TIGHAR TRACKS

THE JOURNAL OF THE INTERNATIONAL GROUP FOR HISTORIC AIRCRAFT RECOVERY

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

– John Aubrey
Stonehenge Manuscripts
1660

About TIGHAR

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, responsiblity, 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.

TIGHAR Tracks is the official publication of The International Group for Historic Aircraft Recovery. A subscription to *TIGHAR Tracks* is included as part of membership in the foundation (minimum donation $55.00 per year).The editors welcome contributions of written material and artwork. Materials should be addressed to: Editors, *TIGHAR Tracks*, 2812 Fawkes Drive, Wilmington, DE 19808 USA; telephone (302) 994-4410, fax (302) 994-7945; email tigharpat@mac.com. Photographs and artwork will be returned on request.

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On the Cover

"Hey Paw! I got Miss Earhart!"

New information sheds new light on one of the most fascinating instances in which an amateur radio listener reported hearing a distress call from Amelia Earhart after her plane disappeared. See "Ship Is On A Reef South of Equator," page 22.

Thanks to Ron Bright, TIGHAR #2342, and the Rock Springs, Wyoming Rocket Miner *for the article and photograph.*

On the Web

http://www.tighar.org

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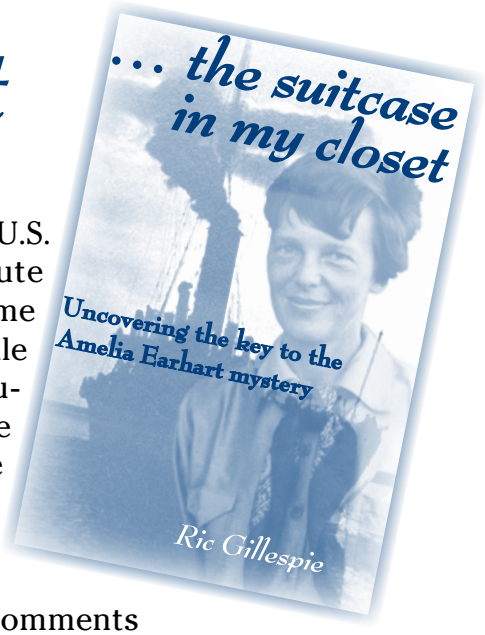
Progress Report



The TIGHAR membership's on-going peer review of the draft chapters is proving to be a great success. Many of you have sent corrections, comments, and advice, all of which are greatly appreciated and many of which have prompted changes to the text.

Because we're hoping that this book finds an audience beyond the usual suspects who buy books about Amelia Earhart, we're especially thankful to anyone who raises a jargon-alert. For example, in response to a note from a TIGHAR member, I've added a short, simple explanation of what a "ground loop" is to Chapter Two – Hawaiian Debacle.

I've also received excellent stylistic advice from some of the authors in our ranks. In response to a call for more use of active voice and less chronological back-and-forthing, I've done a major overhaul of chapters one through four. Shorter sentences and more paragraph breaks have also improved the chapters' readability.

Another change is substantive rather than stylistic. In Chapter Four, "Not For Publication," I've removed the references to Fred Noonan's romantic interest in Helen Day. Excerpts from his letters to her commenting upon aspects of the World Flight remain as part of the story.

You'll see that, in this issue of *TIGHAR Tracks*, we offer Chapter Five, "Stand To Sea,"and a new Chapter Six: "The Long Road To Lae." Covering all of the events involving *Itasca's* preparation to support the flight, and all of Earhart's difficulties in Java, was just too much for one chapter. The former Chapter Six, "Denmark's A Prison," is now Chapter Seven and will be in the next issue.

I'll also mention that the book's title will probably change. Once the manuscript is finished, we'll be working closely with the folks at the U.S. Naval Institute Press to come up with a title that we mutually agree will serve the book best.

Please continue to send your comments and corrections.

Before I get back to my writing, I want to say that I'm thrilled and humbled by your response to the TIGHAR Literary Guild funding drive. As we go to press, the Guild is up to 60 members and the campaign has brought in $9,400.

Your contributions are making it possible for me to write this book. We have three more months to go before deadline. If you haven't yet joined the Guild, please do. If you're already a member, please keep helping.

Thank you.

Ric

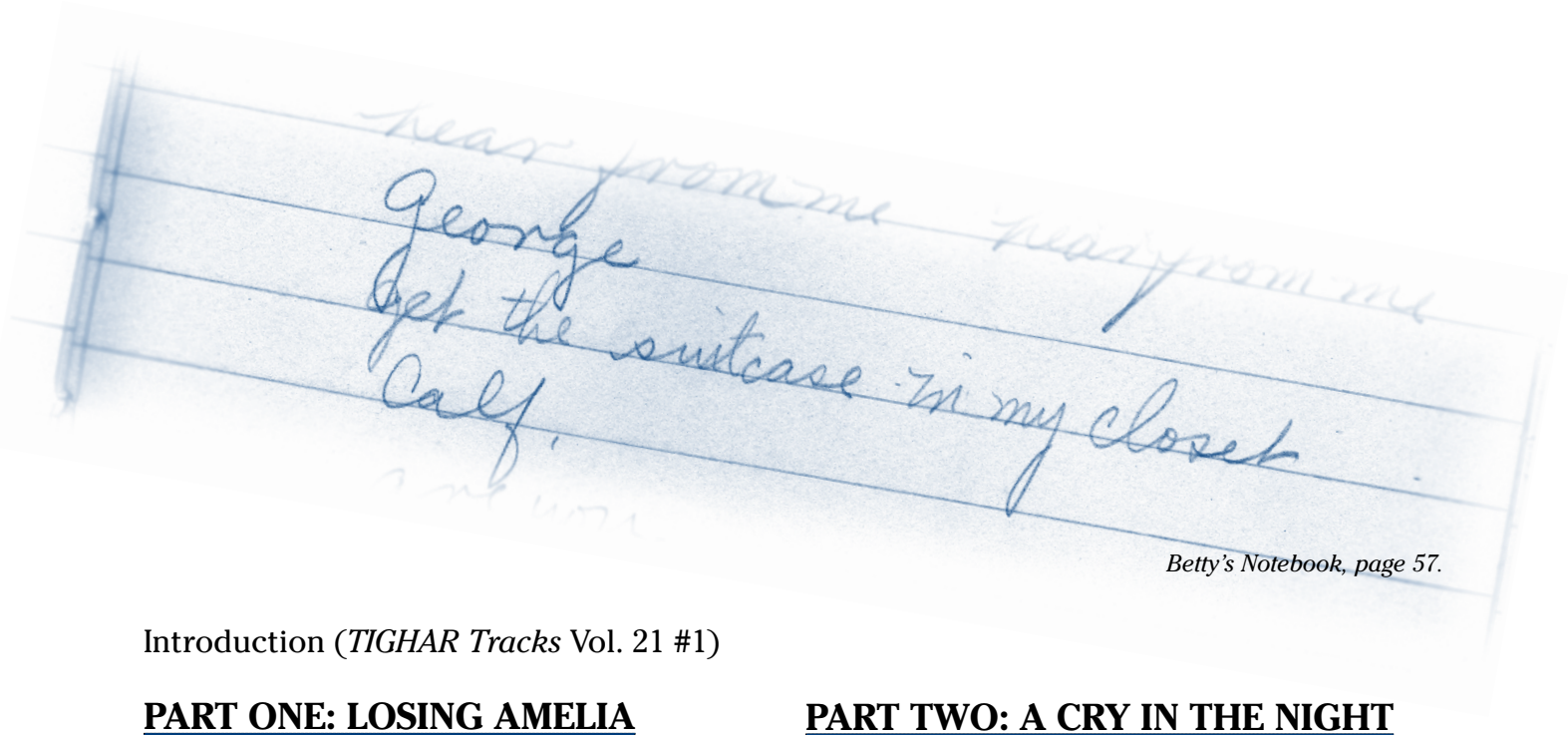
Ric Gillespie
TIGHAR
2812 Fawkes Drive
Wilmington, DE 19808 USA

Fax
302/994-7945

Email
tigharic@mac.com

... the suitcase in my closet

Uncovering the key to the Amelia Earhart mystery



Betty's Notebook, page 57.

