

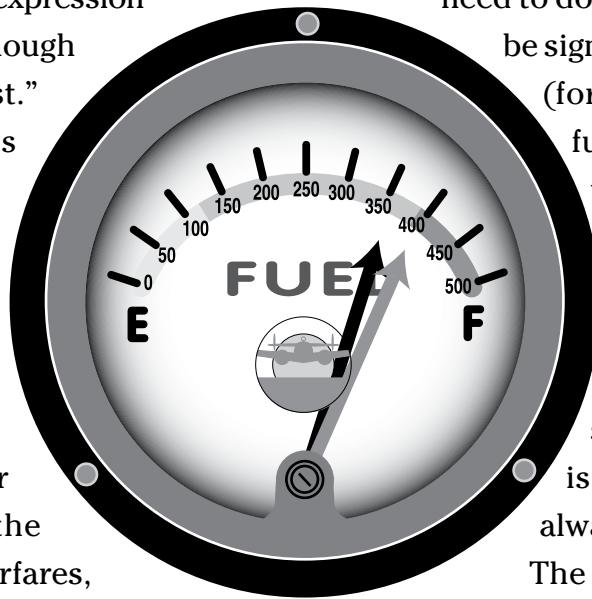
TIGHAR Tracks



A Publication of The International Group for Historic Aircraft Recovery
 TIGHAR · 2812 Fawkes Drive · Wilmington, DE 19808 · USA · www.tighar.org

... AS GOOD AS A FEAST

There is an old Gaelic expression that translates, “Enough is as good as a feast.” and that pretty well sums up TIGHAR’s situation as we prepare to depart on the Niku III expedition. We have not yet met our funding goal but, with your help, we’ve been able to raise enough to cover the immediate costs of the expedition—ship charter, airfares, equipment needs, etc. We have what we



need to do the job. There will, however, be significant post-expedition costs (for example, actual food and fuel costs are paid after the trip) and, if we’re lucky, we’ll come home with artifacts that will need to be tested, analysed, and researched—and that all costs money so your continued support is just as important as it has always been.

The preparations are complete. There’s nothing left to do but go and do the work.

Original Budget for Niku III:	\$500,000
Budget Extras:	
Satellite Imagery	\$3,000
Tarawa trip	\$4,000
10 extra days of ship charter	\$50,000
Total Budget	\$557,000
Support Received:	<u>\$407,193</u>
Balance to Raise	\$149,807



Cash in Hand Needed by September 30:	\$500,000
Cash in Hand to Date:	<u>\$407,193</u>
Cash Needed to Raise by September 30:	\$92,807

We wish that we could take along all of the many highly-qualified and dedicated TIGHAR members who would like to be out there to help us but we're limited by practical realities to twelve team members. They are, in alphabetical order:

Karen R. "Kar" Burns, Ph.D.

Age: 54

Home: Athens, Georgia

Position: Forensic osteologist; Grave Investigation Team leader

Experience: Forensic investigation of criminal and human rights cases in the U.S., Europe, Central America, and the Central Pacific. Participant in 1999 TIGHAR expedition to Nikumaroro.

Profession: Consultant in human skeletal identification; Adjunct Professor, Department of Anthropology, University of Georgia



William M. "Bill" Carter

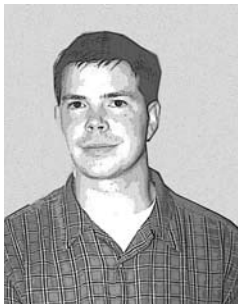
Age 31

Home: Boise, Idaho

Position: Grave Investigation Team

Experience: Logistical Coordinator and participant in TIGHAR's B-23 Dragon survey, Loon Lake, ID 2000

Profession: Litigation Attorney for Albertson's Inc.



John Clauss

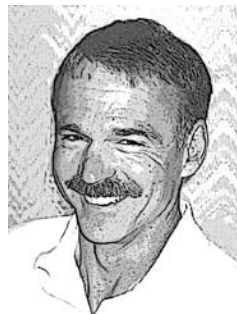
Home: Homewood, California

Age: 51

Position: Small Boat Support and Archaeological Team

Experience: Participant in numerous TIGHAR expeditions including all six previous trips to the Central Pacific (1989, 1991, 1996, 1997, 1998, and 1999).

Profession: Builds and sells hi-tech racing sailboats. Private pilot's license with land and sea ratings.



