

Earhart Plane Must Be on Land to Send Radio Signals, Says Air Expert

**TAYLOR DOUBTS
SHIP, IN WATER,
COULD USE SET**

**Test Pilot Wonders Why
Noonan Doesn't Give Posi-
tion More Definitely.**

THINKS HE MAY BE HURT

**Also Wonders at Use of Voice
Instead of Code—Trans-
mitter Powerful.**

If the faint radio signals being picked up in the South Pacific are indeed from Amelia Earhart's plane the fact is in itself a pretty conclusive indication that Miss Earhart and Captain Fred J. Noonan, her navigator, are down on reef or atoll rather than at sea, James B. Taylor, aviation expert and test pilot, said today.

"Were Miss Earhart's Lockheed-Electra in the water," Mr. Taylor explained, "it would almost certainly be awash—the weight of the engines would pull it down by the nose and the only thing that would keep it afloat would be the empty gasoline tanks. It is hard to say how long the plane might remain above the surface under such circumstances—indeinitely, perhaps, in a calm sea.

"But it would be virtually impossible, so far as I can see, to operate the radio under these circumstances. Were the plane ashore, though, the radio could be operated by running the motor—600 revolutions would give power enough."

Fraction of Power.

Six hundred revolutions a minute are only a small fraction of the plane's maximum power.

Mr. Taylor "could not understand" why the Earhart plane had been unable to give its position in latitude and longitude instead of such vague directions as "281 north Howland." He pointed out that even were the plane's chronometer damaged in the landing Captain Noonan should have been able to estimate his position fairly accurately by the sun.

"Perhaps something has happened to him," he hazarded. "I don't think she knows navigation."

This possibility, he thought, might explain why the Earhart plane has been sending out voice signals rather than code.

"I don't know whether she can send code or not," he said. "However, there must be a code book in the plane, and you would think she could get it out, slowly. It is very puzzling. She should be getting more range, too."

Mr. Taylor considered, reluctantly, the distressing chance that the signals were not the work of Miss Earhart at all, but of some amateur, with a twisted mentality.

Kept Right Along.

"Do you suppose they could be faked?" he asked. "It seems unbelievable . . ."

That the signals have been received more clearly at a distance than by vessels in the area being searched Mr. Taylor attributed to "skip," a common phenomenon.

"You get that right along," he said. "There are times when you can pick up Richmond here much better, for instance, than they are getting it in Washington."

Engineers of the Western Electric Co., which installed the radio equipment in Miss Earhart's plane, said the ship is equipped with the latest "type 13" transmitter, similar to that used by Dick Merrill and Jack Lambie on their recent round-trip transatlantic hop.

Merrill and Lambie were able to maintain direct communication between their plane and Newark Airport until they were within 100 miles of the Irish coast, a distance of approximately 1,700 miles.

This transmitter, used in most of the commercial transport planes in the United States, operates on 3,105 kilocycles and 6,210 kilocycles for voice or telegraph code transmission. In addition, it is provided with a 500-kilocycle frequency for radio telegraph transmission to ships at sea and marine coastal stations. The transmitter has an output of 50 watts, and is provided with the usual storage battery, plus an auxiliary battery, both of which can be charged by the plane's engine-driven generator equipment.