



# BOOKCASE UPDATE



Although the photo of “our” bookcase in Earhart’s airplane has yet to surface, a great deal of other information has come out as a result of the search. The appeal for research help in the last issue of *TIGHAR Tracks* (see *The Grail*, Vol. 6, No. 3) brought a flood of excellent work by TIGHAR members all over the U.S. and, so far, everything we learn seems to bring Artifact 2-1 closer to being the long-sought proof that we have the answer to the Earhart riddle. Even some of those who espouse other theories have uncovered information which strengthens TIGHAR’s hypothesis while trying to disprove it.

## Where did the books come from?

Elgen Long is a retired airline captain who has spent many years researching the Earhart disappearance. He believes the airplane ran out of fuel and ditched at sea northwest of Howland. Although we disagree with his conclusions, we respect the tremendous amount of information he has gathered over the years and have always enjoyed a friendly and open relationship with Captain Long in the belief that honest peer-review is a cornerstone of sound research. In that spirit we sent him a copy of the project book and asked for his comments and criticisms. He reviewed his several hundred photos of the Electra in an attempt to either confirm or deny our suspicions that the bookcase came from NR16020, but what he came up with was both frustrating and fascinating. He was unable to find photographic coverage of two important areas within the airplane, either of which would be logical locations for a navigator’s bookcase. Neither was he able to find, in the remainder of the airplane, any means for stowing a navigator’s books. Among his files was a copy of an inventory of the contents of the Electra made on March 20, 1937. That was the day Amelia wrecked the airplane in Hawaii on the first ’round-the-world attempt and then turned it over to the military for preparation for shipment home for repairs. In the process, a very detailed inventory of all contents of the airplane not affixed to the airframe was made. That inventory clearly lists the navigator’s reference books but, unlike all other instances where bags, boxes or containers are listed along with their contents, no means of stowing or carrying the books is listed. We must conclude, therefore, that whatever the books were in remained in the aircraft as an installed component. Whatever they were in does

not show up in Elgen Long’s photos and so must be in one of the two areas as yet not seen in any photo.

## Bo Doesn’t Know

Memories are not nearly as good as photographs, but when we learned that Earhart’s mechanic, “Bo” McKneeley, was still alive it seemed worth a try to see if he remembered how the navigator’s station was set up. The only address we had for him was in Houston and that proved to be no longer good, but the TIGHAR network once more came to the rescue. One call to Houston member Rick Siciliano (TIGHAR #247) and some on-site investigation resulted in a current address for McKneeley in no time. Unfortunately, after all that, Bo McKneeley just doesn’t remember any more and, of course, we’d much rather have someone say they don’t remember than have him remember poorly.

## Fuzz Does

Francis O. “Fuzz” Furman remembers a great deal about the time he spent with AE and Fred in Java while they were having some repairs made to the airplane. Fuzz was the representative of the Martin Company servicing the new B-10 bombers used by the Netherlands East Indies Air Force. He spent five days with Earhart and Noonan while mechanics fixed a broken exhaust gas analyser on the Electra. He remembers that AE kept to herself, took her meals in her room, and frequently called her husband, George Putnam, on the telephone. Furman spent most of his time with Fred Noonan, who he remembers as being quite concerned about the upcoming Howland leg. But far from hitting the bottle as some have

|    |      |  |
|----|------|--|
| 8  | Ea.  | 1 Qt. Sealright containers                           |
| 2  | "    | Canteens, type 4 N                                   |
| 1  | "    | Ditto 6 N  |
| 1  | Bdl. | Containing: 4 Prop. Blade Covers and 2 engine covers |
| 1  | Pkg. | Kleenex  |
| *1 | Ea.  | Funnel with chamois strainer                         |
| 1  | Pkg. | Air Bottles for life jackets                         |
| 1  | Ea.  | Fuel tank gauges                                     |
| 1  | Book | Radio Aids, Navigation                               |
| 1  | Box  | Lead Pencils   |
| 1  | Book | List of Broadcasting stations                        |
| 2  | "    | American Nautical Almanac 1937                       |
| 1  | "    | List of Coast Stations & Ship Stations               |
| 1  | "    | List of Aeronautical Stations and aircraft stations  |
| 1  | "    | List of Stations performing special services         |
| 2  | "    | Navigation tables for Mariners and Aviators          |
| 1  | Ea.  | Envelope containing miscellaneous navigation papers  |
| 1  | "    | Parallel   |
| 2  | "    | Dividers   |
| 3  | "    | Scratch Pads   |

*Excerpt from inventory of NR16020 made March 20, 1937, following groundloop accident at Luke Field, Oahu. Note nine various books listed, but no listing of any case to contain them, although the envelope containing parallel, dividers, and scratch pads is separately catalogued. Whatever the books were in stayed in the airplane. Note also the bundle “Containing: 4 Prop. Blade Covers and 2 engine covers.”*

alleged, Fuzz remembers Fred as never taking a drink while he was in Java, and being almost obsessive about checking his chronometers for accuracy. He does not remember Fred having his navigational books out of the airplane, nor did Fuzz ever have occasion to board the Electra, so he was unable to help us regarding the bookcase.

