating a fiction that cost the foundation 20% of its membership. TIGHAR has since recovered that loss ten times over and, ironically, the January 1991 issue of *Air Classics* featured an article entitled "Let's Stop the Airshow Carnage!" which echoed the cautions TIGHAR had first raised four years earlier.

Stafford again. "Folks, I believe this organization is not what it claims. I don't believe they've recovered a single aircraft. I know they haven't restored a single aircraft. To suggest they are authorities about something they have never done is ludicrous."

Roy Stafford has never been a TIGHAR member, has apparently never seen a TIGHAR publication, and his only contact with the organization was a phone call seven years ago; and yet he feels qualified to say that TIGHAR is "not what it claims." The truth is that TIGHAR has never claimed to do anything it has not done.

Stafford ends his letter with charges that TIGHAR manipulates the media and cautions that, "If we don't keep an eye out, these self-appointed experts may convince some bubble-headed vermin that lives inside this nation's capital that they are for real .... Any individual or group that seeks to be appointed to rule over the rest of us bears close monitoring, lest one day these self-appointed experts end up in control of our hobbies, jobs and lives."

I don't know how to reply to something like that. TIGHAR puts out press releases when we have news to report and the media, far from being manipulated, grill us endlessly about the results of our research. As far as "seeking to be appointed to rule over the rest of us" I've got enough to do just trying to run this little non-profit foundation (thanks just the same).

As always, we welcome your comments and questions.

# STRICTLY BUSINESS

## ORDERSORDERSORDERSORDERSORDERSORDE

Have you ordered something from TIGHAR and not received it? Like an Earhart Project Pin? An Earhart Project Electra Model? A Directory? Here's the status on these items:

**Pins** – We STILL do not have our pins! The Winter Olympic Games absorbed the entire pin-making capability of the world, it seems; however, our supplier now has found a vendor who has noticed that the Games are over, and we are assured of having our pins. Someday. We're really sorry this happened. We do have your order on record, and you'll receive it within four days of us receiving our order.

**Models** – The prototype has reached us and has been sent back for correction. This means we should have the finished models about the first week in April. We'll ship them immediately on receipt.

**Directories** – Were shipped to all who ordered them on February 28. If you did not receive yours, let us know. We have them in stock now and can ship all new orders immediately. See the order form enclosed for details.

**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 co-operation 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, nor does it engage in the restoration or buying and selling of artifacts. The foundation devotes its resources to the saving of endangered historic aircraft wherever they may be found, and to the education of the international public in the need to preserve the relics of the history of flight.

**TIGHAR Tracks**, published six 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.

# MEMBERSHIP FORM

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

\$35 for a one year membership

\$60 for a two year membership

\$125 for a five year membership

\$1,000 for a life membership

Please send me —

*TIGHAR Tracks* six times a year, and a membership patch and decals  
Invitations to participate in expeditions, courses, seminars, and Gatherings  
Opportunities to subscribe to special internal TIGHAR project publications  
Opportunities to do research, interviews, and reports for aviation historical projects

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Telephone \_\_\_\_\_

Please return this form with your membership dues in U.S. funds only, 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.

