

TIGHAR TRACKS

A PUBLICATION OF THE INTERNATIONAL GROUP FOR HISTORIC AIRCRAFT RECOVERY





... that they might escape the teeth of time and
the hands of mistaken zeal.

— JOHN AUBREY
STONEHENGE MANUSCRIPTS
1660

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.

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COVER:

With muscle power and determination, TIGHAR volunteers recover an outer wing section of the P-47 “Beast of Bombay Hook” (see page 8).

TIGHAR Photo by P. Thrasher.

Written by Richard Gillespie & Patricia Thrasher.

Research by The members of TIGHAR.

Design by Patricia Thrasher.

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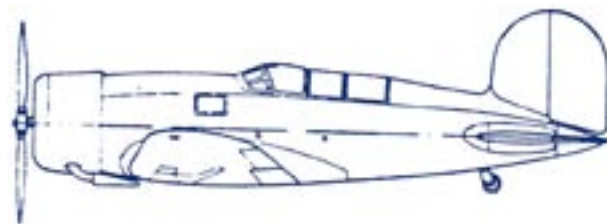
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Another Lockheed, Another Island

Nothing vanishes without a trace. Just as TIGHAR is pulling back the veil of mystery from the disappearance of the Earhart/Noonan and Nungesser/Coli flights, it now appears that yet another great aviation riddle is solvable.

In November, 1935 Sir Charles Kingsford-Smith – the incomparable “Smithy” – and his co-pilot J. Thomas Pethybridge were lost aboard the Lockheed Altair “Lady Southern Cross” during an England-to-Australia record attempt. Although Smithy is acknowledged as a giant of aviation’s Golden Age (his portrait is featured on the Australian \$20 bill), most histories are rather vague about his last flight, describing the disappearance as having occurred “somewhere in the Indian Ocean,” “over the Bay of Bengal,” or “after passing over Calcutta.” In truth, however, it is possible to be more specific about where the “Lady Southern Cross” went down – a whole lot more specific. New Zealand author Ian Mackersey, who is currently working on the definitive Kingsford-Smith biography, recently approached TIGHAR with evidence indicating that the remains of the aircraft, and conceivably those of its crew, might be discoverable and recoverable. Mackersey’s research is meticulous and the story is fascinating.

In the early hours of November 8, 1935, Smithy and Pethybridge disappeared between Rangoon and Singapore while running down the western coast of Burma over the Andaman Sea (not the Bay of Bengal, much less the Indian Ocean). Close along that shore, about 140 nm southeast of Rangoon, is Aye Island where, 18 months later, a landing gear leg and still-inflated tire washed up on the beach and was positively identified as being from the “Lady Southern Cross.” But the news of this remarkable discovery hit the papers on, of all days, July 9, 1937, and was overshadowed by the U.S. Navy’s frustrated efforts to find Amelia Earhart. Nonetheless, encouraged by the discovery, a friend of Smithy’s by the name of T.F. “Jack” Hod-



der went to Aye Island in January of 1938 and found additional bits and pieces of wreckage he was convinced were from the

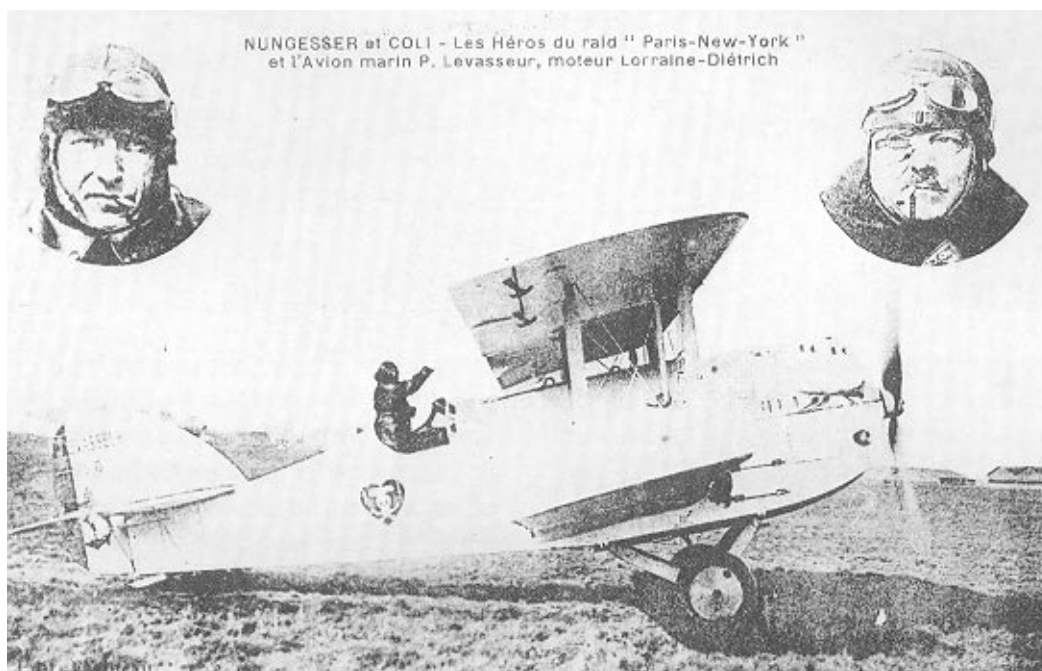
aircraft. He also noted a swath of broken tree tops on the island’s 480 ft. peak which indicated to him that the plane had struck the island in the dark and crashed into the relatively shallow water just off the southern shore. Meanwhile, analysis of the shellfish and marine growth on the landing gear by a professor of zoology at Rangoon University revealed that the structure had been “resting for some considerable time motionless in seawater of a depth not exceeding 15 fathoms on a muddy bottom.” The metal had broken in such a way as to suggest that the gear leg had failed from metal fatigue due to “working” in current or wave action only shortly before its discovery on the beach.

In March of 1983 an underfunded expedition by a small group of Australian enthusiasts (not associated with Mackersey) spent a difficult ten days at Aye Island. Their search was focused in an area that we would not consider to be the most likely and was rewarded only with the wreck of a fishing boat. The gear leg survives in a museum in Sydney, and Mackersey has arranged for a major aeronautical research laboratory to do further fracture analysis on it. He has also sent one of the aluminum pieces found by Hodder to Alcoa in Pittsburgh, Pennsylvania to determine its alloy.