Chapter 5

Stand to Sea

As Earhart and Noonan pursued their own agendas on the coast of Africa, Captain Stanley V. Parker, commander of the Coast Guard's San Francisco Division, discovered that, like Richard Black in Hawaii, he had been blindsided by Earhart's surprise departure. On June 7, 1937, a message arrived from the Commandant in Washington asking, "Have arrangements been made to have vessel at Howland Island end of June cooperation Earhart flight?"[1] Capt. Parker replied, "Earhart negative. No official information of itinerary and schedule received but private information promised two weeks advance notice of time of expected arrival Howland Island."[2]

If that time was going to be late June there was a problem. Parker explained to the Commandant that all of the ships currently assigned to the Hawaiian Section were either laid up for maintenance or obligated to other duties until the end of June. "Please advise closest estimate expected arrival time Howland."[3]

Admiral Waesche's response dumped the problem squarely back in Parker's lap. "Best estimate Earhart flight is depart from New Guinea June 20 for Howland. Advise action contemplated by you."[4]

The Commandant had ordered him to pay Paul, so Captain Parker had no choice but to rob Peter. The cutter *Itasca* was in port near Los Angeles, having recently been reassigned to the Coast Guard's Southern Section for duty on the West Coast. He would have to send it back to the Hawaiian Section. Parker alerted the cutter's captain to "be prepared on short notice to proceed Howland Island via Honolulu."[5]

Meanwhile, the Department of Interior was also trying to cope with the schedule change. On June 8, 1937, the day Earhart and Noonan arrived in Dakar, Acting Director Ruth Hampton received a letter from Putnam saying that Earhart would probably be at Howland the latter part of June or in early July.[6] Hampton immediately responded, cautioning him that Interior could not support a late June arrival because "the next regular quarterly expedition to Equatorial Islands cannot leave Honolulu before July 1st due to the nonavailability of appropriations before that date."[7]

Hampton then cabled Black in Hawaii to bring him up to date on the situation and suggest that he proceed with arrangements for the island reprovisioning and Earhart flight support expedition to leave Honolulu early on the morning of July 1st.[8]

In San Francisco, Capt. Stanley Parker, having been told to send a cutter to Howland in late June, and not knowing that Interior was out of money until July 1st, sent a message to the commander of the Hawaiian Section saying: "In view *Itasca's* early departure for Honolulu and Howland Island, suggest possibility her performance routine line island cruise."[9]

The Coast Guard commander in Honolulu ran the idea past Richard Black who told him about the appropriations problem. Later that day Black cabled Hampton with the news that the Coast Guard was sending *Itasca* to Honolulu and to offer a suggestion.

> Since Putnam has been advised sailing date July 1st, please advise me whether combine cruise to aid flight and regular cruise visiting JBH *[Jarvis, Baker, How-*

land], or special cruise immediately and regular cruise mid July. Commander Hawaiian Section leaves decision to us but respectfully suggests conference Coast Guard Washington would obviate necessity such early departure of *Itasca* from coast if cruises combined.[10]

Howland Island was nearly two thousand miles from Hawaii. Black and the Coast Guard commander could hardly believe that their superiors in Washington were contemplating two separate trips. The sensible course of action was to wait and do the island resupply and flight support as a combined cruise after July 1st, but the decision rested with the Interior Department's Division of Territories and Island Possessions and its Acting Director, Ruth Hampton.

For George Putnam, the prospect of Amelia cooling her heels somewhere on the far side of the world until it was convenient for the Department of Interior to resupply their colonists was alarming. The next day, June 10, 1937, Hampton got another letter from Putnam.

> I hasten to reply to your letter of June 8th …. I have today received a letter from Admiral Waesche of the Coast Guard. He informs me that a cutter is at Honolulu and will depart for Howland when required. …
>
> From my understanding, as above set forth, it would appear that the departure for the Island of Mr. Black, even before July 1st, would not necessarily necessitate the expenditure of Department funds as transportation, and I assume sustenance, are supplied by the Coast Guard. …
>
> I have taken the liberty of assuming that Mr. Black would, so far as Howland Island is concerned, be in charge of the entire matter. I have had very pleasant and helpful exchanges of letters with him and am deeply grateful for his intelligent and efficient cooperation and his evident intention to follow the matter through thoroughly.[11]

Putnam's representations were disingenuous at best. The letter from Admiral Waesche did not say, " a cutter is at Honolulu and will depart for Howland when required." Waesche's letter said only that, "I have notified our San Francisco representative to be prepared to have a vessel at Howland Island the latter part of June."[12] *Itasca*, at that moment, was still tied to a California pier.

Putnam's assumption that the Coast Guard was covering the cost of "sustenance" for the colonists was also in error. The Interior Department was responsible for provisioning the islands and, as Hampton had told him in her letter, the Department could not resupply the islands until appropriations became available on July 1st. His claim to have exchanged pleasant and helpful letters with Black was pure fiction. All of the correspondence with Black to coordinate support for the first World Flight attempt had been handled by Bureau of Air Commerce liaison William Miller. The only communication Black had ever received from Putnam was a telegram sent to him aboard *Shoshone* on the day of the Luke Field wreck and that message merely relayed Amelia's apologies for breaking their "engagement for tonight."[13]

Putnam was right about one thing. With regard to government support of Earhart's second attempt to fly to Howland Island, Black was, indeed, in charge of the entire matter. Putnam was also correct in saying that it was Black's intention to follow the matter through thoroughly, but at that moment Richard Black was growing apprehensive at the lack of communication from George Putnam.

Nonetheless, Putnam's letter had the desired effect and Hampton sent Black a cable authorizing two expeditions to Howland Island:

> Letter from Putnam just received indicates possible arrival Earhart at Howland before July 1st … Putnam states all arrangements with Coast Guard and Navy have been made and cutter will leave

> Honolulu sufficiently in advance to permit several days at Howland to recondition runways and disperse bird population, also to establish radio contact with Earhart plane. .... You are authorized to proceed with coordination all arrangements and if departure necessary before July 1st to make special trip to Howland, regular expedition to follow at such time as you may decide after 1938 appropriation becomes available. Please cooperate and assist in every way possible and keep this division closely informed as to developments.[14]

Black didn't like it, but he would do as he was told. What he needed most was information about the flight he was supposed to support. He replied, "Will proceed with coordination of arrangements as directed. … Please give me direct radio address Putnam or other direct contact flight."[15]

The Coast Guard's San Francisco Division also needed information. Capt. Parker was upset that Putnam had failed to provide the promised two weeks advance notice of Earhart's anticipated arrival at Howland and on June 10, 1937, he asked the Commandant that "Putnam be required to keep this Division advised daily of progress of Earhart flight."[16] The reply from Washington was not encouraging. "Headquarters unable contact Putnam."[17]

Itasca was at sea, steaming for Honolulu. Her captain, too, needed instructions and, on June 11th, he queried Parker, "Please advise any radio schedules to be observed with Earhart plane and frequency guarded."[18] Parker replied with what little information he had.

> No plane schedules have been arranged with this Division. On previous trip plane was equipped with 50 watt transmitter for operation on 500, 3105 and 6210 kilocycles with receiver covering all frequencies and direction finder covering 200 to 1500 kilocycles. All transmissions were by key although the transmitter may be used for voice. Will advise all details possible to obtain when received from headquarters.[19]

The next day Parker also passed along to *Itasca* a comment forwarded by the Coast Guard air station in Miami:

> When Amelia Earhart took off from Miami she stated she would not try to communicate with any radio station but would broadcast her position every 15 and 45 minutes past each hour on 6210 kcs. She also transmits on 3105 kcs. She stated that her receiver will be used most of the time taking radio bearings.[20]

Parker was scrounging outdated information and hearsay. Earhart's flight to Howland might be as little as eight days away and there was still no word from Putnam about what support she wanted and how the Coast Guard and Navy ships were supposed to communicate with her.

As Division commander, Parker also faced the prospect of his Hawaiian Section making back-to-back trips to Howland. On June 12th, he sent a strongly worded appeal to Admiral Waesche, the Coast Guard Commandant: "Failure to combine Earhart mission and routine Equator Island cruise so awkward and embarrassing in variety of aspect[s] it would seem higher authority could compel action on basis of emergency funds." Parker pointed out that if *Itasca* did not resupply the islands, that job would have to be done in July by the cutter *Roger B. Taney*, meaning that *Taney* would not be available for law enforcement duties for the entire month of July and "some adverse comment may flow from special detail of *Itasca* to flight cooperation alone."[21]

Admiral Waesche saw Parker's point. Rather than risk adverse comment, the Coast Guard would front the needed supplies. "*Itasca* authorized to obtain and issue to Department Interior necessary stores for islands. Invoice Coast Guard supplies to Interior after June 30."[22] Waesche then telephoned Interior and the good news was wired to Black in Hawaii the same day.[23] The flight support and the island resupply missions would be combined in a single voyage that would sail according to Earhart's schedule.

But what was Earhart's schedule and what radio protocols would she be using? On June 14, 1937, Black wired Hampton with a message for Putnam which she included in a letter sent to his New York address.

