

The Earhart Project

COSMIC SIGNIFICANCE

Pick a number—any three digit number. Now, just remember that number until the end of this article.

Subscribers to the Earhart Project Bulletins are aware that, through the archival archaeology of Dr. Randall Jacobson (TIGHAR #1364), we've recently been able to establish that the radio signals heard in the days following the Earhart disappearance were far more credible than was later alleged. It is now clear that one of the messages either contains uncannily specific information about the whereabouts of the missing fliers or represents a coincidence of truly mind-boggling proportions.

Late on the night of July 4, 1937 – two and a half days after Amelia Earhart and Fred Noonan disappeared – three operators at U.S. Navy Radio Station Wailupe, Hawaii heard the following message fragments:

TWO EIGHT ONE NORTH HOWLAND CALL
KHAQQ BEYOND NORTH DON'T HOLD
WITH US MUCH LONGER ABOVE WATER
SHUT OFF

KHAQQ was Earhart's radio call sign and the signals were received on Earhart's nighttime frequency of 3105 KCs. The message was sent in "extremely poor" Morse code and only partial phrases could be understood.

This message was taken very seriously at the time and every available vessel—the USCG *Itasca*, the USS *Swan*, and a British freighter, the S.S. *Moorsby* – was diverted to search the ocean 281 miles north of Howland Island. They got there the next evening but found nothing. Reinforcing their frustration was a message from Lockheed officials stating that the location of the Electra's radio gear would make it impossible for the airplane to transmit if it was floating.

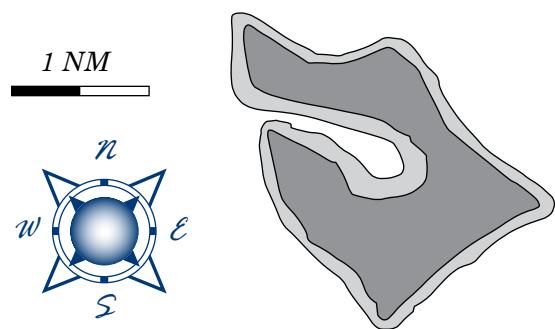
The *Itasca*'s captain, Commander Warner K. Thompson, later wrote in his official report, "This ... was probably a faked message originating in



the Hawaiian Islands. However, Howland, on night 4 July, did get a bearing on some signal." But there's more to it than that – much more. When the "281" message is put in the context of the other signals being heard that night (see box p. 9), Thompson's dismissal makes little sense.

But if Earhart and Noonan were on an island and calling for help why were they playing games with cryptic phrases? If they were on Gardner Island why not transmit, "We're on Gardner Island, Gardner, Gardner, Gardner" or, if they didn't know the island's name, could not Master Navigator Noonan have easily established their latitude and longitude? Yes and no. Noonan could have accurately determined his latitude using just his octant and almanac. Inding longitude, however, requires precision timekeeping and Noonan's chronometer(s) had not been corrected since before he departed Lae, New Guinea. Remember also that Noonan had failed to find Howland and probably wasn't sure why. Following the only logical recourse – running down the Line of Position – had brought them to an island which should be Gardner, but was it? Unfortunately, having a map of the island would have only increased his doubts.

Randy Jacobson has recently established that the only map of Gardner Island available in the U.S. in 1937 was wildly inaccurate. If Fred Noonan had taken the trouble to equip himself with a chart which showed the shape of various Pacific islands near their route of flight he would have expected Gardner Island to look like this:



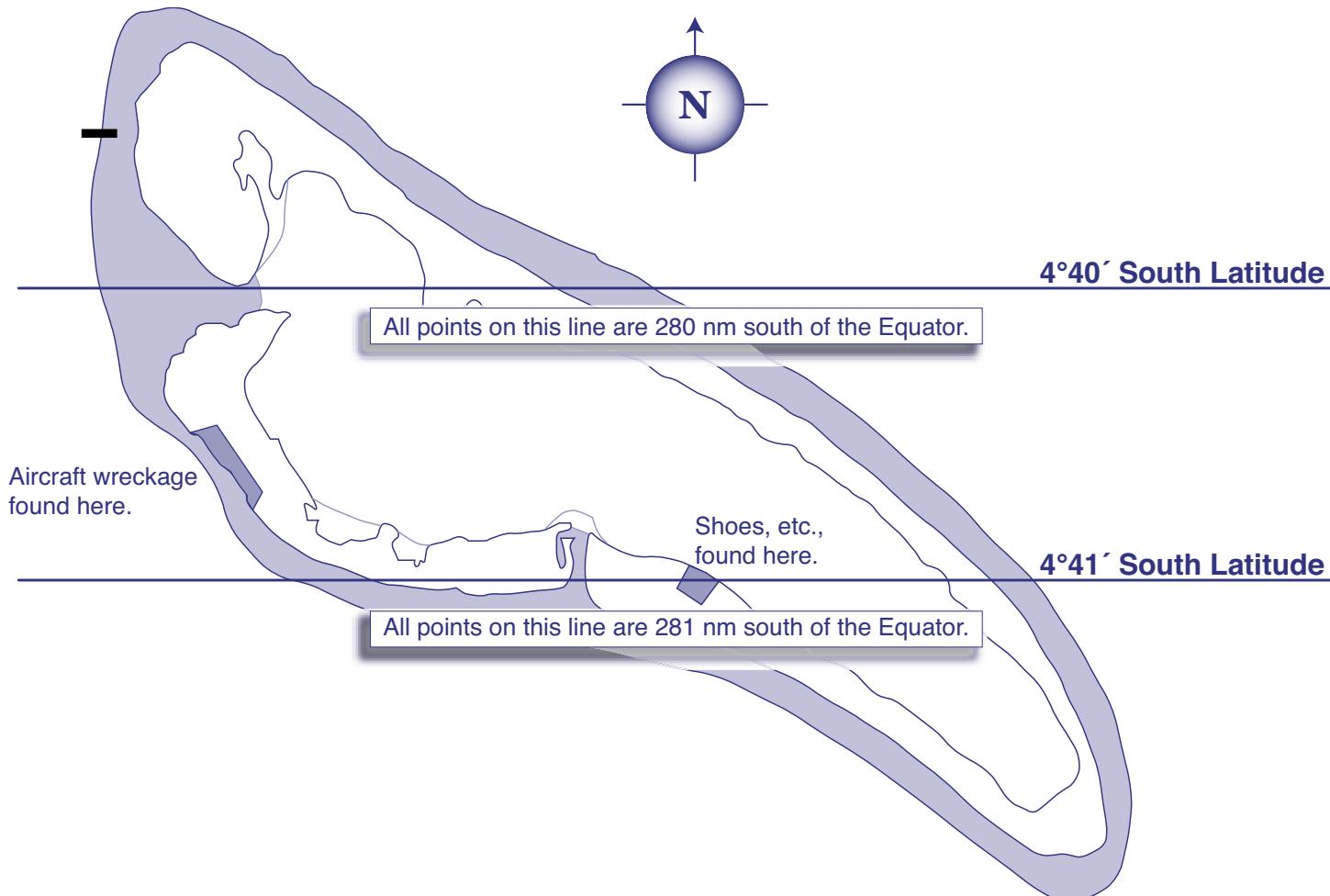
Without faith in the precision of his chronometer, and lacking an accurate depiction of the island's shape, the only position information he could establish with certainty was his latitude. By using his octant to find the sun's highest elevation above the horizon at his location, and looking up that number for that date in his almanac, he could know within very close tolerances that he was somewhere along a line parallel to, and so many nautical miles from, the Equator. If, for example, Fred Noonan was standing on Gardner Island – let's be more specific: if Fred was standing in the very spot where TIGHAR found the remains of what we believe is one of Amelia's shoes and a heel from one of his shoes, he would find that he was standing at exactly $4^{\circ}41'$ South Latitude. (See map below.) A degree of latitude equals 60 nautical miles and a minute of latitude equals one nautical mile. In other words, the only sure position information he could get was that he was 281 miles from the Equator.