To conclusively solve the Kingsford-Smith disappearance would take a professional effort by an experienced international aviation archeological organization. It would involve a major expedition requiring considerable funding (not to mention dealing with the dicey political and military situation in Burma, now known as Myanmar), and the fruits of the project would be archeological rather than “restorable.” Who but TIGHAR could do it? But before we can even think about spending time and resources trying to put such a project together, we need your input. Whaddya say, TIGHARs? Do we go after Smithy?



Project Midnight Ghost



*Although it might be mistaken for a cigarette ad, this "Carte Postale" celebrates the lost French heroes.
—From the TIGHAR Collection.*

People sometimes get a bit confused about TIGHAR's oldest (and, in many ways, favorite) project. We're often asked about our search for The Midnight Ghost, or The White Ghost, or sometimes it's The Gray Ghost (there was even one guy who asked about The Blue Goose). But there's no confusion about the project's almost mystical allure. We've come to call it "the curse" – the obsession with finding the answer to aviation history's greatest riddle. So if you're a new TIGHAR member, read on at your own peril. The rest of us have no choice.

Shortly after 05:00 on May 8, 1927, a large white biplane staggered aloft from Le Bourget Field outside Paris loaded with 3800 liters (1,004 U.S. gallons) of fuel. For the first time in history, an airplane capable of flying non-stop from Paris to New York had made a successful take-off with enough fuel to complete the flight and win the coveted \$25,000 Orteig Prize. The airplane, officially a Levasseur PL-8, but known to the French public as l'Oiseau Blanc (say Lwazo Blahnk or the White Bird), was a modification of a naval observation type. Powered by a single twelve-cylinder, liquid cooled Lorraine-Dietrich engine of 450 H.P.,

the aircraft featured landing gear that was jettisoned after takeoff and a sealed plywood hull to permit a water landing. The plan was to set the aircraft down in New York harbor beside the Statue of Liberty (a French gift to the United States) approximately forty hours after its departure from Paris.

At the controls was Charles Eugene Jules Marie Nungesser, the most highly decorated Allied pilot of the Great War, third highest scoring French ace (45 victories), the most sought-after airshow performer of the Roaring '20s and star of one of the first aviation films ("The Sky Raider," filmed on Long Island in 1925). Beside him in the cramped open cockpit was François Coli, decorated wartime escadrille commander, noted long distance record-setter and perhaps the finest aerial navigator of his day.

Physically, the two war heroes were what we would today call "challenged." Nungesser, 35, had literally crashed his way to fame. He had a complete set of gold teeth, a gold palate, a platinum wrist, a silver ankle, an aluminum plate in his head, and metal pins in most of his arm and leg bones. (If he were alive today he'd still have to fly the Atlantic himself. He'd never

make it through the airport metal detector.) His personal coat of arms – a black heart with death’s head, coffin and candles – was emblazoned on the White Bird’s fuselage. Coli had frozen his feet and lost his right eye during the war. His black monocle became a trademark (although he wore a more practical patch when flying).

The departure of Nungesser and Coli caught the other competitors for the Orteig Prize on the ground. In New York, Richard Byrd’s Fokker Trimotor “America” wasn’t yet ready and Charles Levine’s Bellanca WB1 “Columbia” was tied up in a dispute over who would be its pilot. Charles Lindbergh, for his part, was still in San Diego completing acceptance trials on his Ryan. When the news arrived that the French aviators had made a successful departure Slim abandoned his plans to fly the Atlantic and began considering a flight to Hawaii.

The day after it left Paris the French flight was reported seen at various points along the route to New York and a huge flotilla gathered in the harbor to welcome its arrival. But the White Bird never showed up and, one by one, the many sightings were explained away. As Lindbergh later wrote in his book *The Spirit of St. Louis*, “It’s May 9th. Step by step newspaper headlines have followed Nungesser and Coli ... only to have them vanish like midnight ghosts.” Resuming his original plan, Lindbergh flew to New York and, on May 20th, into history.

Human events commonly sweep in broad patterns but at other times they turn more abruptly, as if on a hinge, pivoting on a single pin. May 9, 1927 was one of those times. Had Nungesser and Coli arrived in New York, Lindbergh would not have flown the Atlantic and a whole generation of Americans would not have been fired by the example of the Lone Eagle. Without the headstart inspired by Lindbergh’s achievement, would the U.S. aviation industry have been capable of the phenomenal expansion called for at the outbreak of World War Two? And if not, what would have been the consequences?

In 1984, Project Midnight Ghost (named for Lindbergh’s characterization of the mystery) was launched to try to discover what really happened to the White Bird and, in 1985, the need

for volunteers to help in the search prompted the founding of TIGHAR. For seven years the investigation has sought, without success, to find physical evidence to confirm a large body of anecdotal accounts indicating that the White Bird crashed in the wilderness of coastal Maine. Now, as described in the last issue of *TIGHAR Tracks* (Vol. 8, No. 4, page 8, “New Focus”) the discovery of new evidence has shifted the search to the Avalon Peninsula of Newfoundland. It’s a change we make with great reluctance – not only because we would rather that the White Bird had made it further toward its goal, and not only because TIGHAR has poured thousands of both man-hours and dollars into research and field work in Maine, but also because, for so many TIGHAR members, our semi-annual trips to Washington County have become something of a tradition. After twenty expeditions the names of the places where we’ve searched and suffered, where we’ve felt the exhilaration of discovery and the pangs of disappointment, ring like the names of old battlefields – Third Hill, The Second Lake Country, Clark’s Hill. What veteran of a Project Midnight Ghost expedition will ever forget long evenings huddled over maps at Graham’s Restaurant in Machias, or frosty mornings rattling along the Eastern Ridge Road? And most of all, we miss the people – Amy, Sherman, Jim & Kathy, and the many others who have made Machias a second home for TIGHAR. The nostalgia is strong, but the work remains unfinished, the riddle unsolved. Ironically, it is the lessons we learned in Maine that have enabled us to push the investigation eastward another 600 miles to the foggy cliffs of Newfoundland. Whatever success we find there will be through the application of techniques pioneered in the Maine woods. And whatever happens, in October of 1994, we plan to hold a Project Midnight Ghost reunion in Machias to celebrate the tenth anniversary of the investigation from which TIGHAR was born. 🐾