> The following radiogram for you from Mr. Richard B. Black…
>
> Request latest estimate arrival date Howland Island and frequent supplementary information via Coast Guard radio to reach me here or aboard *Itasca*. Please give me full instructions on radio contact with plane as verification of information Earhart gave at Miami regarding frequencies and times of transmission. We have two radios dated March 13 covering plan on first flight.[24]

The "radios" Black referred to were messages sent to the Coast Guard a few days before the first World Flight attempt was scheduled to leave California. The navigator/radio operator for that flight, Harry Manning, and Bureau of Air Commerce liaison, William Miller, designed the plan based upon the capabilities of the aircraft and crew at that time. That information was now dangerously obsolete.

In his appeal to Putnam for information, Black also explained what arrangements had and had not been made to provide Earhart with weather predictions: "Lieutenant True, Aerologist, Fleet Air Base, will give forecast from Howland to Honolulu and suggest you arrange forecast New Guinea to Howland through weather facilities at Lae."[25]

Itasca arrived from California on the morning of June 15, 1937, mooring to Honolulu's Pier 27 at 11:55 a.m. Her captain, Commander Warner Thompson, immediately went ashore to report for duty.

At the Hawaiian Section offices Thompson met its Deputy Commander, LCDR Frank T. Kenner, and the Interior Department's representative, Richard Black. Kenner had skippered *Itasca* on earlier trips to the islands, had been in charge of landing construction equipment from USCG *Duane* to build the Howland runways, and had helped coordinate support in Honolulu for Earhart's March attempt. Because the mission to Howland was to be Thompson's first cruise to the equatorial Pacific, Kenner would accompany him in an advisory capacity. His presence on this trip would provide a measure of continuity.

Itasca's mission would be "to act as Earhart plane guard at Howland and furnish weather."[26] Upon completion of its work in connection with the Earhart flight, the ship was to "continue on regular Line Island cruise."[27]

Black was the designated "leader of the expedition and coordinator of government assistance to Earhart flight as regards Howland Island."[28] It was his job to match Earhart's needs to the services offered by the various agencies, and he could see that competent, reliable radio communication was going to be critical to the success of the mission.

The transmitters operated by the colonists on Howland and Baker were low power and could only send code. It was the cutter's radio operators who would handle pre-flight coordination, provide weather information, and send the signals upon which Earhart would take bearings to guide her to Howland. *Itasca*, however, arrived in Hawaii with one experienced Chief Radio Man and three young men rated Radioman 3rd Class, the lowest rating for operators. As leader of the expedition, Black felt justified in arranging to have the men replaced with experienced U.S. Navy personnel. Commander Thompson would have none of it:

> This arrangement was not acceptable to the Commanding Officer of the *Itasca* for the reason that the Coast Guard has sufficient radiomen to perform its work.[29]

Thwarted in his attempt to improve the level of radio expertise aboard the ship, Black did what he could to give the island better capability. During the preparations in March, Manning and Miller had suggested

that a radio direction finder be set up on Howland Island "if practicable." [30] A direction finding radio receiver can determine the direction or "bearing" from which an incoming signal is being transmitted. If the plane was having trouble using its own direction finder to home in on signals sent from the ship, the receiver on the island could take bearings on the transmissions from the plane and the operator could then radio the pilot with instructions about what course to follow.

Direction finders work best on relatively low radio frequencies and, in March, the plan was for the plane to transmit signals on 500 kilocycles. Having a direction finder set up on Howland was a good idea but in March the request was not made until the ship was already at sea. Now, for the second try, Richard Black revived the idea; but the very limited information available about Earhart's intentions made no mention of the lower frequency and spoke only of Earhart transmitting on her two higher frequencies.

High frequency direction finding was problematic but Black conspired with Army Air Corps Lieutenant Daniel A. Cooper, who would be in charge of servicing the Electra at Howland, to borrow an experimental unit from the Navy. Commander Thompson was not supportive of this idea either:

> Mr. Black and Lieutenant Cooper of the Army had the Navy send a high frequency direction finder on board. The Coast Guard did not request the equipment and did not receipt for it.

Thompson later explained his skepticism:

> It was the impression of Coast Guard officers that limits of accuracy reasonably to be expected from this equipment in the circumstances which would obtain on Howland Island were decidedly not sufficiently close to warrant its use as a dependable navigational device to bring the plane safely on the island. It was considered desirable however to set the equipment up at Howland as a necessary precaution.[31]

The ship too had a direction finder, but it was not able to take bearings on high frequency signals, and there was no expectation that it would be used. The plan, as Thompson understood it and as Earhart had implied when she left Miami, was for the Coast Guard to be the passive partner in the direction finding procedure. *Itasca*, standing just off Howland Island, would send signals and Earhart would use the direction finder aboard her Electra to home in on the ship.

If Black and Cooper insisted on setting up the Navy high frequency direction finder on Howland, someone would have to man it. Thompson had already made it clear that Navy radio operators were not welcome aboard *Itasca* but Black thought he might be able to find a topnotch Coast Guard radioman for the job. The cutter *Roger B. Taney* was in dry dock and her crew was, for the moment, unemployed. The first operator selected was found to be "medically unfit"[32] and the job ultimately fell to *Taney* Radioman 2nd Class Frank Cipriani who reported aboard *Itasca* the next day.

June 16, 1937, was also the day that George Putnam broke his silence. In telegrams sent to the Chief of Naval Operations, the Commandant of the Coast Guard, and to Ruth Hampton at Interior, he advised that Amelia had wired from Karachi, India saying that she expected to arrive in Lae, New Guinea one week hence. Putnam estimated that she would fly to Howland on June 24th or possibly the 25th.[33] The telegrams said nothing about radio arrangements.

Two days later, on June 18th, as *Itasca* was about to put to sea, Black was handed a cable from Ruth Hampton in Washington. The message relayed long-awaited radio information she had just received in a letter from Putnam.

> Earhart will broadcast radio phone quarter after and quarter to hour. Her frequencies 6210 and 3105, former used daylight. Also has 500 but dubious usability. Advise what frequencies *Itasca*

will use, ditto naval vessels, so she can listen. Suggest Coast Guard and Navy coordinate so that helpful weather data be broadcasted to her after Lae takeoff on the hour and half.

Will confirm arrangement with her by wire at Lae.

Can *Itasca* forward Howland weather forecast to Lae possibly via the *Ontario* prior takeoff?[34]

Responding to Black's request of June 14th, Putnam was verifying what Amelia had reportedly said before her departure from Miami. There was still nothing about her radio direction finder or how she planned to use it to find Howland Island, but Putnam's message did include new information.

Putnam said that Earhart would broadcast using radio phone and that her 500 kilocycle frequency was of "dubious usability." In fact, the usability of the 500 kilocycle frequency was not dubious; it was virtually nonexistent. Low frequencies require long antennas. On the first World Flight attempt, the Electra had been equipped with a "trailing wire" that was electrically run out and reeled in from a short mast under the cabin. That mechanism was wiped out in the Luke Field crash and Earhart chose not to have it reinstalled when the airplane was rebuilt at Lockheed Burbank.

Her decision was symptomatic of a larger problem. With Harry Manning's departure, there was no longer anyone on the crew who was technically proficient in radio matters or was even adept at sending and receiving Morse code. The low frequency could only be used to send code. In omitting the trailing wire, Earhart was eliminating the weight of a system she couldn't use anyway.*

**Legend holds that the trailing wire was removed in Miami, but photos of the plane taken in Burbank on May 20, 1937 – the day after it came out of the Lockheed repair shop – clearly show that the system was not present at that time.*

In the absence of updated instructions, Black and the Coast Guard had been studying the old radio protocols set up by Manning and Miller. Those procedures specified the use of telegraphy for most communications with the plane. Putnam now indicated that Earhart would broadcast using radio phone but he did not make it clear that the plane could no longer communicate using Morse code.

Putnam's letter reveals another problem. In his June 14th message, Black had told him "Lieutenant True, Aerologist, Fleet Air Base, will give forecast from Howland to Honolulu and suggest you arrange forecast New Guinea to Howland through weather facilities at Lae."[35]

Now Putnam was asking Black "Can *Itasca* forward Howland weather forecast to Lae possibly via the *Ontario* prior takeoff?"[36] And to Hampton he wrote, "As you will readily understand a matter of vital importance is for Miss Earhart to get the best possible weather data concerning the Howland region and that along the route to Howland from Lae prior to her takeoff.[37]

Black replied by wire to Hampton. He would arrange for U.S. stations in the central Pacific (Howland, Baker, Jarvis, Fanning, Christmas Island, and the Navy ships USS *Swan* and *Ontario*) to send their weather observations to the main U.S. Navy radio stations in Hawaii and Samoa. The Navy would be asked to "Please forward this data … to Earhart at Lae, New Guinea, starting tonight, so weather bureau at Lae can start maps."[38] Black made it clear that the cost of forwarding the weather data to Lae via commercial services would be borne by Putnam.