## Paint Drips and Screw Heads

Research into the physical characteristics of the artifact itself has been more rewarding. An inspection of the paint remnants visible on the bookcase by Alexander A. Chasan, Coatings Specialist at the U.S. Navy's David Taylor Research and Development Center in Annapolis, Maryland, brought a very strong opinion that the case had never been installed in a military aircraft. Another line of research focused on the fact that one of the modifications to the case (an apparent anchor for a canvas strap) is attached with a truss type Phillips head screw. When did that type of screw come into use? If the date was after June of 1937 we would be — well, screwed. We were surprised at the number of aircraft restoration experts who couldn't answer the question, and it was finally TIGHAR member Bob Kujawa, TIGHAR # 962, who put us in touch with, guess what, the Phillips Screw Company of Gloucester, Massachusetts. It turns out the Phillips head screw was developed by Dr. Henry Frank Phillips, a dentist in Eugene, Oregon, who bought out early patents on cross head screws and patented his own improved version in 1932. By 1936 screws such as the one on Artifact 2-1 were being test marketed in various industries (Cadillac automobiles, for one). Bulk orders of the new screws were not placed by the aviation industry until 1939 and 1940.

So could a test market Phillips head screw have been used on the Earhart "Flying Laboratory" in 1937? The answer is certainly yes. Was it? To answer that we still need the elusive photograph.

## H. M. Navigator's Bookcase

Other research has eliminated one more possible alternative explanation for the unique mounting holes and bracket on Artifact 2-1. We know that our bookcase was installed very differently from those in U.S. military PBVs, but there was another major purchaser of the aircraft. Might the bookcases in British Catalinas be installed differently than those in their American cousins? After all, Nikumaroro's primary affiliation was British, and if a post-war Catalina had visited the island it might well have started out as an RAF or RAAF airplane.

Thanks to librarian Peter Elliott at the RAF Museum we have the answer. British Catalinas carried an entirely different navigator's bookcase than the U.S. aircraft, and a moment's thought makes the reason obvious. Part No. 28F 4023 was designed for publications of the U.S. Navy's Hydrographic Office; while the British bookcase, Part No. 28F 5662, was designed for manuals produced by the Royal Observatory. Different size books, different bookcase. Is Artifact 2-1 from a British airplane? No way.

## The Search Goes On

Nobody said this was going to be easy and there are still plenty of sources being investigated by a number of TIGHAR members. Bob Kujawa (TIGHAR #962) in Wisconsin, Kristin Tague (TIGHAR #905) and Mike Bowman (TIGHAR #758) in California, and Mike Williams (TIGHAR #371) in Indiana are just a few of those who are digging for the next piece of the puzzle. That photo is out there somewhere. If you'd like to help find it call Project Director Ric Gillespie. Maybe there's a source that needs checking in your area. 



## Is There Life Beyond Earhart?

Although it may seem like it lately, TIGHAR is not The International Group for Historic Amelia Recovery. Other active, if less media-hyped, projects include:

**Operation Sepulchre** — WWII Luftwaffe aircraft sealed in underground German hangars since 1945.

**Lady in Waiting** — B-17E 41-2446, the world's oldest complete and original Flying Fortress, awaiting recovery from a Papua New Guinea Swamp.

**Under investigation:** A **Doolittle B-25** in shallow water off the China coast; **Curtiss Sparrowhawks** with the wreck of the Airship *Macon*; relics of the **Bellanca WB2 Columbia** buried in Delaware; and much more.

At the same time, TIGHAR has become the leader in discussions throughout the air museum world concerning the establishment of long-overdue standards, definitions and protocols which will have a profound effect upon the future of both static and airworthy historic aircraft.

## The Ushers Will Now Collect the Offering

Everything TIGHAR does is funded entirely by public contributions, and the progress we're making can only continue if TIGHAR members make it possible. With this issue of TIGHAR Tracks we've included a summary of the many high quality publications and wearables the foundation offers exclusively to you, the members. Use the order form to express your support for the work your organization is doing. Renew your membership promptly, and when you do, take advantage of the reduced rates for multiple year renewals. And if you're especially moved by something we're doing, there's no better way to express your approval than by sitting down, writing a note, and enclosing a check as a tax-deductible contribution. That's the most meaningful way to say "Go get 'em, TIGHAR!"