Richard B. "Skeet" Gifford

Home: Aurora, Colorado

Age: 67

Position: Archaeological Team
Experience: Member of Board of Directors, TIGHAR; participant in 1999 expedition to Nikumaroro. Air Transport Pilot's license.

Profession: Pilot and senior flight instructor, United Airlines (retired); airline safety consultant to NASA employed by Lockheed/Martin.

Richard E. "Ric" Gillespie

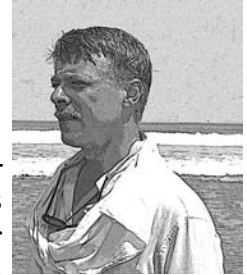
Age: 53

Home: Wilmington, Delaware

Position: Expedition Leader

Experience: Executive Director of TIGHAR since its founding in 1985; leader of more than three dozen aviation archaeological expeditions in the U.S., Canada, Europe, New Guinea and the islands of the Central Pacific; Director of the Earhart Project since its inception in 1988 and leader of all six previous Earhart expeditions; Commercial pilot's license with Single, Multi-engine, and instrument ratings.

Profession: Historian



Richard Walter "Walt" Holm

Age: 38

Home: Menlo Park, California

Position: Dive Team

Experience: Participant in TIGHAR's B-23 Dragon survey, Loon Lake, ID 2000; Certified Divemaster with extensive

scuba diving experience. Commercial pilot's license with Single-engine land and sea, and Instrument ratings. Private pilot glider rating.

Profession: Electrical Engineer, develops aerospace electronic systems and consults on electronic instrumentation design.

Van T. Hunn, Col. USAF (ret.)

Age: 69

Position: Dive Team leader

Experience: Numerous scuba qualifications and training in underwater search tech-



niques. Diver on two previous TIGHAR expeditions to Nikumaroro. (1997 and 1999) and researcher on 2001 trip to Tarawa, Republic of Kiribati. Air Transport Pilot's license.

Profession: Military and airline pilot (retired)



Christopher N. "Chris" Kennedy

Age: 45

Home: Houston, Texas

Position: Archeological Team

Experience: Participant in 1999 expedition to Nikumaroro

Profession: Attorney specializing in maritime law

Thomas F. "Tom" King, Ph.D.

Age: 58

Home: Silver Spring, Maryland

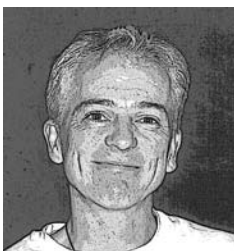
Position: Archaeological Team leader

Experience: Archaeological investigations in Micronesia and California; former senior archaeologist for the federal Advisory Council on Historic Preservation; author of several textbooks on archaeology and historic preservation as well as many monographs and journal articles. Member of Board of Directors, TIGHAR; Participant in two previous TIGHAR expeditions to Nikumaroro (1989 and 1997), in the Kanton Island survey (1998), and the Fiji Bones Search (1999). Principal author of *Amelia Earhart's Shoes*, a recounting of TIGHAR's Earhart investigation to date, available now from Altamira Press (www.altamirapress.com).

Profession: Consultant, writer, mediator and teacher in historic preservation and cultural resource management.



James "Jim" Morrissey



(Note: Jim is Amelia Earhart's great nephew. His grandmother was Amelia's sister.)

Age: 42

Home: Oakland, California

Position: Medical Officer and Archeological Team

Experience: Remote location emergency medical services and instruction to foreign and

domestic government agencies and military units.

Profession: Founding Member and Head of Faculty for Wilderness Medical Association.

Andrew M. "Jihad" McKenna

(Andrew earned his nickname by declaring and leading a highly successful "holy war" to recruit new TIGHAR members via the Earhart Search Forum)

Age: 42

Home: Boulder, Colorado

Position: Dive Team

Experience: Participant in

TIGHAR's B-23 Dragon survey, Loon Lake, ID 2000; extensive field experience with the American Museum of Natural History fossil collecting expeditions throughout the Western US, Greenland, and Egypt. Certified Advanced open water scuba diver; Commercial pilot's license with Single, Multi-engine, and Instrument ratings.

Profession: Energy conservation consulting specializing in commercial and industrial cooling systems.



Gary F. Quigg

Age 39

Home: Crawfordsville, Indiana

Position: Grave Investigation Team

Experience: Professional historian; Participant in numerous TIGHAR expeditions including

two previous TIGHAR expeditions to Nikumaroro (1997 and 1999); Private pilot's license.