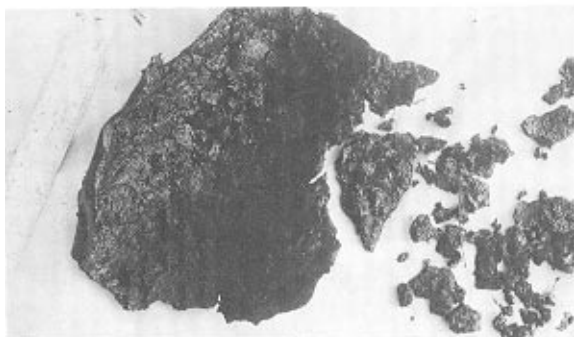
A Piece Of The Plane In The Pond

In late September 1992, at the Newfoundland Museum in St. John's, TIGHAR examined aircraft debris said to have been found at Gull Pond and suspected of being from l'Oiseau Blanc. Close inspection, however, revealed the structures to be of World War II vintage and the museum to be the victim of an apparent hoax. Nonetheless, research at the Newfoundland Archives and interviews with surviving witnesses lent further credence to the stories of "the plane in the pond," and it was decided that a survey of the pond was warranted.



Artifact 1-21-1, exterior

TIGHAR Photo by P. Thrasher.



Artifact 1-21-1, interior

TIGHAR Photo by P. Thrasher.

A month later we returned and on October 25, 1992, Project Midnight Ghost Expedition XXI recovered an artifact from Gull Pond. Its location, construction and advanced state of deterioration lead us to suspect that this, at last, may be the real thing. The team that made the discovery included Harlan Lanoue (#0074, diver), Paul Squires (#1391, metal detection), Patricia Thrasher (TIGHAR photographer), and was led by Richard Gillespie (TIGHAR Exec.Dir.). This was a Category III operation involving helicopter insertion and extraction, dry-suit diving, high winds, cold rain, a leaky tent and curious caribou (for a full account see PMG Bulletin #4).

For all that, the artifact isn't much to look at—a badly oxidized half-cylinder of ferrous metal roughly 15 cm x 5 cm with what appears to be remnants of bluish-gray paint on its exterior surface and what may be traces of oil on its interior surface. One end of the half-cylinder is slightly narrower than the other, is elliptical in shape, and has what seems to be a finished edge. The other end has a squared-off shape and its edge is bent and ragged. The entire piece gives the impression of having been violently separated from a larger structure. It was found under 30 cm of water completely buried in about

12 cm of silt and was quite solid when first found. Once removed from the anaerobic protection of the silt it began to deteriorate, and before we could get it to a stable environment portions of the piece had fallen apart. The only other objects found at or in Gull Pond were quite obviously trash left by ice fishermen who began using the pond in the early 1970s with the advent of snowmobiles and ATVs.

In accordance with Canadian law, the artifact (TIGHAR Artifact #1-21-1) was turned over to the Newfoundland Museum in St. John's for safekeeping and conservation pending ministerial permission for TIGHAR to export it to the U.S. for analytical testing. Meanwhile, speculation as to the artifact's identity is focusing on the White Bird's oil tank, visible immediately behind the engine in the photo below. The hypothesis that 1-21-1 may be a section from the bottom of the tank is supported by the artifact's size and shape, and by the oily residue noted on its interior surface. Of further interest is the reported discovery in 1971, in virtually the same spot, of the badly corroded remains of a metal strap and tightening screw device of the type typically used to secure tanks in aircraft. Such a strap is visible in the photo. But was the White Bird's oil tank made of aluminum or steel? Was it painted and, if so, what color and what kind of paint?

Our ability to pursue this lead is a function of the time we can afford to dedicate to the project and that, of course, is a question of funding. The pace at which further research and field work can proceed depends on you, the members of TIGHAR. If you haven't subscribed already, the Project Midnight Ghost Bulletins (\$25) are an excellent way to show your support and, at the same time, keep current on the latest research results. Or, if you'd like to make a special gift to TIGHAR earmarked for Project Midnight Ghost, please contact Executive Director Richard Gillespie to discuss the investigation's specific needs.



L'Oiseau Blanc under construction.

