

MARK II B
DRIFT SIGHT

NEW YORK HERALD TRIBUNE, SUNDAY, MARCH 7, 1937

Learn How Vidal's Successor Will Treat His Policies

As Amelia Earhart Makes Preparations for Her Round-the-World Flight



Above, left, in the chart room of the Electra, "The Flying Laboratory," with Navigator Harry Manning. Above, right, her complete baggage for the flight. The suitcase in her hand contains her clothing, while the case beside her holds charts arranged for quick reference. Right, the pilot smiles through a Bendix direction finder

Complete Navigation Room Ready to Guide Miss Earhart

Countless Last Details on Plane and Over World Route Being Checked to Await Take-Off; Supplies 'Spotted' Along Her Course

Special to the Herald Tribune

BURBANK, Calif., March 6.—"What does a round-the-world flyer think about?"

When asked that question, Amelia Earhart, poised in California for a hop across the Pacific to Australia and beyond, just grinned.

"If, as and when I get back" she countered good-naturedly, "perhaps I'll be able to answer—although probably I wouldn't even if I could." "But," she added, "if you want to discuss what one who plans a 27,000-mile flight has to think about, it's not an uninteresting subject—to me, at least."

Miss Earhart added that even before the inquiring reporter indulged in much inquiry he'd do well to look around a bit. He did.

These days the Lockheed Electra plane alternates between preparation in the hangar of Paul Mantz, who is Miss Earhart's technical adviser, and periodic test flights. On the ground or in the air the biplane fairly swarms with technicians and mechanics tinkering with the thousand and one details of its complex equipment.

On her previous Pacific flight, Miss Earhart's voice messages carried over 2,000 miles. A few days ago Commander Clarence Williams brought to the field a box of aeronautical students using them for main power to move the big Electra about on the compass rose until all its compasses there are three of them were properly swung. Which means checked, exactly and re-ordinated.

"And just what are you yourself doing?" Miss Earhart was asked.

"Plenty!" Illustrating that answer the aviator offered an informed pre-



parately, typhoid injections and smallpox inoculations are among the personal requisites of long-range flying.

Takes Walking Boots

"Sporing of personal matters, what about your own equipment? And your feet?"

for vital mechanical parts is important. Also, ropes to tie the ship down, and staves to tie it to a parachute already waits at Paul Mantz. It would be wasted waiting over the Pacific. Preparation of the extra-long runway at Oakland.

CREDITS: AVCHISON COUNTY HISTORICAL MUSEUM
CREDITS: SAM KAHALEWAI

CREDITS: SAM KAHALEWAI

cher of 142. no Com-60 to n the s from ed away rough removed, O, How-British American The the map inused. official

Above, left, in the chart room of the Electra, "The Flying Laboratory," with Navigator Harry Manning. Above, right, her complete baggage for the flight. The suitcase in her hand contains her clothing, while the case beside her holds charts arranged for quick reference. Right, the pilot smiles through a Bendix direction finder

Complete Navigation Room Ready to Guide Miss Earhart

Countless Last Details on Plane and Over World Route Being Checked to Await Take-Off; Supplies 'Spotted' Along Her Course

Special to the Herald Tribune

BURBANK, Calif., March 8.—"What does a round-the-world flyer think about?"

When asked that question, Amelia Earhart, poised in California for a hop across the Pacific to Australia and beyond, just grinned.

"If, as and when I get back" she countered good-naturedly, "perhaps I'll be able to answer—although probably I wouldn't even if I could." "But," she added, "if you want to discuss what one who plans a 27,000-mile flight has to think about, it's not an uninteresting subject—to me, at least."

Miss Earhart added that even before the inquiring reporter indulged in much inquiry he'd do well to look around a bit. He did.

These days the Lockheed Electra plane alternates between preparation in the hangar of Paul Mantz, who is Miss Earhart's technical adviser, and periodic test flights. On the ground or in the air the big ship fairly swarms with technicians and mechanics, tinkering with the thousand and one details of its complex equipment.

both cockpit and cabin. On her previous Pacific flight, Miss Earhart's voice messages carried over 2,000 miles.