Profession: Associate Director for Historic Resources, Conner Prairie Museum, Indiana

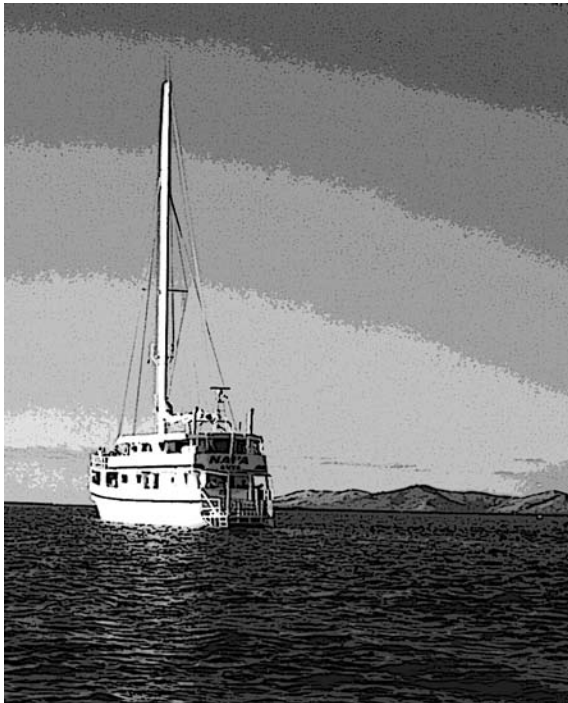
Funding; equipment; documentation capability; and a team of bright, tough, dedicated people – enough is as good as a feast. We're ready to go and do the job you have sent us to do.



PLANS & EXPECTATIONS

NIKU III EXPEDITION PLANS

Expedition Vessel



The Fiji-based 120 ft motor/sailer Nai'a—pronounced NIGHya, which is Hawaiian for “dolphin” (see www.naia.com.fj). Nai'a supported the Niku III (1997) and Niku IIIIP (1999) expeditions.

TIGHAR Team

Archeological Team

Leader—Tom King
John Clauss
Skeet Gifford
Chris Kennedy

Grave Investigation Team

Leader—Kar Burns
Gary Quigg
Bill Carter

Dive Team

Leader—Van Hunn
Walt Holm
Andrew McKenna

Expedition Leader—Ric Gillespie

Primary Objectives of the Expedition

To test the following:

- 1. Hypothesis:** Identifiable components of NR16020 survive on or near the edge of the reef north of the wreck of S.S. *Norwich City*.

Investigators: Dive Team

Methodology: Visual and metal detector examination of reef surface, reef edge, spur and groove features, and submerged areas down to a maximum depth of 60 feet.

- 2. Hypothesis:** Aluminum and other light-weight structures of NR16020 were washed through the main lagoon passage and survive on the lagoon floor.

Investigators: Dive Team

Methodology: Visual and metal detector examination of lagoon floor at and near the

base of the sandbar that marks the inner extremity of the main passage. Excavation of metal detector “hits” in deep silt will be accomplished with the aid of a suction dredge.

- 3. Hypothesis:** One or both of two erect coral slabs near the western beach are graves in which are interred bones said to have been found by the island’s early settlers.

Investigators: Grave Investigation Team supported by Archaeological Team.

Methodology: Clearing of surrounding vegetation and inspection of area for indications of alternative explanations for the presence of the slabs. If none are found, ask Kiribati government representative for permission to excavate. If granted, perform a controlled excavation to determine if remains are present.

If remains are found, determine whether there is sufficient reason to suspect that they may be Earhart's or Noonan's to seek permission to recover and export all or a portion for further research.