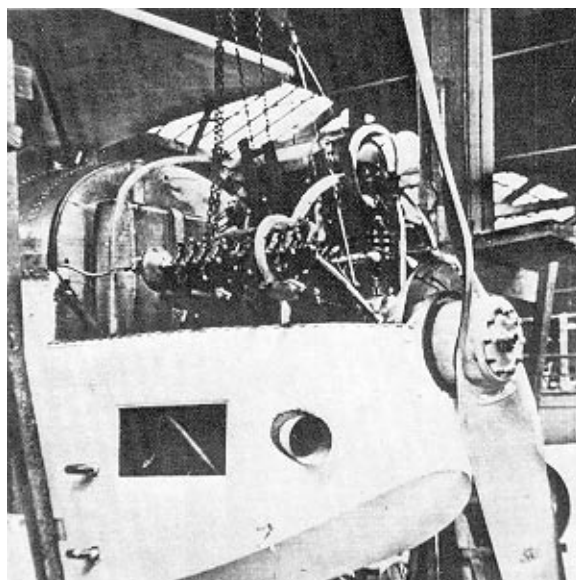
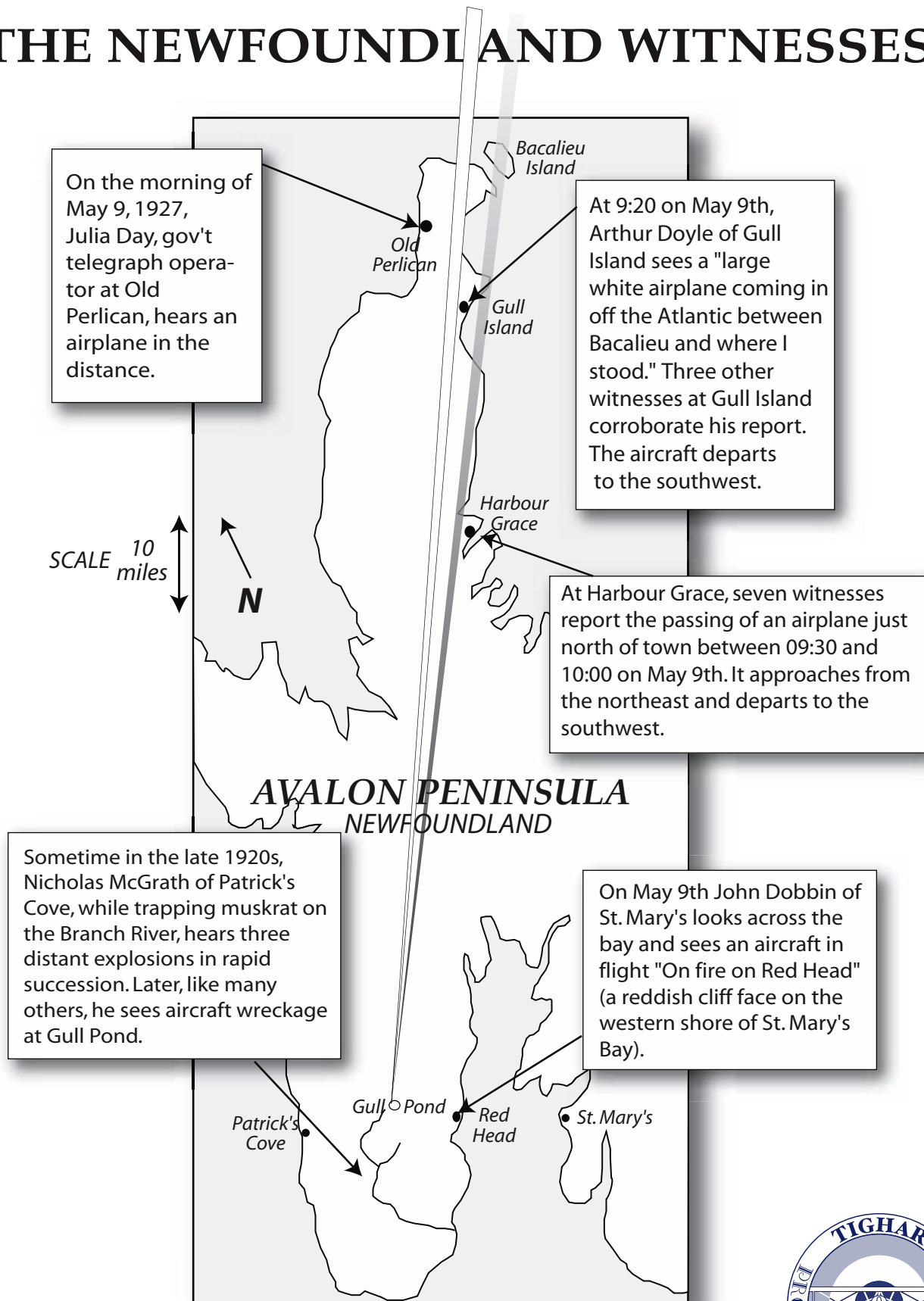


Photo courtesy Musée de l'Air.

THE NEWFOUNDLAND WITNESSES



The Beast of Bombay Hook

OUTER WING SECTION RECOVERY

DECEMBER 4 – 11, 1992

In April of 1992 a TIGHAR team found and evaluated the remains of a Republic P-47 Thunderbolt on the Bombay Hook National Wildlife Refuge near Dover Air Force Base, Delaware (see *TIGHAR Tracks*, Vol. 8, No. 3). Dubbed the Beast of Bombay Hook, the fighter is the only existing example of an aircraft known to have served at Dover Army Airfield during World War Two. Only the wings and center section survive relatively intact, buried in the mud of the salt marsh. Over seven cold and dirty days in early December, nine dedicated TIGHAR volunteers began the recovery process with the excavation, removal, cleaning and cataloguing of the port outer wing section as a service to the Dover Air Force Base Museum. The recovery will resume in April 1993.



TIGHAR Photo by R. Gillespie.

The first task was to remove approximately a ton of near-freezing mud from around and under the wing.

Every cavity was found to be packed with mud which had to be blasted out with a pressure washer before the badly corroded structure could support its own weight.



TIGHAR Photo by P. Thrasher.



TIGHAR Photo by P. Thrasher.

Back at the Dover AFB Museum, the wing section was further cleaned and flushed with fresh water.



TIGHAR Photo by P. Thrasher.

The team: L to R, back row: Vern Wiese (#0728CE), Donna Franz (#1245CE), Van Hunn (#1459CE), Doug Shriner (#1487CE), Jim Leech (Curator, Dover AFB Museum), Rob Roth (#1498CE). L to R, front row: Kent Spading (#1382CE), Ric Gillespie (Exec. Dir. TIGHAR), Holly Hays (#1385CE), Russ Lowe (#1436E). Not shown: Costa Chalas (#1245C).

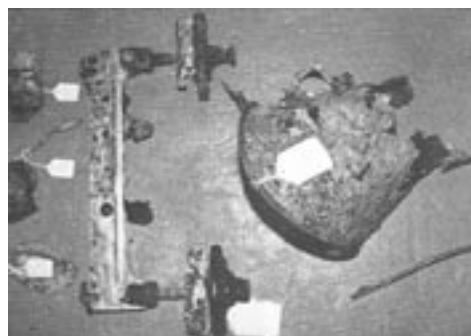
TIGHAR Photo by P. Thrasher.

After separating the structure just inboard of the gun bay (the wing tip was missing) the outer wing panel was shifted free.



TIGHAR Photo by P. Thrasher.

Once removed from the pit (see cover photo) the wing section, weighing an estimated 500 lbs, was carried overland to where it could be loaded aboard a boat. The site of the dig is on an island inaccessible to heavy equipment and all work must be done by hand.



TIGHAR Photo by P. Thrasher.

In addition to the wing section, 123 separate structures and fragments were individually cleaned, tagged and catalogued. Shown here are components of the underwing weapons pylon.