Suddenly the message heard by U. S. Navy Radio Wailupe becomes very interesting. We know that the Navy believed the message to be

genuine at the time and, given the various signals being heard that night, it's easy to see why. However, their interpretation of the fragmentary phrases as meaning that the airplane was 281 miles north of Howland Island was based upon the incorrect assumption that the airplane could transmit if afloat. If we are to accept their subsequent conclusion that the message was a hoax we must also accept that it was perpetrated by someone who:

- Knew Earhart's frequency.
- Knew Earhart's call sign.
- Knew that neither she nor Noonan was adept at Morse code.
- Picked the number 281 by chance. (What number did you pick? If it was 281 you should be playing the lottery instead of reading *TIGHAR Tracks*.)

Every place is "281 north" of someplace, but 281 nautical miles north of the "shoe site" on Nikumaroro is the Equator – the only thing to which Noonan could accurately measure a distance. Nikumaroro is also the only place



in the Central Pacific where you can stand on land and be 281 nautical miles north or south of the Equator.

Taken in the context of all the available evidence, it now appears more reasonable to accept the 281 message as probably legitimate than to dismiss it as a hoax. That presents us

with the staggering prospect of a credible, if badly garbled, communication from Earhart and Noonan while they are at Nikumaroro. If we can make reasonable observations about the possible meaning of the rest of the message it may yield clues about what happened to the airplane and help us find the rest of it when we return to the island.



THE FOURTH OF JULY, 1937

All times have been converted to Greenwich Civil Time (as it was known then) to avoid confusion. Locally it is late evening on July 4, 1937. All of the following events are taken directly from official logs recorded at the time. All reported receptions are on Earhart's nighttime frequency of 3105 KC.

06:30 GCT KGMB in Honolulu, the most powerful commercial station in the Pacific, sends out a blind transmission to "Earhart plane" asking for four long dashes in response. Pan American Airways at Mokapu, Oahu immediately hears four dashes and takes a bearing of 213° (which passes near Gardner Island). The four dashes are also heard by U.S. Coast Guard Hawaiian Section. Oahu is 1,830 nm from Gardner Island.

06:38 GCT Pan American Airways at Midway Island (over 2,000 nm from Gardner) hears a very poor quality signal in which a man's voice is "distinctly heard but not of sufficient modulation to be understood or identified." A bearing of 201° (passing far to the west of Gardner Island) is taken but "the signal was of such short duration that it was impossible to narrow it down properly."

06:50 GCT Baker Island hears "NRUI from KHAQQ" ("Itasca from Earhart") in voice at Signal Strength 4 (on a scale of 1-5) and Readability 7 (on a scale of 1-9). The reported quality of reception leaves no doubt that this was a strong and clearly intelligible signal. Baker, at 310 nm, is the closest station to Gardner Island.

07:00 GCT KGMB repeats its request for four dashes. U.S. Navy Radio at Tutuila, American Samoa (650 nm from Gardner) immediately hears four sets of four dashes in reply.

09:06 GCT Howland Island hears Earhart calling the *Itasca*. Howland Island is 350 nm from Gardner.

09:07 – 09:23 GCT *Itasca* hears "a man's voice" but cannot make out the words. At this time *Itasca* is at sea about 430 nm from Gardner.

10:10 GCT Upon learning of the dashes heard in Hawaii and that Howland and Baker have been receiving clear signals from Earhart, *Itasca* orders radioman Cipriani on Howland to "get the direction finder in operation."

11:05 GCT Pan Am Midway hears another signal and takes a bearing of 175° (passing near Gardner Island).

11:30 – 12:30 GCT U.S. Navy Radio at Wailupe, Oahu hears the "281" message.

12:05 GCT Cipriani on Howland uses the high-frequency direction finder to take a bearing on "a weak carrier" either NNW or SSE of Howland. He couldn't be more specific than that because the experimental unit could only give him a line, not a direction, and incredible as it sounds, he had only a pocket compass with which to assign that line an azimuth. North-northwest of Howland is nothing but open ocean for thousands of miles. Just 350 nm to the South-southeast lies Gardner Island.

12:23 – 12:36 GCT Pan American Airways at Wake Island takes a "reasonably accurate" bearing of 144° on a signal of which the operator later said in his official report, "While no identification call letters were distinguished ... I was positive at that time that this was KHAQQ ... At this date (July 10, 1937) I am still of this opinion." The bearing passes near Gardner Island.