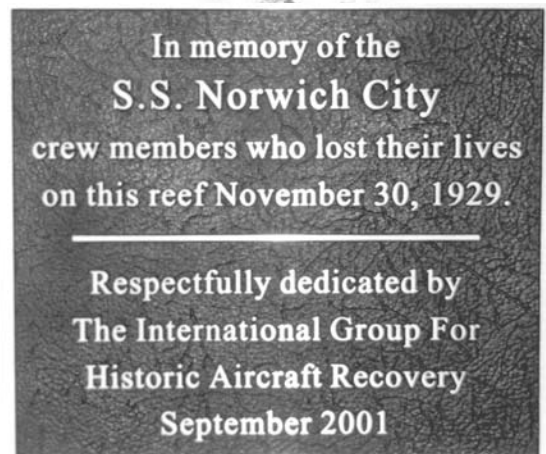
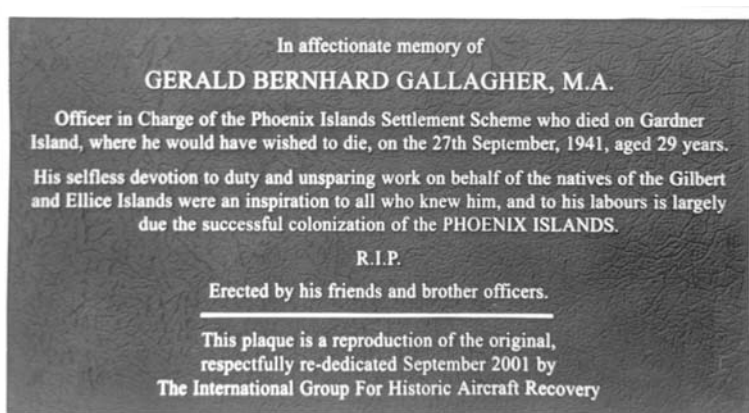
4. **Hypothesis:** The area near the southeast end of the island known to TIGHAR as the "Seven Site" is where the remains of a castaway were found in 1940.

Investigators: Archaeological Team supported by Grave Investigation Team.

Methodology: Clear and search the area for artifacts and human remains using visual, metal detector, and ultra violet light (bone glows under UV). If the Seven Site survey proves negative the search will shift to other possible sites.

Ancillary Objectives of the Expedition

1. Collect environmental data that will be useful in post-expedition research and analysis.
2. Install and dedicate a reproduction of the missing memorial plaque on the grave monument of Gerald B. Gallagher.
3. Install and dedicate a memorial plaque on the engine of S.S. *Norwich City*.



Communications During the Expedition

Expedition Leader Ric Gillespie will make a daily verbal report via satellite phone to TIGHAR President Pat Thrasher at TIGHAR's office in Wilmington, Delaware. Pat will compose a written synopsis which she will post on the TIGHAR website (www.tighar.org), and write up in *TIGHAR Tracks* for September. Location

descriptions in the reports will be keyed to alpha-numeric coordinates on a special poster-size (18x24 inches) grid map of Nikumaroro available only to TIGHAR members. The locations descriptions in the Schedule below refer to the grid map. Please use the order form on page eight to get your own copy.

Schedule

- August 24** TIGHAR Team travels from Los Angeles, California to Pago Pago. American Samoa. *Nai'a* is scheduled to arrive Pago Pago on or about this date to begin fueling and provisioning for the expedition.
- August 25** Last minute prep in American Samoa.
- August 26** Expedition departs Pago Pago for Nikumaroro.
- August 27**
- August 28**
- August 29**
- August 30** Expedition arrives Nikumaroro. Logistical preparations—moving launch into lagoon, building a trail from the landing (Sector WG21) to the lagoon shore base (Sector WI18), moving gear ashore, checking dive gear and procedures, etc.
- August 31**
- September 1** Archaeological Team assists Grave Investigation Team in clearing and
- September 2** evaluating putative grave sites (Sectors WD10 & WD7). Recon and logistical set-up at Seven Site (Sector EV29). Sea conditions permitting, Dive Team begins reef search (Sectors WB6, 7 & 8).
- September 3** Grave Investigation Team excavates features if warranted and approved.
- September 4** Archeological Team begins examination of Seven Site. Dive Team concludes reef inspection and begins lagoon search.
- September 5**
- September 6**
- September 7**
- September 8**
- September 9** Day off.
- September 10** Archeological Team continues survey of Seven Site assisted by Grave
- September 11** Investigation Team. Recon of other locations if negative results at Seven Site
- September 12** and possible shift of search activities. Dive Team continues lagoon search.
- September 13**
- September 14**
- September 15**
- September 16** Possible day off depending on how everyone is holding up.
- September 17** Wrap up of operations and preparations for departure.
- September 18**
- September 19**
- September 20**
- September 21** Expedition departs Nikumaroro.
- September 22**
- September 23**
- September 24** Expedition arrives Pago Pago. TIGHAR Team departs for Los Angeles. *Nai'a* departs for Fiji.
- September 25** TIGHAR Team arrives Los Angeles.

GUNSMOKE

In the weeks leading up to the expedition there has been a veritable feeding frenzy of media attention focused on TIGHAR, the Space Imaging satellite photo, and the possibility that the Earhart mystery may be about to be solved. That possibility, of course, is just as real as it has been prior to each of TIGHAR's previous five trips to the island. We couldn't do all we have to do to put together one of these expeditions if we didn't believe we have a shot at finding that elusive "smoking gun" that will be accepted as conclusive proof that the lost Earhart/Noonan flight ended at Nikumaroro. But, hope as we might for a dramatic discovery, we also recognize that it is far more likely that nothing of the sort will happen.