A few days ago Commander Clarence Williams brought to the field a bevy of aeronautical students using them for man power to move the big Electra about on the compass rose until all its compasses—there are three of them—were properly swung. Which means checked exactly and co-ordinated.

"And just what are you yourself doing?" Miss Earhart was asked.

"Plenty!" Illustrating that answer the aviatix offered an informal pre-



Incidentally, typhoid injections and smallpox inoculations are among the personal requisites of long-range flying.

Takes Walking Boots

"Speaking of personal matters, what about your own equipment? And your feet?"

↑ SWUNG COMPASS ↑

↓ DRIFT SIGHT ↓

Pioneer is another name for
mk II B drift sight

Two-Way Electric Voice

An arrangement has been devised to open the cabin door about four inches, where it is held rigidly in place. A Pioneer drift indicator is mounted for use looking down through this aperture, to check wind drift on the earth or sea below. For this work flares are used at night over water, smoke bombs in daylight.

Beside the chart table are mounted three chronometers, altimeter, air speed indicator and temperature gauge. All of which gives a skilled navigator about all he could wish to work with for determining course and location aloft.

A last-minute addition to navigational equipment is a Bendix direction finder, installed during the last week. Its "loop," carried on the outside of the ship just above the cockpit, is adjustable by the pilot so that it may be turned in any desired direction. In effect this uncanny device does with man-made radio emissions what a routine compass accomplishes with magnetic forces, in determining position and direction to a desired location.

Both navigator and pilot may utilize the two-way Western Electric voice and telegraph radio communication system with which the ship is equipped. Code transmitting is from both cockpit and cabin. On her previous Pacific flight, Miss Earhart's voice messages carried over 2,000 miles.

A few days ago Commander Clarence Williams brought to the field a bevy of aeronautical students using them for man power to move the big Electra about on the compass rose until all its compasses—there are three of them—were properly swung. Which means checked exactly and co-ordinated.

"And just what are you yourself doing?" Miss Earhart was asked.

"Plenty!" Illustrating that answer the aviatrix offered an informal preview of her maps—dozens of them. "Merely assembling these, getting information on fields, weather condi-

explained. "But, it's sensible to be prepared all the way. Which of them I will 'leap frog' depends upon weather, on mechanical matters and even on the feelings of the pilot.

"By the way," she continued, "in all this preparation we've been fortunate in having the help of an old friend of ours, the Viscount Jacques de Sibour. He and his wife, the former Violette Selfridge, have cruised in their own planes over much of the territory I hope to traverse. He is connected with the Standard Oil Company of New Jersey, which has generously co-operated in 'spotting' our supplies."

Another matter to be thought about, it developed, is governmental permissions. Even a lone woman flyer—or perhaps, especially, one—has to have all sorts of permits and official advance arrangements, particularly in these troubled times. Incidentally, typhoid injections and smallpox inoculations are among the personal requisites of long-range flying.

Takes Walking Boots

"Speaking of personal matters, what about your own equipment? And your food?"

"If you mean clothes, one of my own small light suitcases will carry all I'll take." Miss Earhart replied. "Once I crossed the Atlantic with only a toothbrush. This time there'll be a few luxuries like spare slacks and clean linen."

The woman pilot's usual flying togs comprise twill slacks, sport shirt and scarf, plus a leather windbreaker, their color almost always some tone of brown. She will carry a light over-all flying suit—never a hat. In the plane she'll wear light, low shoe. And this time she's taking along a pair of heavy, high walking boots, "just in case," as she puts it.

Other emergency items include a light land compass, waterproof match box, knife, small ax and canteen. In the fuselage will be a two-man rubber lifeboat, instantly in-

Other items? There are plenty of them.