Over the next several days the various stations made their weather reports to the Navy, but Radio Tutuila in American Samoa had difficulty transmitting the information onward and there is no indication that any of the compiled weather observations ever reached Lae. Whether the raw data reached Lae didn't matter anyway. There was no weather bureau in Lae.

The same day George Putnam wrote his letter to Hampton he sent a plea for help to J.M. Johnson, the Assistant Secretary of Commerce. "I am venturing this note to inquire the present whereabouts of W. T. Miller. I have the impression that he is due shortly back from his trans-Pacific trip."[39]

Putnam reminded Johnson how helpful Miller had been prior to Amelia's previous attempt to fly to Howland Island. Amelia was expected to be ready to try again on June 24th. Putnam would soon be flying from New York to Oakland to help coordinate with the Coast Guard for the difficult Pacific legs.

> Perhaps [Miller] could put in a few days there with me. He is, of course, intimately familiar with the entire Pacific situation, knows the personnel involved, etc. ….
>
> I will be grateful for word as to Miller's whereabouts and doubly grateful if it is possible for him to lend me a hand should he be returning in time. [40]

Johnson replied that Miller was due back in a few days but "several very important matters are being held in abeyance awaiting his return here. I would be glad to have him consult with you there but he would not be able to spend any time out at Oakland."[41]

Meanwhile in Hawaii, as *Itasca* was preparing to put to sea, Black and the Coast Guard at last had some current information about Earhart's radios, but now questions were being raised about the cutter's own equipment. San Francisco Division sent a message to the Hawaiian Section saying that *Itasca's* transmitter was faulty and ordering them to send someone to check it out.[42] Warrant Officer Henry Anthony, the Hawaiian Section's radio technician, went down to the dock and performed some tests, but he couldn't find anything wrong. "Transmitter checked and operation excellent … no defects noted."[43]

At four o'clock in the afternoon of June 18, 1937 the 250-foot Lake Class cutter cast off from Honolulu's Pier 12. *Itasca* normally carried a complement of ninety-seven officers and men, but for this cruise there were eleven additional sailors borrowed from the cutters *Taney* and *Reliance*. There was also an extra officer aboard. The ship's previous captain, LCDR Frank Kenner, would act as advisor to Commander Thompson.

Richard Black had loaded the ship with forty drums of water, several tons of supplies for the islands, and nine Hawaiians to relieve the colonists. The Army sent Air Corps Lt. Daniel Cooper and two enlisted men to service the Electra; an Engineer captain and an enlisted assistant to examine the runways; and a photographer. The Navy contributed two airplane mechanics and its own photographer. There was also a doctor from the U.S. Public Health Service. The press was represented by two wire service reporters: Howard Hanzlick from the United Press, and James Carey from the Associated Press. Rounding out the ship's company were three civilian "guests of the wardroom," a Mr. P. Fricks and a Mr. E. W. Walsh who was accompanied by his 11 year old son Geoffrey. In all, there were about 133 souls aboard as *Itasca* "stood to sea shaping course for Howland Island."[44]

The ship had barely cleared the harbor when there was more trouble about the radios. The San Francisco Division communications officer had monitored the previous day's radio traffic and insisted that *Itasca's* transmitter was not working properly. Worse, one of the ship's radio operators had refused to cooperate when directed to make adjustments. The Division commander demanded "name of radioman responsible for disregarding orders."[45] The cutter's captain replied, providing the name of the offender but also disagreeing with headquarters and, at the same time, begging their indulgence.

> Transmitter not, repeat not, faulty based on repeated checks.
>
> *Itasca* has difficult communication problem with inexperienced personnel and desires Division's cooperation.[46]

The next day, as *Itasca* steamed southward, Black sent a message to Washington answering Putnam's question about what frequency the Coast Guard would use to send weather reports. "*Itasca* can give her almost any frequency desired."[47] But if Earhart was going to find Howland Island by homing in on signals sent by the *Itasca*, Black needed more information and he needed it from Amelia, not from Putnam. He asked Putnam to have Earhart contact him with "what frequency best suited her homing device. Also, have her designate time and type of our signal."[48]

Amelia had no way of communicating directly with Black. She was in southeast Asia and he was on a boat in the middle of the Pacific. Black suggested that Putnam have her send a commercial wire to the Governor of American Samoa. The Governor's office would then pass the message to the local U.S. Navy radio station at Tutuila who would, in turn, relay it to *Itasca*.[49] It was an awkward, time-consuming arrangement but, as far as Black knew, it was the only one available.

Putnam responded, saying that it was difficult for him to get in touch with Amelia but she would contact Black via Samoa when she reached Darwin, Australia and that she would confirm all arrangements before leaving Lae, New Guinea for Howland.[50]

Putnam was stalling. The problem was not communication so much as procrastination. Amelia had been in daily telephone communication with the *Herald Tribune*'s New York office for over a week. Under an arrangement Putnam had negotiated with the newspaper, Earhart was providing a series of exclusive first-person narratives as she traveled around the globe. After arriving at nearly every destination along the way, she wrote an account of her flying experiences and described her impressions of these faraway places. She then transmitted the story to the newspaper by whatever means were available. Her adventures appeared in the *Herald Tribune* papers the next day. According to the plan, the series would become the basis for *World Flight*, the book to be published by Harcourt Brace.*

As she made her way down through South America and across the South Atlantic, her daily travelogues were sent as telegrams and appeared in the paper under a byline that read "By Amelia Earhart – via wireless."[51] She filed no stories during her three-day trip across Africa, so the *Tribune* published Associate Press coverage of that part of the flight.[52] Once she reached Khartoum in Anglo-Egyptian Sudan she resumed sending her daily contributions, but now the byline appearing above her articles in the newspaper read, "By Amelia Earhart – via telephone."[53]

Over the next nine days she phoned in stories from Massawa, Eritrea; Karachi, India; Calcutta, India; Akyab, Burma; Rangoon, Burma; Singapore; and Bandoeng, Java in the Netherlands East Indies.

Late that night of June 20, 1937, the same day he had sent a telegram to Ruth Hampton telling her "Difficult contact Earhart satisfactorily before arrival Darwin," George Putnam talked to his wife again on the phone. She had just landed at Bandoeng after an easy 630-mile hop from Singapore. For Amelia it was mid-morning on June 21st.

As Amelia reported in her story to the *Herald Tribune*, phoned in later that day, "The conversation mostly concerned arrangements being made for the two flights from Lae, New Guinea to Howland Island and thence to Honolulu. The United States Navy and Coast Guard are kindly co-operating to help make these rather longish jumps a bit easier. There were details to settle about radio frequencies, weather reports, and the like."[54] If any details were, in fact, settled during the phone call, Putnam did not pass them along to the Navy or the Coast Guard, or to Richard Black.

The Electra arrived in Bandoeng needing what Noonan called "some minor instrument

** Subsequent events resulted in the book's title being changed to* Last Flight.

adjustments."[55] Royal Netherlands East Indies Airlines operated American aircraft and the shop at Bandoeng was well equipped to address the problem. Weather delays in Burma had put the World Flight a day behind schedule and Earhart hoped that the repairs could be completed in time for a morning departure tomorrow. That afternoon, while the technicians worked on the airplane, she and Noonan visited an active volcano.

> Tonight we go to the home of one of the K.L.M. pilots, for international 'ground flying' is one of the few social events our recent lives have permitted.
>
> We are staying tonight at a very good hotel. My room is filled with flowers and everything is as neat and clean as Dutch reputation prescribes. I wish we could stay longer, but we must push on as soon as the plane is in condition.[56]

Amelia got her wish. Checking with the airfield later that night Earhart learned that the needed repairs were taking longer than anticipated and it would be another day before the Electra was ready. There was time for more sightseeing. Noonan had friends living in Batavia (today's Jakarta) about eighty miles away. He called them on the phone that night and they invited him and Amelia to spend the day tomorrow, June 22nd. As Fred wrote to Helen Day the next night:

> The local Nash automobile representative placed a car and driver at our disposal – so we drove down this forenoon – had a fabulous lunch at the famous 'Des Indies' hotel with a charming group – toured the town by car – and flew back on the local airways.[57]

While she was in Batavia that afternoon, Amelia phoned her husband to say that she expected to be able to leave Bandoeng in the morning and would be in Lae by the 24th.