The Plan For Niku III

The departure of TIGHAR's third expedition to Nikumaroro has been set for September 1, 1993. The longest and best-equipped Earhart Project field operation yet, Niku III will spend a full month working both on land and underwater to capitalize on TIGHAR's 1991 discoveries and put together the remaining pieces of the Earhart puzzle.

Fortunately, new developments in the Phoenix Islands mean that bigger and better does not mean more expensive. A Seattle Washington-based company has concluded an agreement with the government of Kiribati to permanently station a research vessel at Canton Island (200 nautical miles northeast of Nikumaroro) where the old U.S. Army/Pan American airfield is being renovated to accept regular jet service from Hawaii. The ability to fly the team to within a one day voyage of Niku (as opposed to nine days each way from Honolulu in 1991) will make for a far more economical and efficient operation than has ever before been possible. As part of a complete rebuild, the ship is being outfitted with a 3-D Phase Array sonar for underwater searching and a sonar-cable winch with a capacity of 10,000 meters. For checking out suspicious targets she'll deploy a Remote Operated Vehicle and hold precise position with bow and stern thrusters. The ship's owners and marine architect have solicited TIGHAR's advice on how best to outfit the vessel for research support in the central Pacific environment (after all, we're sort of experts on the subject by now) and we, of course, welcome the opportunity. Negotiations for TIGHAR's charter of the vessel should be completed soon. She's to be called *Resolution* (we couldn't have thought of a better name).

At Niku, the onshore search operations will focus on three specific areas:

1. The site on the northern shoreline where unexplained structures have been identified in early photographs (see *TIGHAR Tracks*, Vol. 8, No. 4).
2. The inland area on the southern shore where shoe fragments and other personal effects were found in 1991.

3. The western beachfront where aircraft wreckage was found in 1991.

An undersea sonar/ROV search for aircraft wreckage, far more focused and detailed than was possible in 1991, will be coordinated with the on-shore operations to maximize the chances of finding a conclusively identifiable piece of the aircraft.

Although departure isn't until September, the long journey back to Nikumaroro begins now. We have the evidence. We have the expertise. But just as in 1989 and 1991, this expedition will only happen if all of us want it to badly enough. Do your part. Buy a patch or pin (\$8.50 donation), subscribe to the Earhart Project Bulletins (\$25 donation), get a videotape of the two-hour documentary *The Search For Amelia Earhart* (\$50 donation), order a copy of the soon-to-be-published Seventh Edition of the Earhart Project book (\$100 donation or get the Project Book/Companion set for \$135), get the hand-carved mahogany Electra model (\$250 donation or \$1,000 for the individualized limited edition) or just send a check. It's here, not out there, that the battle is won.



TIGHAR is proud to announce the selection of the expedition team for Niku III. The need to choose a small group from among so many good people is always the second-most difficult part of preparing an Earhart Project expedition (only the fund-raising is tougher). The qualification process is rigorous and everyone who earned an "E" (Expedition-qualified) suffix for their membership number deserves to go. But, as always, selections were made with one consideration only in mind – to assemble the team best able to do the work.

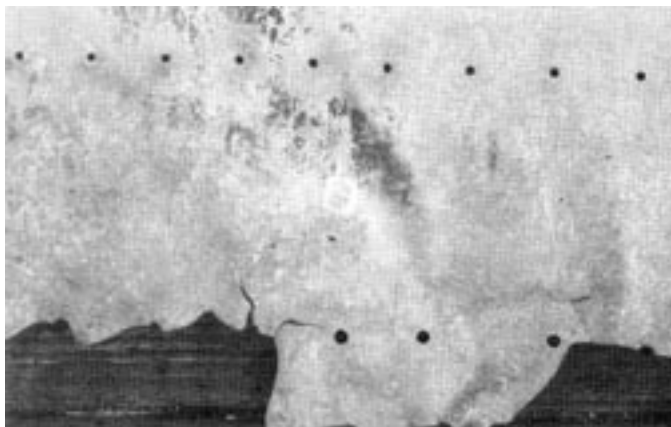
John Clauss, TIGHAR #0142CE
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 Richard Gillespie, Executive Director
 Van Hunn, TIGHAR #1459CE
 Leroy Knoll, TIGHAR #0750CEL
 Dr. Tommy Love, TIGHAR #0457CE
 Russell Matthews, TIGHAR #0509CE
 Gary Quigg, TIGHAR #1025CE
 Douglas Shriner, TIGHAR #1487CE
 Kenton Spading, TIGHAR #1382CE
 Kristin Tague, TIGHAR #0905CE
 Patricia Thrasher, President



Matching The Markings

Of the many points of evidence which link artifacts found on Nikumaroro with the Earhart aircraft, none is more intriguing than the remnants of manufacturer's markings seen on Artifact 2-2-V-1, the section of aircraft skin discovered on the island's western beach. Although the unique pattern of its rivet holes has been the subject of heated debate (see *TIGHAR Tracks* Vol. 8, No. 3, "Through The Flak"), the discernible traces of two letters etched into the skin's exterior surface are an equally important subject of investigation.

Faintly visible, but undeniably present, are the letters "A" and "D," each measuring $\frac{1}{2}$ inch in height and spaced roughly a third of that distance apart. The letters are set on a line which runs at an angle of 8° to that of the rivet holes, and are rendered in a distinctive sans serif type style. The left-hand leg of the A is noticeably skinnier than the right and the crossbar is set relatively low on the legs. The arc of the D is relatively thick but tapers to join the vertical shaft. Both letters are canted very slightly to the right.



The "D" etched into Artifact 2-2-V-1 is apparent in this photo. The "A" to its left is much fainter.

With the help of Alcoa Aluminum in Pittsburgh, Pennsylvania, we were able to confirm that the letters are remnants of the product labeling stamped onto the metal with red ink at the time of manufacture. As the ink wore away it caused a differential in the degree of corrosion in this particular spot resulting in the preservation of the letters' shape. Why

this etching effect occurred here and nowhere else on the artifact is unknown. Although it wasn't much to go on, we reasoned that if we could match the size and style of the letters with labeling surviving on other aircraft we might be able to complete the picture.

