The Senior Data Processor at Oceanic Imaging Consultants, Inc. of Honolulu, Hawai‘i, recently examined the raw sonar data associated with the anomaly that TIGHAR suspects might possibly be the wreckage of the Earhart Electra (see “Is This the Earhart Electra?” at http://tighar.org/Projects/Earhart/Archives/Research/Bulletins/66_NikuVIIUpdate/66_NikuVIIUpdate.html) and has provided a report (URL below). The report contains some bad news and some good news.

The bad news is that the data collection performed by the search contractor during last year’s Niku VII expedition was much less complete than we were led to believe. Consequently, the imagery initially derived from that data was somewhat misleading.

The good news is that, when corrected, the imagery of the anomaly – although less complete – looks even more interesting than it did in the initial distorted version.

Oceanic Imaging Consultants, Inc. (OIC) contacted TIGHAR after seeing media coverage of our interest in the anomaly. OIC makes seafloor mapping software and provides consulting and data processing services for seafloor mapping projects, including scientific analysis and interpretation of sonar data. We eagerly accepted OIC’s offer to use their proprietary CleanSweep software to post-process our raw sonar data to see if we could learn anything more about the anomaly.

To our surprise, OIC soon discovered that the raw sonar data we sent them were incomplete. Normally a sonar device sends out “pings” of sound at a rate that matches the speed the device is traveling through the water so that the returns or “echos” provide a complete “sound picture” of the area scanned. However, in this case, there were numerous “dropped pings” in the data. Where there were no pings, there were no echoes – and therefore no data.

The sonar mosaic provided to us by the contractor merged the data and created the illusion of complete coverage.
The mosaic created by OIC shows the true extent of the coverage.

One consequence of merging the data to mask the intermittent coverage is the unintended illusion that there is a break in the linear nature of the portion of the anomaly that is high enough to cast a sound shadow.

When the data are presented as they really are, it is apparent that the portion of the anomaly that is high enough to cast a sound shadow is actually very straight. That’s good. Straight lines are relatively rare in nature.
Merging the imagery also makes the anomaly look shorter than it really is. We had previously estimated the object casting a shadow to be under 10 meters in length. OIC has estimated the length of the object – as represented by the blue line – to be 10.36 meters (34 feet).

The “downhill” end of the object falls in an area approximately 1.7 meters long where we have no data, so we have no way of knowing where the object ends in the black area. If the OIC scale is correct, the length of the object could be as little as 10.36 meters (34 feet long) or as much as 12.06 meters (39.5 feet).

In other words, it could be the length of a Lockheed Electra with a slightly crushed nose, or the length of an intact 11.76 meters (38.5 feet) Lockheed Electra fuselage; or it could be about one foot too long to be an Electra fuselage. The Holy Grail or close-but-no-cigar?

OIC’s estimate for the height of the object, based on the shadow, is 1.66 meters (5 feet 5 inches) but the accuracy of that measurement depends heavily upon the surface upon which the shadow is cast and that is information we do not have. If the terrain immediately beyond the object is relatively flat, the estimate should be fairly good. If the terrain is a steep upslope the measurement will be off. It is worth mentioning, however, that the fuselage diameter of a Lockheed Electra is almost exactly 1.66 meters (5 feet 5 inches).

All of this new information – the bad news and the good – is extremely valuable. Oceanic Imaging Consultants, Inc. will continue to analyze the sonar data collected during the Niku VII expedition. We’ll report further results as they become available.

A PDF of OIC’s full report can be read at http://tighar.org/Projects/Earhart/Archives/Research/Bulletins/67_NikuVII/News/CleanSweepComplete.pdf.
A tin box has been found containing forty-five aerial photographs of Gardner Island (now Nikumaroro) taken just fifteen months after the Earhart disappearance and before the first official inhabitation of the island.

Matthew O’Sullivan, Keeper of Photographs at the New Zealand Air Force Museum in Christchurch, New Zealand recently stumbled upon an unlabeled tin box in the museum’s archives described in records only as “Unknown Island.” Curious, he opened the box and found five sheets of contact prints and a slip of paper with the words “Gardner Island.” We’ve worked with Mr. Sullivan several times over the years so he is well familiar with TIGHAR’s work. A quick comparison of the images on the contact sheets with Google Earth convinced him that the photos were, indeed, of Gardner Island. Some more checking confirmed that he has the original five-inch negatives. He immediately notified TIGHAR Executive Director Ric Gillespie: “I don’t have a date but it will be early WW2 at the latest. … If this film proves to be of interest you may well wish to come here and examine it yourself.” He sent photos of the contact sheets and Ric replied:

Matt,

These photos are a gold mine. I know exactly what they are. What you have discovered is the complete set of aerial obliques taken on December 1, 1938 by a Supermarine Walrus launched from HMS Leander in support of the New Zealand Pacific Aviation Survey. The scrapbook of photos you have shared with us previously are the photos taken by the land survey party.

We’ve had two of these images via the New Zealand National Archives in Wellington for a long time. We always reasoned that there must be more photos somewhere. You have found them.
Some of these photos provide excellent views of areas on the island that are of particular interest to us. The fact that you have the 5 inch negatives is fortunate beyond measure.

We are delighted to accept your invitation to come and examine the negatives in person. Our forensic imaging specialist, Jeff Glickman, will want to take photos of the negatives with his own equipment. Jeff and I made a similar visit to Oxford University last year to copy-photo the Bev-ington Photo. Congratulations on an amazing find.