The next day, Wednesday the 23rd, brought further frustration. Her story for the *Tribune*, written that afternoon, explained the situation:

> My plans for leaving Bandoeng today cannot be carried out, as K.L.M. engineers and mechanics pleaded for two hours more to complete their work on my plane, so we now plan to hop off some time after midnight, trying to reach Darwin, Australia, by nightfall.[58]

She described the previous day's visit to Batavia and concluded with:

> Bandoeng is a charming place. If I must delay I am glad of such surroundings.[59]

Her June 23rd press release, however, did not reach the newspaper, nor did her husband receive a phone call from her that day. Trans-Pacific telegrams and phone calls went by radio and it may be that atmospheric conditions were bad that day. For whatever the reason, there was no word from Amelia. Wednesday's *Herald Tribune*, for the first time since her departure from Miami, carried no news about Amelia Earhart's trip around the world.

That day, Putnam confessed his puzzlement in a letter answering Ruth Hampton's request for updated information about when Amelia might make the flight to Howland. He wrote that he had spoken with his wife at 2 a.m. on June 22nd. At that time Amelia hoped to leave Bandoeng "tomorrow." "However, we have no word from her whatsoever this morning so I just don't know. All I can report is that when I talked to her yesterday she expected to be in Lae by the 24th, ready to take off for Howland. … I expect to leave tonight for the coast."[60] ◆

Notes

1 Message from Commandant to COMFRANDIV, June 7, 1937.

2 Message from COMFRANDIV to Commandant, June 7, 1937.

3 *Ibid.*

4 Message from Commandant to COMFRANDIV, June 8, 1937.

5 Message from COMFRANDIV to COMSOSEC, June 9, 1937.

6 Letter from Putnam to Hampton, June 4, 1937.

7 Letter from Hampton to Putnam, June 8, 1937.

8 Message from Hampton to Black, June 8, 1937.

9 Message from COMFRANDIV to COMHAWSEC. June 9, 1937.

10 Message from Black to Hampton, June 9, 1937.

11 Letter from Putnam to Hampton, June 9, 1937.

12 Letter from Admiral Waesche to Putnam, June 7, 1937.

13 Message from Putnam to Black, March 20, 1937.

14 Message from Hampton to Black, June 10, 1937.

15 Message from Black to Hampton, June 10, 1937.

16 Message from COMFRANDIV to Commandant, June 10, 1937.

17 Message from Commandant to COMFRANDIV, June 11, 1937.

18 Message from *Itasca* to COMFRANDIV, June 11, 1937.

19 Message from COMFRANDIV to *Itasca*, June 11, 1937.

20 Message from COMFRANDIV to *Itasca*, June 12, 1937.

21 Message from COMFRANDIV to Commandant, June 12, 1937.

22 Message from Commandant to COMFRANDIV, June 15, 1937.

23 Message from West to Black, June 15, 1937.

24 Letter from Hampton to Putnam, June 16, 1937.

25 Letter from Hampton to Black, June 16, 1937.

26 Message from COMHAWSEC to COMFRANDIV. June 18, 1937.

27 *Ibid.*

28 Department of Interior report "Tenth Cruise to the American Equatorial Islands," July 24, 1937.

29 U.S. Treasury Dept. report "Radio Transcripts Earhart Flight," Thompson, July 19, 1937, page 5.

30 Message from COMFRANDIV to *Shoshone*, March 13, 1937.

31 U.S. Treasury Dept. report "Radio Transcripts Earhart Flight," Thompson, July 19, 1937, page 5.

32 Message from Black to Hampton, June 16, 1937.

33 Messages from Putnam to CNO, COMFRANDIV and Hampton, June 16, 1937.

34 Message from Hampton to Black, June 18, 1937.

35 Letter from Hampton to Black, June 16, 1937.

36 Message from Hampton to Black, June 18, 1937.

37 Letter from Putnam to Hampton, June 17, 1937.

38 Message from Black to Hampton, June 19, 1937.

39 Letter from Putnam to Johnson, June 17, 1937.

40 *Ibid.*

41 Letter from Johnson to Putnam, June 18, 1937.

42 Message from COMFRANDIV to COMHAWSEC, June 18, 1937.

43 Message from COMHAWSEC to COMFRANDIV, June 18, 1937.

44 Treasury Department Report, "Cruise Report 4 June to 24 July 1937 – embracing Earhart flight and Equatorial Island cruise."

45 Message from COMFRANDIV to *Itasca*, June 18, 1937.

46 Message from *Itasca* to COMFRANDIV, June 18, 1937.

47 Message from *Itasca* to COMHAWSEC, June 19, 1937.

48 *Ibid.*

49 Message from Black to Putnam via Hampton, June 19, 1937.

50 Message from Putnam to Black via Hampton, June 20, 1937.

51 New York *Herald Tribune*, June 1-9, 1937.

52 New York *Herald Tribune*, June 10-12, 1937.

53 New York *Herald Tribune*, June 13-21, 1937.

54 New York *Herald Tribune*, June 22, 1937, page 1.

55 Letter from Noonan to Helen Day, June 22, 1937.

56 New York *Herald Tribune*, June 22, 1937, page 11.

57 Letter from Noonan to Helen Day, June 22, 1937.

58 New York *Herald Tribune,* June 24, 1937.

59 *Ibid.*

60 Letter from Putnam to Hampton, June 23, 1937.

Chapter 6

The Long Road to Lae

Amelia had not checked in and, for once, Putnam did not know where she was. Neither did Richard Black. As *Itasca* neared the end of its five day voyage from Honolulu to Howland, Black reasoned that, because he had not yet received the promised communication from Darwin, she was probably still at her previous scheduled stop – Bandoeng, Java. To be safe he sent telegrams to both Darwin and Bandoeng, giving her the radio capabilities of the three ships that would help guide her flight. He asked her to "Please confirm and designate signals desired from *Ontario*, *Itasca* and *Swan** within these ranges best suited to your homing device." He also cautioned her that any messages she might send from Lae via Samoa would take four hours to reach the *Itasca*.[1]

A few hours after Black sent his telegrams, Commander Thompson sent his own, one addressed to Earhart in Port Darwin, Australia† and the other to Lae, New Guinea.

> Request you advise this vessel 12 hours prior to your departure from New Guinea full information regarding your desires in matter of radio frequencies and communication schedule. We will conform to any frequencies desired.
>
> Important anticipate your departure as communication via Port Darwin very slow.[2]

Neither of Thompson's telegrams reached Amelia because, as Black suspected, she had not yet reached Australia.

About this time yet another message arrived from San Francisco Division insisting that the ship had a faulty transmitter. Taking heed of Commander Thompson's earlier plea for patience with the cutter's inexperienced radio operators, headquarters provided a detailed diagnosis of the problem.[3] By later that day the problem was finally fixed.[4]

Mid-day, June 23rd, at Howland Island was evening in New York as George Putnam boarded a United Airlines Douglas DC-3 for the all-night trip to Oakland, California. If all was going according to plan, Amelia should be on her way from Darwin to Lae about now.

In Java it was the morning of June 24th and Amelia was not on her way to Lae. She wasn't even on her way to Darwin. Earhart was still stuck in Bandoeng. The maintenance problems were taking longer to fix than expected. The Electra spent the whole day on the 23rd in the hangar and an early morning departure on the 24th was once again frustrated by mechanical difficulties. By the time the work was completed that afternoon there wasn't enough daylight left to fly any farther than Surabaya, a major city just 355 miles away.

At 1:15 p.m. (1:45 a.m. in New York) on Thursday, June 24, 1937, Amelia succeeded in placing a phone call to the *Herald Tribune* office in New York. She gave the paper yesterday's press release and reported that she was still in Bandoeng but was ready to depart for Surabaya.

She needed to talk to her husband. It was important that he know about this most recent delay before he made press commitments for her arrival in Oakland. But Putnam, she learned, was at that moment on an airplane en route to California. He was scheduled to arrive in Oakland at 9 a.m. Pacific Time, ready to start the business day. She needed to catch him before he got there.

**The Navy ocean-going tug USS* Ontario *was positioned halfway between Lae and Howland; USCG* Itasca *was standing by at the island; and the Navy seaplane tender USS* Swan *(with no seaplane aboard) was on station halfway between Howland and Hawaii.*

† *Darwin and Port Darwin are the same place.*

The United flight was scheduled to land in Cheyenne, Wyoming for a brief refueling stop at 2:33 a.m. Mountain Time, about three hours from the time Amelia called New York. The flight to Surabaya should take about two and a half hours, but if there were delays or unexpected headwinds she could easily miss him. If she played it safe and waited to make the call from Bandoeng, it would then be too late to fly to Surabaya before dark.