A, for instance, specially made covers of Gifnell cloth for propellers and engines. There there are no hangars dust and weather protection for vital mechanical parts is important. Also, ropes to tie the sh down, and stakes to tie it to parachute already waits at Po Darwin. It would be wasted weight over the Pacific. Preparation of a extra long runway at Oakland, at last minute word about the emergency landing field just created a Howland Island.

With most of this accomplished so far as such things can be arranged in advance, these last days will be devoted to shakedown flight and final testing; also to co-ordinating all arrangements at flight headquarters at Oakland Airport. There W. T. Miller, of the Department of Commerce, is working with Pan American Airways, the Navy and the Coast Guard, all of which are co-operating.

For a fortnight complete "weather maps" of the Pacific have been compiled daily. When plane and pilot are ready, one such map that satisfactory—or at least acceptable—will come through. Then the pioneer air adventure will start, after Lockheed inspectors have made one final, unmistakable check of the ship fittings to allereons.



↓ RDP ↓

Two-Way Electric Valve

An arrangement has been devised to open the cabin door about four inches, where it is held rigidly in place. A Pioneer drift indicator is mounted for use looking down through this aperture, to check wind drift on the earth or sea below. For this work flares are used at night over water, smoke bombs in daylight.

Beside the chart table are mounted three chronometers, altimeter, air speed indicator and temperature gauge. All of which gives a skilled navigator about all he could wish to work with for determining course and location aloft.

A last-minute addition to navigational equipment is a Bendix direction finder, installed during the last week. Its "loop," carried on the outside of the ship just above the cockpit, is adjustable by the pilot so that it may be turned in any desired direction. In effect this uncanny device does with man-made radio emissions what a routine compass accomplishes with magnetic forces, in determining position and direction to a desired location.

Both navigator and pilot may utilize the two-way Western Electric voice and telegraph radio communication system with which the ship is equipped. Code transmitting is from both cockpit and cabin. On her previous Pacific flight, Miss Earhart's voice messages carried over 2,000 miles.

A few days ago Commander Clarence Williams brought to the field a bevy of aeronautical students using them for man power to move the big Electra about on the compass rose until all its compasses—there are three of them—were properly swung. Which means checked exactly and co-ordinated.

"And just what are you yourself doing?" Miss Earhart was asked. "Plenty!" Illustrating that answer the aviatrix offered an informal preview of her maps—dozens of them. "Merely assembling these, getting information on fields, weather conditions, servicing facilities, has taken months. And now Commander Williams has just finished another month's work laying out the courses. It's **VERY A VERY TIGHTY JOB.**"

On previous long-distance flights, the woman flyer has developed her own technique of maps for use in the air. Clearness and simplicity are the key requisites. For each flight the compass course, with its hourly or periodic changes, is set down. The distances also are shown, and the estimated elapsed time between specific points, based on a predetermined minimum cruising speed.

In addition to the charts themselves, one of them is always spread out on the pilot's knees, the "vital statistics" of each portion of the flight are recorded in compact memoranda for easy reference. One of several clocks, by the way, is set at "zero" at the start, so that it records the elapsed time in the air for that particular flight.

Husband Helps Expedition

"What about fuel and supplies at stopping points?"

"We've tried to cover all that," Miss Earhart replied. "Mr. Putnam (George Palmer Putnam, her husband) has had much experience in expedition organization. I think he has had a lot of fun—and some grief—in working out the arrangements."

Specified amounts of gasoline and oil are now on hand at over thirty points on the 27,000 mile course, with a representative in charge at each. Extra engine parts are "spotted" at strategic places and expert mechanical aid arranged.

"Doubtless there are many places on the existing itinerary at which it actually will not stop," Miss Earhart

explained. "But, it's sensible to be prepared all the way. Which of them I will 'leap frog' depends upon weather, on mechanical matters and even on the feelings of the pilot."

"By the way," she continued, "in all this preparation we've been fortunate in having the help of an old friend of ours, the Viscount Jacques de Sibour. He and his wife, the former Violette Selfridge, have cruised in their own planes over much of the territory I hope to traverse. He is connected with the Standard Oil Company of New Jersey, which has generously co-operated in 'spotting' our supplies."