Archeology is a plodding science, once described in a memorable Calvin & Hobbes comic strip as "the most mind numbing job on the planet." TIGHAR's discoveries about the disappearance of Amelia Earhart and Fred Noonan—and there have been many—have not come in the form of Indiana Jones style partings of the bushes but in quiet moments of study and analysis.

"In the moment that the connection is made, in that synaptic spasm when the thought drives through the red fuse, is our keenest pleasure."

—Thomas Harris

We'll consider the expedition to be a success if we are able to gather the information needed to test the hypotheses we have formulated, regardless of whether the results ultimately prove to be positive or negative. We'll feel like we've done a good job if we can do that without hurting anyone. We'll consider ourselves extremely fortunate if we come back from this expedition with a few promising bits and pieces of this and that which, when subjected to further research and testing, move us a few more steps closer to the answer to what really happened out there. But, as always, we'll be hoping for that whiff of gunsmoke.

FAMOUS LAST WORDS

The "Treasure Map" article in the June issue of *TIGHAR Tracks* ended with an assurance that "...even if someone with lots of money and no ethics were convinced that we finally had the answer (to the whereabouts of the Earhart wreckage), it would be extremely difficult to get there ahead us." True enough, but what if a lowly ocean-going salvage tug just happened to be trying to recover a grounded fishing boat at McKean Island 60 miles away, and what if the captain saw our "Treasure Map" article (which is also posted on the TIGHAR website), and what if the captain read that comment and said to himself "We'll just see about that."

Captain Jürgen Ruh has neither a lot of money nor does he seem to be at all unethical, but he does enjoy a challenge and he is, after all, a salvager by trade. Having had no luck with the fishing boat at McKean Island he stopped by Nikumaroro on his way home and put three divers in the water for about 30 minutes along the reef edge north of the shipwreck. They didn't find anything but they did recover a piece of metal debris from up on the reef flat. Jürgen emailed a photo of the piece to us along with a description of what they had done, where they had looked, and what they had found and not found. We, of course, expressed our regret that he had chosen to interfere with an archaeological site and pointed out that, had he actually found and recovered aircraft wreckage, important information would unquestionably have been lost.

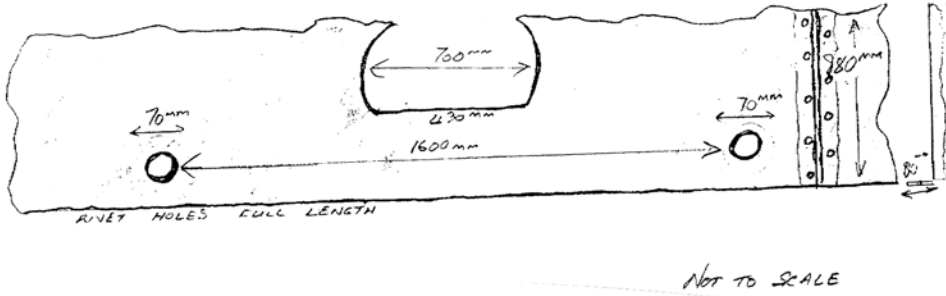
In the end, no harm was done. The recovered object is quite obviously a piece of shipwreck debris and Jürgen, having made his point, is hoping that we'll call on him should we ever need the capabilities of a salvage tug—but the incident does point up how complete the worldwide communications revolution has been and teaches us not to make assumptions about the remoteness of Nikumaroro.

Jürgen's fruitless underwater inspection of

the reef edge north of the shipwreck would seem to reduce the possibility that there is anything of interest present. On the other hand, he didn't find anything that explains the anomaly we see in the satellite photo and our search plan for the expedition remains unchanged. We may not find anything either, but we'll look harder than he did.

LOCKHEED ELECTRA PROBABILITY 41%
 NORWICH CITY PROBABILITY 99%

The piece of iron or steel debris recovered by the salvage tug is about 2.6 meters (8.5 feet) long and about .88 meters (2.8 feet) wide. It's probably a piece of topside bulwark plating from the S.S. Norwich City. It is certainly not aircraft wreckage. Sketch courtesy White, Young & Williams, Cairns, Australia.