Playing it safe was not Amelia's style. When the United DC-3 arrived at the terminal in Cheyenne, passenger Putnam was told that there was an international phone call waiting for him from Surabaya, Java. Earhart told him of the delay but assured him that she would be able to continue on to Australia in the morning. The three minute call cost $24.[5]

While Earhart and Noonan were flying to Surabaya and Putnam was flying to Oakland, the Coast Guard cutter *Itasca* was completing its five-day voyage from Honolulu. At 8:56 p.m. on June 23, 1937, the ship "raised Howland Island, bearing 90 degrees true, distance 7 miles. Stopped, drifted to the westward of the island awaiting daybreak."[6]

First thing the next morning, Richard Black led a delegation ashore to check the airfield. He found the runways to be in good condition, time and some rain having served to settle and compact the coral surface. Air Corps Lt. Dan Cooper erected windsocks and marked the boundaries with red bunting. The birds, however, were another matter.

Black thought their numbers had increased since March. Cooper considered them to be a "significant hazard" and estimated the population at "10,000 Frigates, 8,000 Booby and 14,000 Terns. The Frigates and Boobies are the size of large buzzards while the Terns are the size of young pigeons."[7] Blocks of TNT and riot guns were employed in an attempt frighten the birds away but only succeeded in shifting them from place to place around the island. The best they could hope to do was clear the birds away from the approach end of the runway Earhart was most likely to use.

Now that the expedition was at Howland the next question was, where was Amelia? In his first report sent from *Itasca*, Associated Press correspondent Jim Carey described the preparations being made for the flight's arrival and ended with a query: "Earhart whereabouts? *Itasca* not informed."[8]

Universal Press reporter Howard Hanzlick also filed his first story, painting a picture of "minute preparations for every emergency" with "all personnel on toes."[9]

Late in the afternoon, *Itasca*'s radio operators picked up press reports that Earhart was still in Java and was expected to remain there for three days.[10] It was Thursday, June 24th. If Earhart was not going to fly to Australia until Sunday there was plenty of time to attend to other business. Black sent a message to Washington saying that *Itasca* would proceed to Baker Island and service the colonists there on Friday. "Please tell Putnam we would appreciate direct notification of all progress."[11]

Earhart, in fact, was not making progress. During early morning pre-flight checks before leaving Surabaya for the flight to Darwin, she discovered that an instrument that she thought had been repaired was again malfunctioning. Earhart and Noonan had no choice but to return to Bandoeng.

In a press release filed from Bandoeng later that day, by wireless this time, Earhart expressed her frustration.

> Today for the second time in a week I had to do what is unquestionably the most difficult thing I have ever done in aviation. It was necessary to return to Bandoeng this morning from Sourabaya [sic] for readjustment of certain long-distance flying instruments. … I do not know how long we shall have to be here, but it is probable that the trouble will be located today.[12]*

Word of the reversal traveled fast and it was only a few hours later that *Itasca*, un-

** Earhart's comment that she had been forced to reverse course "for the second time in a week" is a reference to a flight on June 19th when, after departing Akyab, Burma for Bangkok, Siam, heavy rain forced her to turn back after less than an hour.*

loading supplies at Baker Island, received a message from San Francisco Division. The Associated Press was reporting that Earhart had attempted to resume her trip yesterday but had gotten only as far as Surabaya, Java before experiencing instrument problems. She was returning to Bandoeng, Java and it was "uncertain when continuing flight."[13]

Later, another message from San Francisco Division brought word that Putnam, now in Oakland, had confirmed that Earhart was indeed back in Bandoeng, "departure indefinite."[14] Putnam promised that, once she got to Darwin, Amelia would cable the communication details for the Lae/Howland flight directly to the Coast Guard in San Francisco who would then convey them to *Itasca*.

Putnam also tried to provide some of the radio information the Coast Guard had been clamoring for. "Communication from plane will be on 500, 3105 or 6210 kilocycles by voice."[15*]

He also repeated the previously given information that Earhart would broadcast her position at fifteen and forty five minutes past the hour. *Itasca*, he said, should adjust its transmitter "for possible use 3105 kilocycles for voice."[16]

This was the first time the Coast Guard learned what frequency Earhart might want them to use when transmitting to her. It was an unusual request because, by federal regulation, only aircraft were allowed to transmit on 3105 kilocycles. Ground stations replied on a different frequency. In closing, Putnam added that, "direction finder on plane covers range of about 200 to 1400 kilocycles."[17]

That evening, *Itasca*, having completed its resupply of the Baker Island colonists, steamed the forty miles back to Howland.

In Bandoeng it was the morning of June 26th and the Electra was once again in the Netherlands East Indies Airlines hangar. A consequence of Earhart's unscheduled return to Bandoeng was that she received a telegram that had arrived there after she left for Surabaya. The message was from Richard Black aboard the Coast Guard cutter *Itasca* informing her of the ship's radio capabilities and asking that she "designate signals desired from *Ontario*, *Itasca* and *Swan* within … ranges best suited to your homing device."[18]

While technicians worked on her airplane, Amelia drafted a response to Black's request and gave it to the local telegraph office. By mid-day, the instrument problem seemed to be truly fixed but, once again, there was only time for a few hours flying before nightfall. Earhart and Noonan returned to Surabaya while Amelia's telegram began it's own journey to Black.

That afternoon the Electra landed in Surabaya for the second time in as many days. Amelia did not file a *Tribune* story from Surabaya, and *Last Flight*, the book later compiled from her narratives, pretends that the second stop never happened at all. Apparently Earhart made another phone call to her husband later that night. In the wee hours of the next morning; which was 8:00 a.m. aboard *Itasca* and 11:30 a.m. in California, the Coast Guard's San Francisco Division sent a priority message to the cutter.

> Repairs made and Earhart now at Surabaya. Expects leave dawn this date for Port Darwin and next day for Lae.[19]
>
> Following information from Earhart this date; homing device covers from 200 to 1500 and 2400 to 4800 kilocycles. Any frequencies not repeat not near ends of bands suitable.[20†]

Just the day before, Putnam had said her homing device covered 200 to 1400 kilocycles. Now it supposedly had much broader frequency limits and she seemed to be asking the Coast Guard to designate what frequencies she should use for direction finding.

** The plane had never had voice capability on 500 kilocycles. With the elimination of the trailing wire antenna during repairs at Lockheed, the frequency became essentially useless.*

† The admonition to avoid frequencies near the ends of the bands was to permit tuning the receiver slightly above and below the frequency, thus allowing for possible calibration discrepancies.

San Francisco Division's commanding officer, Capt. Stanley Parker, was happy to oblige. In his message to *Itasca* he said:

> We suggest using suitable frequencies having in mind uncertain characteristics of high frequencies. Use 333 kilocycles or frequency in that vicinity and try 545 kilocycles after tests with stations your locality to determine which is best.[21]

After several more suggestions and admonitions he said: "Am advising Earhart that *Itasca* will voice radio her on 3105 on hour and half hour as she approaches Howland."[22]

San Francisco's suggestions were not welcome aboard *Itasca*. From the beginning, Black and Thompson had made the assumption that they were there to accommodate Earhart. It was up to her to tell them what she wanted. Black's June 23rd telegram had asked Earhart to "designate signals desired from *Ontario*, *Itasca* and *Swan* within these ranges best suited to your homing device."[23] Thompson had asked her for "full information regarding your desires in matter of radio frequencies and communication schedule. We will conform to any frequencies desired."[24]

Now, not only was Parker pressing Commander Thompson to assume more responsibility for Earhart's flight by telling him to suggest what frequencies she should use, but he was also taking it upon himself to tell Earhart what Thompson would do.

Not along after Parker's message was received aboard *Itasca*, the U.S, Navy's main radio station in Hawaii, Radio Wailupe near Honolulu, contacted the cutter with a wire for Black from Earhart. Amelia's telegram from Bandoeng had taken something over sixteen hours to wend its way through the system.

Earhart's instructions were very specific. For the flight from Lae to Howland she wanted *Ontario*, the Navy ship positioned halfway along the route, to be ready to transmit on 400 kilocycles. When she got close, she would call the ship and it should then send the Morse code letter "N" (dash-dot) repeatedly for five minutes. At the end of each minute the ship should also send its call letters, NIDX, twice. By hearing the letter "N," and by identifying the call letters, Amelia could be sure that she was listening to *Ontario*. She would then, presumably, use her direction finder to home in on the ship and make sure she was on course for Howland.

Her instructions for *Itasca* were somewhat different. Rather than wait for her to call, the cutter was to transmit the Morse code letter "A" (dot-dash), the ship's position and its own call letters, NRUI, every hour on the half hour on a frequency of 7500 kilocycles. "Position ships and our leaving will determine broadcast times specifically. If frequencies mentioned unsuitable night work inform me Lae."[25]

The receipt of Earhart's detailed plan reinforced Commander Thompson's view that his job was to deliver the services the flyer requested, not design a flight plan for her. The ship had now received a direct communication from Earhart via the Navy. The information being relayed though San Francisco Division was contradictory and its commanding officer was trying to micro-manage *Itasca's* mission.