Another matter to be thought about, it developed, is governmental permissions. Even a lone woman flyer—or perhaps especially one—has to have all sorts of permits and official advance arrangements, particularly in these troubled times. Incidentally, typhoid injections and smallpox inoculations are among the personal requisites of long-range flying.

Takes Walking Boots

"Speaking of personal matters, what about your own equipment? And your food?"

"If you mean clothes, one of my own small light suitcases will carry all I'll take," Miss Earhart replied. "Once I crossed the Atlantic with only a toothbrush. This time there'll be a few luxuries like spare slacks and clean linen."

The woman pilot's usual flying togs comprise twill slacks, sport shirt and scarf, plus a leather windbreaker, their color almost always some tone of brown. She will carry a light over-all flying suit—never a hat. The plane she'll wear light, low shoes. And this time she's taking along a pair of heavy, high walking boots. "Just in case," as she puts it.

Other emergency items include a light land compass, waterproof match box, knife, small ax and canteen. In the fuselage will be a two-man rubber lifeboat, instantly inflatable from capsules of carbon dioxide. Likewise a Very pistol for firing distress signals, flares that ignite on the surface of the water, and, as she says, "a very orange" orange kite.

"If we sit down somewhere in the Pacific and stay afloat, I'd like to be noticed," says Miss Earhart.

Tomato Juice a Standby

As another safety precaution—or at least an aid in case of forced landing at sea or in jungle or desert—the top of the plane's wings are having stripes of black, orange and red painted on them to increase visibility for possible searching aircraft. The blue-gray of the Electra's unpainted metal is difficult to see against neutral backgrounds.

Miss Earhart will carry her usual food supplies. Tomato juice is her favorite standby. Her technique is to punch a hole in a can with an abbreviated ice-pick gadget, insert a straw and, as she says, "let nature take its course."

There will be thermos bottles of hot cocoa and a reserve emergency supply of concentrated food, its mainstay milled milk tablets. Raisins and chocolate complete the larder. Two desert water bags will carry water, plus a canteen.

A unique item in the pilot's equipment is a "battery" of sun glasses that have been made up especially for her. Miss Earhart reckons fatigue as a pilot's greatest problem on any long flight, and especially one sustained for many days. A vital aspect of physical and mental fatigue, she has found, is eye strain.

Other items? There are plenty of them.

As, for instance, specially made covers of Girdell cloth for propellers and engines; there there are no hangars dust and weather protection for vital mechanical parts is imperative. Also, ropes to tie the ship down, and slacks to tie it to. A parachute already waits at Pe Darwin—it would be wasted weight over the Pacific. Preparation of a extra long runway at Oakland, at last minute word about the emergency landing field just created at Howland Island.

With most of this accomplished, so far as such things can be arranged in advance, these last days will be devoted to shakedown flights and final testing, also to co-ordinating all arrangements at flight headquarters at Oakland Airport. There W. T. Miller, of the Department of Commerce, is working with Pan American Airways, the Navy and the Coast Guard, all of whom are co-operating.

For a fortnight complete "weather maps" of the Pacific have been compiled daily. When plane and pilot are ready, one such map that is satisfactory—or at least acceptable—will come through. Then the pioneer air adventure will start, after Lockheed inspectors have made one final, mistaking check of the ship from engines to allerons.

CREDITS: END WILLIAMS and SCHLESINGER LIBRARY, RADCLIFFE COLLEGE

Amelia, left, and Anita King Lee, one of the singing King sisters, in Oakland. Anita was taking flying lessons the day she met Amelia at the airfield.



CREDITS: FOREST M. JOHNSON, "IRON HAWK"

Amelia, My Courageous Sister

Biography of Amelia Earhart • True Facts About Her Disappearance

by
Muriel Earhart Morrissey
and
Carol L. Osborne

ge
1
7
19
23
29
37
41
49
59
69
81
95
09
23
31
51
65
93
49
67
99
10