Order Form For Grid Map

Full color, 18 x 24 inches, featuring the number/letter grid superimposed on the satellite photo taken by SpacelMaging. A deal at \$25 (add \$5 for airmail postage overseas), sent in a tube. Suitable for framing or the refrigerator door. All reports from the island will be keyed to this map, and published daily on TIGHAR's website. The reports will also be published for the entire membership as the primary subject of September's *TIGHAR Tracks*. Order yours today and don't miss a thing!



Name _____

Address _____

Daytime Telephone _____

Email _____

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Expiration Date _____

Check enclosed _____

**Send to: TIGHAR · 2812 Fawkes Dr · Wilmington, DE · 19808 · USA
 or fax a credit card order to (302) 994-7945**

FOREST FORTRESS



On June 24, 2001 twelve TIGHARs gathered at rustic Strawberry Lodge in the Sierra Nevada mountains near Lake Tahoe for an Introductory Course in Aviation Archaeology and Historic Preservation. In two days of classroom work under the tutelage of archaeologist Tim Smith (TIGHAR 1142CE), Craig Fuller of Aviation Archaeological Investigation & Research (TIGHAR 1589CE) and TIGHAR's Executive Director Ric Gillespie they earned their "C" certification and prepared to head into the mountains on an expedition to survey the remains of a rare Boeing B-17C Flying Fortress that broke up in mid-air during a storm in November 1941. Margot Still (TIGHAR 2332CE) prepared an excellent research summary on the loss and acquired an impressive collection of original photos from Boeing, some of which are reproduced here.



Craig Fuller of Aviation Archaeological Investigation & Research (www.aair.com) explains field techniques for finding and identifying historic aircraft wreck sites. TIGHAR photo by R. Gillespie



TIGHAR photo by R. Gillespie

Unlike the largely intact Douglas B-23 Dragon surveyed last year on the shores of Loon Lake, Idaho (see *TIGHAR Tracks* December 2000 and January 2001), the B-17 is scattered over several square miles of steep, forested terrain. The TIGHAR expedition team used handheld GPS units and the original Army Air Corps crash report and maps to locate several major components. As with many such sites, some pieces are missing.

The largest intact component of B-17C Air Corps No. 40-2047 is the center section with starboard outer wing panel which lies inverted near a creek bed. The port outer wing panel is on a hillside about a quarter mile away across the creek. The bomb bay is easily identifiable although the doors and shackles have been removed. The nacelle of Number 2 (port inboard) engine is evident in this photo.

The entire empennage (tail section of the airplane from the wing aft) lies on a steep hillside about half a mile from the center section. Although collapsed and torn apart from the impact, some distinct and extremely rare features of the B-17C are still very much identifiable. For example, the “bathtub” ventral gun position is crumpled but largely intact.



Photo courtesy Margot Still (TIGHAR 2332CE) and the Boeing Company.



Photo courtesy Margot Still (TIGHAR 2332CE) and the Boeing Company



TIGHAR photo by R. Gillespie

This relatively primitive system of belly defense would in later versions of the Flying Fortress be replaced by a pair of remotely-operated, periscopically-aimed guns and, ultimately, by the famous ball turret.

Also present and identifiable are waist gun positions which, in the B-17C, retained the teardrop shape, but not the convex blisters, of the B-17B. With the E series Fortress the waist positions became rectangular. The trademark narrow vertical fin was not present at the site but is reported to be at the Western Aerospace Museum in Oakland, California.



TIGHAR photo by R. Gillespie.

The expedition team did an outstanding job and those who had not previously participated in TIGHAR field work earned their “E” certification. As the subject of next year’s Aviation Archeology Course and Expedition—tentatively scheduled for October 2002—we’re hoping to identify an interesting and challenging crash site somewhere in the northeastern U.S.

The B-17C Team

Kneeling left to right: David Osgood, TIGHAR 2353CE; John Clauss TIGHAR 0142CE; Nancy Ballenger, TIGHAR 2315CE; Ric Gillespie, TIGHAR Exec. Dir.; Bill Moffet, TIGHAR 2156CE.

Standing left to right: Jerry Kobbeman, TIGHAR 0474SCE; Roger Kelly, TIGHAR 2112CE; Skeet Gifford, TIGHAR 0001CEB; Bill Banas, TIGHAR 22357CE; Ray Schweibert, TIGHAR 2163SCE; Tim Smith, TIGHAR1142CE, Megan Fisher, TIGHAR 2339CE; Fred Madio, TIGHAR 2042CE.

Not shown: Craig & Heidi Fuller, TIGHAR 1589CE; Margot Still, TIGHAR 2332CE.