Warner Thompson had had enough. A few hours after receiving Earhart's telegram, he fired off a strongly worded message to Parker:

> Consider present relationship Division – *Itasca* communications unsatisfactory and potentially dangerous to Earhart contacts and other vital schedules. Urgently request *Itasca* be given complete communication independence. *Itasca* has reliable communications with Navy and routine traffic can be routed via that system. Recommend discontinuance all San Francisco Radio – *Itasca* schedules until Earhart flight reaches Hawaii.[26]

Parker acceded to Thompson's request and further messages from San Francisco were confined to Putnam's queries about press arrangements. Still, sorting out just what procedures Earhart desired was a bit of a challenge.

The day before, Putnam, via San Francisco, had informed *Itasca* that Earhart might want

the ship to send voice on 3105 kilocycles. Amelia's telegrammed instructions contained no such request, but Parker had advised Earhart that *Itasca* would send voice on that frequency on the hour and half hour. Accordingly, Commander Thompson ordered the cutter's transmitter adjusted to enable voice transmissions on 3105 kilocycles.

Earhart's stated plan with regard to *Ontario* could have been more specific but it was, at least, reasonable. She did not say what frequency she would use to call the ship but presumably it would be either her daytime frequency of 6210 kilocycles, or her night time 3105, depending on when she arrived in the area. Her request for signals on 400 kilocycles was within the stated limits of her direction finder.

Her announced plan for finding Howland Island, however, was at odds with information received via San Francisco. She was asking *Itasca* to send signals on 7500 kilocycles – signals useless to her direction finder which, according to Putnam's message, "covers range of about 200 to 1400 kilocycles"[27] and, according to San Francisco's latest message, "covers from 200 to 1500 and 2400 to 4800 kilocycles.[28]

Neither Richard Black nor Commander Thompson questioned Earhart's choice of frequencies even though Thompson, at least, was well aware of the discrepancy. As he later wrote in his official report:

> The above message [referring to Earhart's instructions] is the first contact that the ITASCA has had with Earhart previous to the anticipated flight. The ITASCA bases this message as the key message of the flight. It will be noted that the frequencies requested were high frequencies with the exception of ONTARIO. This is contradictory to the last message received from Commander San Francisco Division suggesting 333 and 545 kilocycles. It will also be noted that the requested 7.5 megacycles is beyond the frequency range, that at least to our knowing (sic), of the plane direction finder.[29]*

Just what range of frequencies the Electra's homing device could cover is an important question, but it is not a difficult one. For direction finding, signals were received by the hoop-shaped "loop" antenna mounted above the Electra's cockpit. Numerous photos taken from the time of its installation just prior to Earhart's first World Flight attempt in March until the final takeoff from Lae, New Guinea in July leave no doubt that the loop antenna on Earhart's Electra was one of a new line of Bendix direction finders pictured and described in the August 1937 issue of *Aero Digest* magazine.

> Bendix D-Fs are designed to operate in conjunction with Bendix Type RA-1 receiver, but will also give accurate and dependable bearings when used with any standard radio receiver covering the desired frequency range.[30]

The article says they can be used "…as navigational direction finding instruments within frequency range of 200 –1500 kilocycles."[31] Those parameters generally agree with the limits described by Manning and Miller prior to the first World Flight attempt, "Plane has direction finder covering 200 to 1430 kcs."[32] They also agree with Putnam's message of June 25, 1937 – "direction finder on plane covers range of about 200 to 1400 kilocycles."[33]

Where Earhart got the idea that her direction finder could cover "from 200 to 1500 and 2400 to 4800 kilocycles"[34] is not clear, but the signals she requested on 7500 kilocycles were far beyond even those limits.

The morning of Sunday, June 27, 1937 in Surabaya found the World Flight ready to leave Java at last. The plan was to make the 1,300-mile flight to Darwin that day but, although the Electra was now cooperating, the

**Thompson's implication that Earhart rejected San Francisco Division's suggestion that she use lower frequencies is misleading. The suggestion was made to Thompson, not Earhart. It was he and Black who declined to pass the recommendation along to Amelia. Thompson's misrepresentation would later create the impression among senior Treasury Department officials that Earhart had disregarded instructions given to her by the Coast Guard*

winds were not. Earhart and Noonan spent the night in the town of Koepang on the island of Timor. As Fred explained in a letter to Helen Day:

> We arrived here about noon from Surabaya, Java, with intention of going on to Port Darwin, Australia, but upon arrival received a weather report indicating head winds of about forty miles per hour lay ahead of us. As Port Darwin time is two hours ahead of local time – that is – the sun sets there two hours earlier than it does here – we decided not to risk landing at a strange airport after darkness had fallen.
>
> So here we be – in a town without hotel accommodations – for the night.
>
> However, it is not as bad as it would appear at first sight. Throughout India, Burma, Siam, and Dutch East Indies the various governments have established what they call "Rest Houses" – comfortable habitations erected to take care of the infrequent travelers who drop in unexpectedly.[35]

Earhart wired a story to the *Tribune* with her impressions of the town "perched as it is on cliffs with winding paved roads"[36] and the airport "surrounded by a stone fence a few feet high to keep out roaming wild pigs."[37]

Sunday night in Koepang was Sunday morning aboard *Itasca*. No further word was expected from Earhart until she reached Lae so Black, the Hawaiian colonists, and the Army contingent used the time to build a small extension on the west end of the island's east/west runway. With a length of only 2,400 feet it was the shortest of the three airstrips but, due to the prevailing easterly winds, it was the most likely to be used. "We found that with only a thin hand-placed layer of coral, it was better not to roll, as the rolling seemed to push the coral into the sand."[38] The new area was to be marked unsafe for landing but could be used to extend the takeoff.

Earhart and Noonan arrived in Darwin, Australia on the afternoon of June 28, 1937. When asked why she had not answered the airport's radio calls, Amelia explained that her receiver was inoperative. A local technician inspected the set, replaced a blown fuse, and conducted a successful ground test of the radio.[39] Earhart did not mention the incident in her Darwin press release, sent by wire to the *Tribune*, nor does it appear in *Last Flight*.

The book, however, does include the passage:

> At Darwin, by the way, we left the parachutes we had carried that far, to be shipped home. A parachute would not help over the Pacific.[40]

The correspondent for the Sydney, Australia newspaper, who was present for the Electra's arrival in Darwin, told a different story.

> The first thing she did after being officially welcomed was to inquire if parachutes, part of the emergency equipment for the Pacific crossing in front of her, had arrived from America. They reached here more than a week ago. …Fully tested and ready for immediate use, the parachutes were waiting in Mr. Collin's office.[41] *[Alan Collins was the Civil Aviation Officer for Darwin.]*

Earhart made no mention of the parachutes in her press release but a photograph taken that day shows her and Noonan in front of the Electra's cabin door with what appears to be a pile of items about to be loaded aboard the airplane. Two parachutes are clearly visible.

In Darwin that evening, Earhart sent information to Guinea Airways in Lae intending to arrange radio communications for her flight to New Guinea the next day. To make sure the message got through, she sent two cables via separate commercial services. Both telegrams expressed the desired radio frequency as wavelength in meters in accordance with the British system. One telegram said that she

would be sending and receiving on a wavelength of 36 meters.[42] The second telegram had it that she would be "receiving and transmitting 36.6 meters D-F loop."[43] The message is ambiguous in that the "D-F loop" (the hoop-shaped radio direction finder antenna mounted on the cockpit roof) was a receiving antenna and could not be used for transmitting. Its mention in the telegram implies that Earhart intended to use her direction finder to home in on signals sent by Lae on 36.6 meters.

Early the next morning, Tuesday. June 29th, Earhart and Noonan left for New Guinea. ◆

Notes

1 Message from Black to Earhart via Samoa, June 23, 1937.

2 Message from Itasca to Earhart via Samoa, June 23, 1937.

3 Message from COMFRANDIV to Itasca, June 23, 1937.

4 Message from Itasca to COMFRANDIV, June 23, 1937.

5 Wyoming Tribune Eagle, June 25, 1937.

6 Treasury Department Report, "Cruise Report 4 June to 24 July 1937 – embracing Earhart flight and Equatorial Island cruise," July 24, 1937.

7 U.S. Army report, "Expedition to the American Equatorial Island in connection with Amelia Earhart flight," Daniel A. Cooper, 1st Lt, Air Corps, July 27, 1937.