An exhaustive search of aircraft of World War Two and earlier vintage produced only three examples of aluminum bearing these exact markings:

1. Lockheed 10A, cn 1052, delivered February 19, 1936 (Earhart's was Lockheed 10E, cn 1055, delivered July 24, 1936). Matching labeling was found on the interior surface of a flap actuator cover.



Labeling on flap actuator cover, Lockheed Electra cn 1052.

2. Lockheed 10A, cn 1015, delivered March 7, 1935 (later converted to 10E). Matching labeling was found on fuselage panels reskinned when the cabin windows' shape was changed from rounded edge to square edge. Why or when the change was made is unknown but, interestingly, the modification involved the omission of stiffeners and corresponding tightening of rivet pattern which some have claimed couldn't happen on Electras.

3. Douglas C-47A, s/n 92841, delivered in April 1944. Matching labeling was found on skin used to patch a small area on the port side of the nose (above and beside the pilot's rudder pedals). When or where the repair was done is unknown.

In all three cases, the entire sequence of labeling reads:

ALCOA REG.
T.M. **.032"**
ALCLAD 24 S – T 3 AN – A – 13

Translated, this means that the aluminum was manufactured by the Aluminum Company of America whose registered trademark is “Alcoa.” It is thirty-two thousands of an inch thick and made of a high strength alloy called 24S (today known as 2024) which



Labeling on fuselage modifications, Lockheed Electra cn 1015.

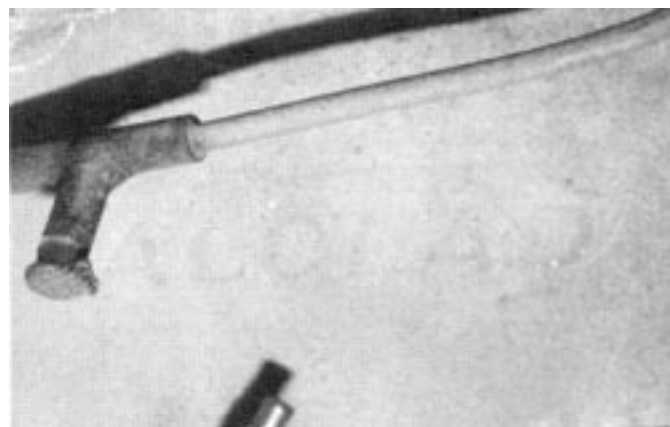
has been heat tempered to the T3 standard, and sandwiched between thin layers of pure aluminum in a corrosion-protective process known as Alcladding. That happens to be an exact description of Artifact 2-2-V-1 and the conclusion appears justified that the letters visible on the artifact are the last two in the word “ALCLAD” in a sequence identical to that shown above. The “AN-A-13” is a specification designator which predates the “QQA” standards which were in place by 1941. Its precise significance has not yet been determined.

During World War II, each of the three Alcoa plants which produced aluminum sheet for aircraft (Pittsburgh, Pennsylvania; Edgewater, New Jersey; and New Kensington, Kentucky) labeled their product with a different type style for the purpose of identification. Although research is still underway, no match has yet been found between a type style used during World War Two and the style found on the two Electras, the C-47 patch, and Artifact 2-2-V-1. Adding to the likelihood that the aluminum found on Niku-

maroro was produced prior to the war is the fact that the labeling was applied at an angle to the grain of the metal – a clear indication of hand-stamping which was replaced by automatically rolled-on labeling when aluminum production skyrocketed in 1939/40. Also, pre-war stocks of aluminum were quickly exhausted when production boomed and, according to Alcoa, the chance that a World War II aircraft would be built of 1930s aluminum is remote.

If we were to construct a hypothesis explaining the origin of the piece of aluminum found on Nikumaroro based solely upon what we’ve learned about the manufacturer’s labeling it would go something like this:

Sometime in 1935 Alcoa produced a run of .032” Alclad sheet labeled in the manner described. Some of it was delivered to Lockheed Aircraft Corporation where it was used over a period of about two years to build components for new Electras and to perform modifications and repairs on customers’ aircraft. At least some aluminum from that same run found application for repair purposes well into World War II.



Labeling on small repair patch, Douglas C-47A s/n 92841.

Obviously, if aluminum markings like this can be on a World War II C-47 repair the aluminum skin found on Nikumaroro could also be from a World War II repair – except that we can’t resolve the combination of skin dimensions, rivet size, and stringer taper with any aircraft type which served in the Pacific. However, all of those features match the repairs performed on Lockheed 10E, cn 1055, in May 1937.



April 30, 1993 – The Dawn Of Reason?

The United States Naval Institute has invited TIGHAR to present its evidence concerning the fate of Amelia Earhart before a distinguished panel at the Institute's annual spring conference in Annapolis, Maryland on April 30, 1993. The general public, and TIGHAR members in particular, are invited to attend this three-hour session to be held in the institute's 900 seat auditorium. For the first time, the results of four years, two expeditions and nearly a million dollars of investigation will be reviewed and critiqued, not by buffs and the media, but by scholars familiar with the principles of sound historical investigation.

Panelists are expected to include: Dr. Tom Crouch, Chairman of Aeronautics at the National Air & Space Museum; Rear Admiral



Francis D. Foley, USN(Ret.), who participated in the 1937 Earhart search as a pilot aboard the U.S.S. *Lexington*; Hiroshi Nakajima, Executive Director of The Pacific Society; and Prof. Mark R. Peattie, of Harvard University's Reischauer

Institute of Japanese Studies, and author of several works on modern Pacific history. Presenting TIGHAR's findings will be the foundation's Executive Director, Richard E. Gillespie. The February 1993 issue of the Naval Institute's highly respected journal *Proceedings* will feature an article by Gillespie entitled "An Answering Wave – Why The U.S. Navy Didn't Find Amelia Earhart."

Watch for more details about this historic event in a special mailing coming soon to TIGHAR members.



Going Dutch

The Military Aviation Museum (Militaire Luchtvaart Museum) of the Royal Netherlands Air Force in Soesterberg, The Netherlands, has invited TIGHAR to offer an expanded version of the Introductory Course In Aviation Archeology at the museum. June 11th – 14th (Friday through Monday), 1993 have been set as the dates for this first European offering of TIGHAR's popular seminar which is expected to include participation in the recovery of a P-51 Mustang by the famous aviation archeological team of the Royal Netherlands Air Force.

