

HOW WE DO IT

Most of the project's research is carried out by the Earhart Project Advisory Council. EPAC, as we call it, is made up of about 30 hand-picked TIGHAR expedition veterans, board members, scientists, and scholars who function as a group and in ad hoc committees. When we feel that some topic of research might benefit from a shotgun approach we throw the question out to the 800+ subscriber Earhart Search Forum email group. The forum is an active, enthusiastic, and sometimes raucous assembly of TIGHAR members, not-yet members, and wouldn't-dream-of-being members who discuss and debate every imaginable aspect of the Earhart mystery.



THE AMELIA EARHART
SEARCH FORUM



When we have solid results to report they usually appear first as articles in *TIGHAR Tracks* and, after a suitable time, as Research Bulletins on the TIGHAR website. While we want to share our findings with anyone who is interested we also feel that our first obligation is to you, the folks who make it all possible.

At any given time literally dozens of topics related to the Earhart Project are under investigation. Here is a brief description of the current "top ten."

1 DADO RESEARCH

As described in the September 2003 issue of *TIGHAR Tracks* and in the Research Bulletins section of the TIGHAR website, we now have at least three and possibly four examples of an aircraft component known as a "dado" that have been recovered from the abandoned village on Nikumaroro. These artifacts are currently preserved at the Maryland Archaeological Conservation Laboratory in St. Leonards, MD. They appear to be from the cabin of a civilian

aircraft that had a wooden floor and used 1/4 inch kapok or "seapak" insulation. Earhart's Electra fits that description. We have established that the cabin furnishings of Lockheed Electras regularly featured dados but, so far, we have been unable to locate engineering drawings that detail their construction. Electras surviving in museums are, by definition, aircraft that enjoyed a long service life and have had their interior furnishings (headliner, cabin wall upholstery, etc.) replaced and upgraded. Documenting exactly how original Lockheed Electra dados were constructed has therefore proven to be something of a challenge. While efforts to locate engineering drawings continue, a special EPAC team is planning a number of expeditions for the coming year which will seek to locate and examine old "forgotten" Electra crash sites in the hope of finding surviving examples of original dados. Two wrecks on mountains in New Zealand, a wreck in Alaska, and another in Idaho are currently being researched.



Lockheed 10A C/N 1128 crashed on Mt. Ruapehu in New Zealand on November 23, 1948. Photo courtesy Howard Alldred.

(Incidentally, if a reconnaissance in the spring shows the Idaho wreck to be suitable, we'll use that site as the focus for the 2004 Aviation Archaeology course and Field School later in the year. Look for more on this in the next *TIGHAR Tracks*.)

2 CORRUGATED METAL RESEARCH

Analysis of Scanning Electron Microscope (SEM) data collected for TIGHAR by the U.S. Naval Academy Engineering Lab in Annapolis, Maryland, of samples of very rusted fragments of corrugated metal recovered from a variety of sites on Nikumaroro show that several large sheets of corrugation that were apparently laid out on the ground at the Seven Site are different from all other corrugation found on the island. Research is continuing to determine the possible significance, but one working hypothesis is that the castaway(s) salvaged corrugated iron from the old Arundel coconut planting operation at the west end of the island and brought it to the Seven Site as a means of channeling rainwater for collection.

3 IDENTIFICATION OF ARTIFACTS: 2-6-S-03A&B

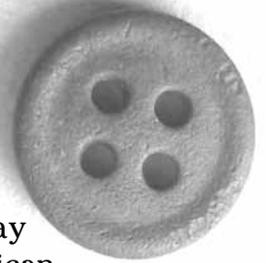
These small, amateur-fashioned devices that incorporated American-made woodscrews were found at the Seven Site and have, so far, defied identification. Numerous hypotheses have been tested and rejected. Research continues.



4 BUTTON RESEARCH

A button, brown in color, was recovered from the Seven Site during the 1996 expedition that first located the site. Its size suggests that it was a trouser button. Work by the FBI Lab and a laundry list of museums and button experts have established that it is of American manufacture and dates from the mid-1930s or later. So far we've been unable to match it to any U.S. Coast Guard or Navy button. There is a dark discoloration on one part of the button that

experimentation with similar buttons suggests was caused by a brief (a few seconds) exposure to flame. Of the categories of individuals known to have been present at the site at various times – Pacific islanders, British administrators, U.S. Coast Guardsmen – none seems to have been a likely source for the button, so we're left with the possibility that it came from an item of clothing owned by the castaway. If the castaway had an American button it follows that the castaway might well have been an American.



5 FORMER NIKUMARORO RESIDENT INTERVIEWS

We've recently made contact with former Nikumaroro residents in Australia and New Guinea who are able to answer many of the questions we have about island folklore and who can carry our research to other former residents who now live in the Solomon Islands. These important new contacts are bringing an avalanche of new information that can be correlated with archival sources and are giving us a better understanding of events on the island.

6 ITASCA RADIO LOGS RESEARCH

We're currently working with a group of former Navy radio operators who are providing some valuable new insights into the radio logs of the *Itasca*. Although the radio logs are the best contemporaneous documentation of what was going on during the Earhart flight and subsequent search, they are written in an archaic and arcane shorthand that must be accurately deciphered.

7 POST-LOSS RADIO STUDY

This massive project continues to plod toward publication. As sections of the study are completed we'll post them on the TIGHAR website for peer review and critique so that we can

make any needed corrections before we commit to print. When completed it will be a landmark document in Earhart research.

S TIDAL RESEARCH

Using new data collected during last summer's Niku Vp expedition, analysis is underway which will enable us to verify and refine our reconstruction of conditions on the reef during the crucial days in 1937.

*Tidal gauge used during NikuVp.
TIGHAR photo by Howard Alldred.*



N NIKUMARORO **G** GEOMORPHOLOGY RESEARCH

Expert assessment based on direct observation and historical data of how storm activity has influenced the island and the distribution of artifacts over the years is giving us a better picture of why we've found what we have, why we haven't found more, and where we should look next.

10 G.I.S. **C** CONSTRUCTION

The volumes of photographic and cartological data we have collected on Nikumaroro are being assembled by Select GIS Services of Northampton, MA into a comprehensive Geographical Information System (GIS) which will be an important, not to say revolutionary, new tool in assessing the significance of what we already know and planning what we should do next.

A BUSY NEW YEAR

In addition to the ongoing research described above, look for a new up-dated paperback edition of *Amelia Earhart's Shoes*, the popular 2001 book about TIGHAR's quest authored by senior archaeologist Dr. Tom King, forensic anthropologist Dr. Karen Burns, oceanographer Dr. Randy Jacobson and researcher Kenton Spading.