Jeff and Ric will be going to Christchurch the week of July 7 to take copy photos and discuss the use and publication of these wonderful photographs. TIGHAR members and supporters have been quick to step forward with funding to let us take advantage of this incredible opportunity. Your help will be greatly appreciated. You can make a donation on the TIGHAR website by clicking any “Donate” link or through any TIGHAR Store link. We are also enclosing a donation form with this mailing for check or credit card donations. Thank you!

Royal Navy Supermarine Walrus (affectionately known to aircrews as “Shagbat”) – the type that took the recently discovered aerial photos of Gardner Island.

Two Slots Still Available!

TIGHAR’s
Aviation Archaeology Field School
August 21 – 25, 2013

The subject aircraft for the 2013 Field School will be Lockheed NC14935. The Northwest Airlines Model 10A Electra iced up and crashed December 18, 1936 near Kellogg, Idaho during an airmail flight from Missoula, Montana to Spokane, Washington. Pilot and copilot died on impact and their bodies were later recovered. There were no passengers aboard. Some of the wreckage was later salvaged but much – and it’s not entirely clear how much – still remains on the site. The wreck is of particular interest to TIGHAR as a rare source of information about Electra structures and how they react under stress. Total tuition $2,500 includes

- All instruction
- All transfers
- Hotel, excluding meals
- All outfitter support and meals in the field

Use the enclosed form or click on any “Field School” link on the TIGHAR website for more information and to register.
TIGHAR has been sued Timothy Mellon, one of the sponsors of the 2012 Niku VII expedition.

Mr. Mellon’s first contact with TIGHAR was on March 22, 2012 when he sent an email to info@tighar.org inquiring about “funding opportunities.” He and I talked on the phone, and I sent him some standard project information.

On March 30, 2012 Mr. Mellon made a generous contribution of a little over a million dollars toward TIGHAR’s Niku VII expedition to Nikumaroro. I did not meet him in person until April 28, 2012. Mr. Mellon subsequently participated in the expedition as a Sponsor Team Member.

On June 3, 2013 Mr. Mellon filed a lawsuit against TIGHAR and me personally. The essence of Mr. Mellon’s suit is his allegation that the wreckage of the Earhart aircraft is visible in underwater video taken during TIGHAR’s 2010 Niku VI expedition and that I withheld that information from him at the time he made his financial contribution to the 2012 Niku VII expedition.

In my opinion, Mr. Mellon’s allegations are not only totally illogical but also demonstrably false. The underwater video in which Mr. Mellon says he sees airplane wreckage was taken on June 7, 2010. There is a piece of rope and what might be a piece of wire, or it could be just “whip coral,” depicted in the video. They were the most interesting objects seen underwater during the Niku VI expedition and the only identifiable manmade objects in the video. The discovery of the rope and possible wire was reviewed and discussed at the team meeting onboard Nai’a the night of June 7. That meeting was filmed by the Discovery Channel camera crew and is included in the documentary special “Finding Amelia” that first aired on December 10, 2010. A clip of that segment from the show is on the TIGHAR Channel as “Finding Amelia excerpt.” It is difficult to imagine how anything could be better documented than the fact that wreckage of the Earhart aircraft was not discovered during the 2010 expedition.

From the conclusion of the 2010 expedition through today, neither TIGHAR nor I are aware of any images taken underwater in 2010 that depict the Electra.

On December 8, 2010, two days before the Discovery show aired, I posted a two-minute clip from the video on the TIGHAR YouTube channel as “Wire & Rope.” To date, that video clip has been viewed nearly 10,000 times.

In October 2012, three months after the expedition, Mr. Mellon and a few other members of the TIGHAR Amelia Earhart Search Forum began seeing what they believed to be airplane debris in the
2010 “Wire & Rope” video. I couldn’t see anything but the rope and possible wire but, on November 2, 2012, at their request, I posted the entire eight minute video to the TIGHAR YouTube channel as “Wire & Rope entire.” That video has now been viewed over 21,000 times. Mr. Mellon soon began posting annotated screen captures from the video pointing out not only aircraft debris but also dismembered human remains and Amelia’s banjo and violin. A sampling of these images is presented here. The full collection can be seen on the TIGHAR Forum in “Summary of Debris from 2010 video.” By January, 2103 I felt that Mr. Mellon’s posted “discoveries” had become so bizarre that allowing them to continue would damage TIGHAR’s credibility, so I cut off forum discussion of objects seen in the underwater video. He continued to send me annotated screen-captures of wreckage and body parts he believed he could see in the video, and I continued to see nothing but coral.

The lawsuit came as a complete surprise. We expect and respect that different people will have different interpretations and opinions about the Earhart disappearance. That has been true for 76 years. We don’t expect people to resort to legal action to promote their opinion. There were no acrimonious exchanges with Mr. Mellon and we received no demands from him before he filed his complaint. When we learned of his suit we contacted his attorney and offered to meet to work out any misunderstanding, but our overtures were rebuffed. None of this makes any sense to us.

We’re confident that TIGHAR will prevail but even frivolous lawsuits are expensive to fight so we’ve asked the TIGHAR membership and the general public to support us by donating to the TIGHAR Legal Defense Fund. I hope you’ll help.
These annotated screen captures from the 2010 underwater video are among many published by Mr. Mellon on TIGHAR’s Amelia Earhart Search Forum. We see only coral.