TIGHAR has always enjoyed a philosophical kinship with the Militaire Luchtvaart Museum, in part because of its pioneering policies regarding artifact conservation and interpretation, and also because the Dutch still have the only national government which routinely sponsors sound aviation archeological investigation and recovery.



In Soesterberg, a special team has been formed to organize logistical arrangements for the course and we anticipate being able to offer very attractive travel and accommodation packages to North American TIGHAR members who wish to participate in what promises to be a landmark international educational experience (and who can resist Holland in June?).

Pricing information will be available soon. Mark your calendar and watch for a special mailing. For those North American TIGHARs who'd like to take the course a little closer to home, we'll be at The Museum Of Flight in Seattle, Washington on January 30 & 31, 1993; The New England Air Museum in Hartford, Connecticut on February 27 & 28; and in Dayton, Ohio, home of the United States Air Force Museum, on May 15 & 16.



Backfire

"Blessed are ye, when men shall revile you, and persecute you, and shall say all manner of evil against you falsely..."

Matthew 5:11

Of the extensive media attention that TIGHAR received in 1992, most was favorable, some was skeptical, and a little bit was downright nasty. *Air Classics* magazine, an aviation nostalgia monthly with an editorial stance somewhere to the right of Herman Goering, conducted a particularly bitter anti-TIGHAR campaign which many TIGHAR members have followed with reactions ranging from outrage to amusement. For those who missed the show, here's a brief recap.

War was declared in the magazine's February '92 issue with the publication of a letter to the editor written by an aircraft rebuilder who, although his total contact with TIGHAR consisted of one phone call in 1985, had decided that the organization and its executive director were a threat to western civilization. Once TIGHAR's Earhart findings became public in March, he was joined by a chorus of conspiracy buffs who accused Gillespie of everything short of being the gunman on the grassy knoll. By August, the editor couldn't stand to let the letter writers have all the fun and so joined in with an

article of his own (a monument to journalistic innaccuracy) debunking TIGHAR's conclusions. Throughout the entire year, not once did anyone from *Air Classics* contact TIGHAR to get the facts straight.

In all, ten attacks on TIGHAR totaling some 135 column inches (that's about eleven feet of text) have appeared in six of the last twelve issues of *Air Classics*. A total of 63 column inches appearing in four issues have been allotted to rebuttals by Gillespie and other TIGHARs. As to the effectiveness of the magazine's assault, not one TIGHAR member has left the organization and several people have joined as a direct result of the *Air Classics* attacks. New members in 1992 totalled well over 200, making it one of our best years ever, and renewals continue to run at an excellent 82%. Perhaps most significantly, the percentage of people inquiring about TIGHAR who actually join the organization has increased from 17% in February 1992 to 27% in December '92.

In fact, the *Air Classics* campaign against TIGHAR has backfired so badly that some have wondered if it might be a put-up job. But if the folks at the magazine are really TIGHAR supporters they've kept it a close secret. Whatever their motivations, we'd like to thank them and wish them a Happy New Year.



Borrowing a proven mnemonic device from a recently successful political campaign, TIGHAR's executive director has hung a sign above his desk with the inscription

MEMBERSHIP, STUPID

as a reminder that TIGHAR's perennial funding shortfalls have one simple and obvious solution. There is no reason on Earth why this organization should not have a worldwide strength of 25,000 people. When you consider what we've accomplished with under a thousand, imagine what we could do with a membership like that.

This year we're launching a three-pronged drive for new members:

1. For the first time we're advertising regularly in Smithsonian *Air & Space* magazine. The ad, which has now appeared in two issues, is bringing in a steady stream of new members each month.
2. Early this year, a direct mail solicitation for new members will go out to 15,000 *Air & Space* subscribers. If the mailing is a success we'll expand the program.
3. Included with this issue of *TIGHAR Tracks* is the new TIGHAR brochure. We think you'll agree that it does all of us proud and can be a first-class recruiting tool, but the brochures won't do any good at all sitting in boxes in Wilmington, Delaware. That's where you come in. Also included with this *TIGHAR Tracks* is a response card for you to tell us how many brochures you'd like us to send you for distribution at your local museum, airport, and anywhere you think latent TIGHARs may lurk. The brochures are free but we do ask that you help out with the shipping costs if you order large amounts. Of course, you'll want to always ask permission before leaving stacks of TIGHAR literature around, and passing out brochures in the passenger concourses of international airports is probably a bit excessive. But there are thousands of people out there who will be eager to join us if we just give them the chance. Go get 'em TIGHAR!



Problems and Progress in Pensacola

The first in a series of concise critiques of some of the world's leading air museums.

The National Museum of Naval Aviation in Pensacola, Florida presents a classic illustration of the changes and challenges facing today's air museums. Like all museums, aviation or otherwise, it is torn between the duty to conserve the artifacts in its collection and the need to employ those same artifacts to advance its own agenda – in this case the memorializing of U.S. naval aviation. And, like most museums, it must dance upon the horns of this preservation-versus-interpretation dilemma with inadequate staffing, funding and education. In the Navy's case, there are a number of notable successes as well as some dismal failures.

PRESERVATION

Happily, recent building additions have brought much of the collection inside and plans are in place for further expansion. While most of the aircraft on the museum floor exhibit the like-new appearance of airplanes that have been turned into replicas of themselves for the sake of cosmetics, a new forward-thinking exhibit is taking shape which will display a Grumman Wildcat and a Douglas Dauntless preserved in the condition in which they were found on the bottom of Lake Michigan. Meanwhile, scattered about the back lot, a number of large aircraft, including last examples of historic types and some individually important airplanes, corrode in the damp salt air and blistering sun. Crazy canopies cloud with condensation as water drips steadily from open inspection



TIGHAR Photo by P. Thrasher

In 1946, P2V-1 Neptune "The Truculent Turtle" flew non-stop 11,236 miles from Perth, Australia to Columbus, Ohio setting an unrefueled record for piston aircraft that stood until the "Voyager" round-the-world flight. Today, with "XP2V-1" erroneously painted on its tail, corrosion devouring its structure and the original nose art flaking away, "The Turtle" rots in the Florida sun.

plates onto flat, rotted tires. It is impossible to preserve an airplane outdoors, but until covered space can be found, simple and economical measures such as canopy shading and dehumidifying can greatly diminish deterioration. The neglect of these aircraft is a disgrace.