8 Message from Carey to Associated Press, June 24, 1937.

9 Message from Hanzlick to Universal Press, June 24. 1937.

10 Message from Itasca to Swan, June 24, 1937.

11 Message from Black to Hampton, June 24, 1937.

12 New York Herald Tribune, June 25, 1937.

13 Message from COMFRANDIV to Itasca, June 25, 1937.

14 Message from COMFRANDIV to Itasca, June 25, 1937.

15 Ibid.

16 Ibid.

17 Ibid.

18 Message from Black to Earhart via Samoa, June 23, 1937.

19 Message from COMFRANDIV to Itasca, June 26, 1937.

20 Ibid.

21 Message from COMFRANDIV to Itasca, June 26, 1937.

22 Ibid.

23 Message from Black to Earhart via Samoa, June 23, 1937.

24 Message from Itasca to Earhart via Samoa, June 23, 1937.

25 Message from Earhart to Black, June 26, 1937.

26 Message from Itasca to COMFRANDIV, June 26, 1937.

27 Message from COMFRANDIV to Itasca, June 25, 1937.

28 Message from COMFRANDIV to Itasca, June 26, 1937.

29 Treasury Department Report "Radio Transcripts – Earhart Flight," June 19, 1937.

30 Aero Digest, August 1937, page 42.

31 Aero Digest, August 1937, page 42.

32 Message from COMFRANDIV to Shoshone, March 13, 1937.

33 Message from COMFRANDIV to Itasca, June 25, 1937.

34 Message from COMFRANDIV to Itasca, June 26, 1937.

35 Letter from Noonan to Day, June 27, 1937.

36 New York Herald Tribune. June 28, 1937.

37 Ibid.

38 Department of Interior report "Tenth Cruise To the Equatorial Islands," July 24, 1937, page 6.

39 Letter from C.L.A. Abbott to Albert M. Doyle, American Consul, August 3, 1937.

40 Last Flight, Earhart. page 128.

41 Sydney newspaper, June 28, 1937.

42 Message from Amalgamated Wireless to Lae, June 28, 1937.

43 Message from Vacuum to Lae, June 28, 1937.

"Ship is on a reef south of the equator."

You might think that, after nearly seventy years, all of the significant contemporary sources of information about the Earhart disappearance had been long since discovered and analyzed. Not so, but far otherwise. We are constantly amazed by the amount of new information that come to light. Most recently, TIGHAR member and Earhart researcher extraordinaire Ron Bright recently scored a bull's eye with an inquiry to the Wyoming State Archives for any possible mention in the Wyoming newspapers of Rock Springs resident Dana Randolph and his alleged reception of a radio distress call from Amelia Earhart.

The Rock Springs incident was well known to us through its mention in official government message traffic and major newspapers. We knew that Dana Randolph was an African-American youth who reportedly heard Amelia say "ship on reef south of equator." We also knew that the message was supposedly received at 15:00 Greenwich Time on July 4, 1937 and that local Bureau of Air Commerce authorities had later investigated the claim and found it to be credible.

In response to Ron's request, Wyoming State Archives Research Intern Suzi Taylor located an article published in the July 6&7, 1937 (combined) edition of the *Rock Springs Rocket*. The text of the article is reproduced below and reveals much more about the intercept and the circumstances surrounding it.

First Radio Contact With Miss Earhart Made By Springs Boy

The Fourth of July was a day for every boy in the United States to get excited over firecrackers–for every boy, that is, except Dana Randolph, 16-year-old son of Cyrus G. Randolph of 1408 Tenth street.

Dana was much too busy for firecrackers. His time was taken up answering inquiries as to the manner in which he became the first person in the world to pick up a radio message from Amelia Earhart, forced down in mid-Pacific in her world-girdling flight.

Listening on a commercial radio set equipped with a short wave receiver, he heard Miss Earhart sending out a radio message for help between 8 and 8:25 a.m., Sunday.

Professional radio operators, operators of amateur stations, government radio men, and listeners in general throughout the world had been listening for such a call since Miss Earhart and her navigator, Capt. Fred Noonan, missed Howland island on their flight from Lea, New Guinea.

The Rock Springs boy, listening in front of his big set, was following a hobby he began eight years ago. Following suggestions by his Uncle John Randolph he has studied and worked on the mechanics of radio. He has built sets. Sunday morning he was listening to reception brought in over a new antenna he had designed and just had erected.

He heard the following words come out of his loud speaker:

"This is Amelia Earhart. Ship is on a reef south of the equator. Station KH9QQ."

The voice then began to give the location of the fallen "flying laboratory" in which Miss Earhart and her navigator had flown more than halfway around the

world. But the voice faded away and the young Rock Springs listener was unable to hear the noted woman flier tell exactly where she was.

"Hey, Paw!" Dana yelled to his father who was in the kitchen. "I got Miss Earhart!"

The elder Randolph came running and he and his son listened closely.

Again the woman's voice came from the loud speaker, repeating her name, the call letters of her station, and fading away again as she began to give her location. The procedure was followed for 25 minutes.

Dana's Uncle Victor Randolph, who lives next door, came in and was told about the reception of the call for help.

"Everybody wants to know about that," he told his nephew. "Get down town and report that."

Cyrus and Victor Randolph immediately went to the police station to learn where the report should be made. They were directed to a local department of commerce radio operator. He notified Washington of their report, saying that the plea for help had come in at 160,000 kilocycles, and then the three of them dashed to the Randolph home to listen again.

But despite constant vigilance at the radio almost day and night, no other clear message came through. Sounds that seemed almost to be the voice of the flier were heard but they were not clear enough to be understood.

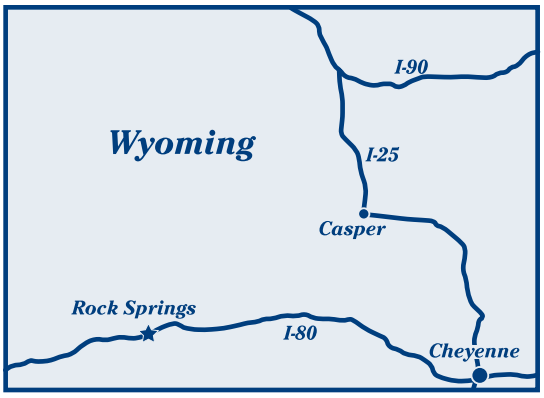
The department of commerce in Washington sent notice to all radio men engaged in the search and shortly others reported hearing radio signals. Battleships, fleets of airplanes, and private ships were pointed toward the indicated spot. Later came signals that all could hear in the vicinity of the search.

In the meantime, the big press associations in Washington had been notified. The name of the local boy was carried in press stories throughout the world.

Tuesday the father received a telegraph message from a man signing himself Lieut. William J. Powell, of Los Angeles, requesting Dana's picture and biography and saying that a tour for him is planned.

Operators of local amateur transmitting stations have interested themselves in him and have offered to help him become a licensed operator if he desires.

He has shown a decided bent for the technical side of radio. It is thought likely that his service in helping to locate Miss Earhart will provide means for him to carry his studies as far as he wishes.



Contrary to the article's assertion, Dana Randolph was by no means the first to claim to hear distress calls from Amelia Earhart, but many aspects of Dana's story are remarkably similar to that told by Betty Klenck of St. Petersburg, Florida. (See "Betty's Notebook," *TIGHAR Tracks* Vol. 16 No.3 and on the TIGHAR website at www.tighar.org/Projects/Earhart/Documents/Notebook/notebook.html)

Both Betty and Dana were young – Betty was 15, Dana was 16.

Both were using standard commercial shortwave radios attached to unusually sophisticated antennas.

Both appear to have been listening on or near

a harmonic of 3105 kilocycles.

Both reported hearing the signal fade out over time. Betty was able to reacquire it. Dana was not.

Both claimed to hear Earhart say she was on land at a time when popular opinion held that the plane was afloat on the ocean.

Both called their fathers who also heard the transmissions.

Both fathers brought the reception to the attention of the authorities. In Dana's case there was a positive response. In Betty's case the report was dismissed.

The newspaper's claim that Dana heard Earhart say "Station KH9QQ" is curious. The call letters of the radio station aboard the Electra were KHAQQ. It's possible that Dana reported hearing KH8QQ and the newspaper simply got it wrong. (It happens.)

We don't know whether the tour planned for Dana ever happened but, given the outcome of the search and the government's subsequent official position that the distress calls heard by amateurs were "all probably criminally false transmissions," it seems unlikely.

Ron Bright has determined that Dana Randolph is, unfortunately, no longer living, but we're grateful for the courage Dana and his father showed in stepping forwarding to tell what they heard.

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TIGHAR · 2812 Fawkes Drive · Wilmington, DE 19808 · USA
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