INTERPRETATION

Inside the museum, aircraft are grouped by historical period and, where space permits, other artifacts and mannequins are used to create scenes that go beyond the traditional technique known at TIGHAR as P⁴ (Park Plane, Post Placard). The historical groups, however, seem to be scattered about in random fashion and, because everything looks new, the visitor gets no sense of chronological development. Of course, there are the inevitable bogus names painted under cockpits (is there, somewhere in the world, a TBM without George Bush's name on it?), and the placards tend to omit information about the particular machine on display, but otherwise the building presents the impressive hardware of naval aviation in a spacious and attractive setting. Admission at the National Museum of Naval Aviation is free because the aircraft are owned by the U.S. taxpayer.

TIGHAR members are encouraged to visit air museums whenever the opportunity arises, not just to stand and gawk, but to take a critical interest in how well the aircraft are preserved and presented. We hope you'll support sound aviation historic preservation with your praise and with your dollars, and voice your displeasure where you see misrepresentation, theme-park mentality, and neglect. An informed and discerning public is the most important factor in improving museum performance.



TIGHAR Photo by P. Thrasher

The placard in front of this gleaming machine describes how a Sopwith Camel was launched from the battleship U.S.S. Texas in 1919. Is this that aircraft (somehow retrieved from a time-warp)? Is it some other Camel rebuilt to look like that aircraft? Or is it a replica? The placard doesn't say.

The Cardiff Lightning

In the September 15, 1992 *TIGHAR Tracks* (Vol. 8, No. 4) we congratulated the Greenland Expedition Society on their recovery of a P-38 from the depths of the icecap and, while regretting that the airplane would be rebuilt rather than preserved, we emphasized that “TIGHAR does not for one moment suggest that those who gave so much of their time and money to have a P-38 to fly (or to sell) should be cheated out of the fulfillment of their dream.” The best hope that at least one of the aircraft still under the ice might yet be saved seemed to be a provision in the original contract with the Danish government which stipulated that “The first aesthetically complete P-38 Lightning aircraft shall be donated to the Danish Aviation Museum” Sadly, we must now report that it doesn’t look like that is going to happen.

In a December 2, 1992 telephone conversation with TIGHAR’s Richard Gillespie, Greenland Expedition Society executive Patrick Epps said that the requirement for an aircraft to go to Denmark had been deleted from the contract in 1991 after the Danes were told that the terms of the original agreement “were just economically impossible to fulfill.” Epps described the wording of the current document as “amibiguous” but said that his for-profit organization was going to “put together a museum display” for the Danes which would “include some artifacts.” Epps expressed the opinion that if more of the aircraft are ever to be recovered, the first would have to be rebuilt and flown to generate publicity, enthusiasm and, of course, money. To that end, the Greenland Lightning is currently being rebuilt in Millersburg, Kentucky. If all goes as planned, the result will fly at Oshkosh in 1994. It is more than a little bit ironic that in the same year the Alpine Ice Man is being meticulously studied as an historical specimen, we in the aviation world can only see an aircraft frozen in time as something to be stripped, gutted and rebuilt as an airshow performer.

But it’s pointless and unfair to fault the Greenland Expedition Society for the airplane’s

destruction. Epps and his backers have never pretended that they put two million dollars (plus another estimated \$500,000 for the rebuild) into this project for the love of Lightnings. They want their money back – and then some. A completely rebuilt and airworthy P-38 has sold for as much as \$1.5 million. An aircraft billed as a flying survivor of the famous Lost Squadron might just bring twice that. But as a time capsule and museum display? Forget it.

And that’s the point. If the Ice Man’s only perceived value was as an awe-inspiring exhibit that reminded us of our past, he would soon be spruced up and shown on the carnival circuit (ever hear of the Cardiff Giant?). But paleo-anthropology has made a few strides since the 1860s, and perhaps the Lightning that flies at Oshkosh in ’94 can serve as a reminder of how far aviation historic preservation has to go to catch up.



BLUE SIDE UP

THE FAR SIDE

By GARY LARSON



"Well, this isn't very promising."

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CALENDAR OF EVENTS

January 30 & 31, 1993 — Introductory Course in Aviation Archeology, Museum of Flight, Seattle, Washington.

January 30, 1993 — Program given by Richard Gillespie, "Finding Amelia," Museum of Flight, Seattle, Washington.

February 27 & 28, 1993 — Introductory Course in Aviation Archeology, New England Air Museum, Hartford, Connecticut.

February 27, 1993 — New England Regional Gathering, Hartford, Connecticut. Details to be announced.

Early – Mid-April, 1992 — Beast of Bombay Hook field work, Dover, Delaware. Level I expedition. Exact dates to be announced.

April 30, 1992 — U.S. Naval Institute Annual Meeting & Seminar, Annapolis, Maryland (see p. 12).

May 15 & 16, 1993 — Introductory Course in Aviation Archeology, USAF Museum, Dayton, Ohio.

June 14 – 16, 1993 — Introductory Course in Aviation Archeology and Historic Preservation Symposium, Royal Netherlands Air Force Museum, Soesterburg, The Netherlands.

September 1, 1993 — Niku III, Earhart Project Expedition departs San Francisco. Level III expedition.



MEMBERSHIP FORM

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

☐

\$35 for a one year membership
\$25 for full-time students

☐

\$60 for a two year membership

☐

\$125 for a five year membership

☐

\$1,000 for a corporate membership

Please send me —

TIGHAR Tracks four times a year

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Please return this form with your membership dues to TIGHAR, 2812 Fawkes Drive, Wilmington, DE 19808 USA; Telephone (302) 994-4410, 9 a.m. to 5 p.m. EST/EDT, M-F; Fax (302) 994-7945. ALL DONATIONS TAX-DEDUCTIBLE IN THE UNITED STATES WITHIN THE LIMITS OF THE LAW. Personal checks may be drawn in U.S., Canadian, or European Community funds.

