

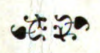
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U.S. AIR SERVICES

Bright Outlook
for the
Advancement
of
Aeronautics

Civil and Military



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U. S. AIR SERVICES



Of aircraft Rudyard Kipling wrote: "We are at the opening verse of the opening page of the chapter of endless possibilities." The purpose of this publication is to provide inspiring and truthful pages for that "chapter of endless possibilities." This magazine is devoted to aerial development in America, birthplace of the flying machine, home of Wilbur and Orville Wright, who wrote the first flawless line of that opening verse.

The Cruise of the "Josephine Ford"

8,604 Miles Around the United States in the Famous North Pole Airplane

DONALD EDWARD KEYHOE

Manager, Byrd Plane Tour

PAST the windows of the *Josephine Ford* drove a blinding snow, hiding the tips of the huge wing, and transforming the sky into a gray-white world through which we roared at ninety miles an hour. An appropriate setting for the famous North Pole plane, perhaps, but not particularly cheering to its occupants. For this was nowhere near the North Pole, but instead a rather indefinite point on the aerial path from Denver to Cheyenne.

Twenty long minutes had passed since the *Josephine Ford* had poked her nose upward into the thickening snow to escape the steadily rising ground ahead. Somewhere—not so very far beneath us—lay that same ground. Also, somewhere off to the left lay a mountain, according to the chart. At least, it was my earnest hope that it lay off to the left. And, supposedly, ahead of us lay Cheyenne, the eighteenth scheduled stop of the Byrd Plane tour for promoting aeronautics.

In the pilots' compartment up forward sat Floyd Bennett and Bernt Balchen, our pilot and our navigator. With the earnestness of two professors in mathematics working on an interesting problem, they kept up a continuous inspection of airspeed meter, turn indicator, compass, inclinometer and clock. The problem in this case consisted of three parts: First, to *keep* the ground beneath us; second, to turn a cold shoulder to the mountain; and finally, to arrive on time at Cheyenne. Particularly to arrive—whether on time or not. Back of these two aerial mathematicians four of us maintained an attitude of watchful waiting.

Mechanician McPhail for once had abandoned his customary afternoon doze and was gazing alertly ahead from his panel window. Similarly, Mr. Kunkel, the representative of the Daniel Guggenheim Fund, alternated his glance from the swirling snow to the hand of the altimeter. The cameraman had long since ceased to be interested in taking pictures. Lastly, I was recalling with great vividness a dark night in far-off Guam, when the Pacific Ocean had greeted my *F-5-L* with entirely unnecessary fervor.

As the clock showed the twenty-fifth minute of "blind" flying, the drone of the motors lessened slightly. At a barely perceptible angle the airplane nosed downward under Bennett's hands. Seconds passed, and gradually the area below us grew darker. This meant we were nearing ground, I recalled, with a certain lively interest as to the degree of proximity indicated. Two seconds more, and the snow clouds dissolved abruptly, leaving us in clear air. Directly beneath the *Josephine Ford* lay the city of Cheyenne.

AT this irrefutable evidence of perfect navigation, I felt a quick shame for my momentary disquiet. We had never yet been off our course, since the moment of taking off at Washington on October 7. Why should I have supposed this flight would be different? Even before our wheel-brakes brought us to a stop upon the Air Mail field, I was busy with a vision of a similar flight in the future.

But instead of seeing the slightest trace of





Frederick photo.

THESE MEN WILL GO DOWN IN HISTORY FOR THEIR PIONEER WORK
IN COMMERCIAL AVIATION

For those whose jaded senses require new joys, the author recommends an aerial transcontinental tour of this country

anxiety, such as existed in the cabin of the *Josephine Ford*, I visualized a score of undisturbed aerial travelers, seated in a luxuriously equipped and heated air transport, idly glancing up from their magazines to look for a moment out into the scurrying snow. For with the addition of such safeguards as radio beacons and guides, and the perfection of devices for "blind" flying, the air passenger of tomorrow will give no more thought to the pilot who heads his plane into a fog or snow storm than the railway traveler of today gives to the engineer who peers ahead into the mists along his track.

With the touching of our wheels at Cheyenne, the *Josephine Ford* had completed 2,815 miles of its 8,604-mile journey across the United States. Up to this time, in spite of the fact that not one member of the crew had ever flown over these airways, there had not been the least difficulty in navigation.

Flying straight compass courses in every case, Bennett and Balchen had invariably scored direct hits on each city scheduled, and this without any guide pilots, or aids other than ordinary naviga-

tional equipment. Single-motor escort planes sent out to meet us often missed us entirely, as they followed circuitous routes, whereas we went on the theory that the shortest distance between two points is a straight line. The presence of our three motors made such short cuts possible, even over bad country.

The purpose of our tour, as previously mentioned, was to promote interest in aeronautics, particularly commercial aviation. The flight was organized and sponsored by the Daniel Guggenheim Fund for the Promotion of Aeronautics, with the cooperation of the Department of Commerce. The National Aeronautic Association also aided in establishing contacts along the route. The tour was made possible through the generosity of Comdr. Richard E. Byrd, who donated the famous Fokker monoplane as an indication of his interest in commercial aeronautics. Floyd Bennett, Commander Byrd's companion on the Polar Flight, was chosen for pilot, as the people would listen more readily to the words of a man who had achieved such success in flying. The backers of the tour believed that the

display of the historic Polar Plane in the capacity of an ordinary transport would be a weighty demonstration of the reliability of air travel.

Encircling the rim of the United States on perfect schedule time would greatly advance the cause of aviation. It would prove that this and similar types of airplanes were capable of regular, efficient service—that the air awaited the will of the

people. "Mountains are levelled and oceans bounded by the slender force of human beings."

THE final success of the tour shows that there is no need for the long, elaborate planning periods usually given to such flights. Decision to make the trip was reserved until twelve days before the departure. Actual plans, make-up of itinerary, securing of maps, and other necessary arrangements were not begun until three days later. The *Josephine Ford* was then removed from a store where it was being displayed, and was put in condition for her nation-wide journey. Except for a general touching up, however, and the substitution of cylinders with more cooling surface, seats for gas tanks in the cabin, and wheels for skis, the plane that toured the country was the same airplane which circled the top of the world.

The following stops were listed:

New York	Reno
Albany	San Francisco
Syracuse	Los Angeles
Rochester	San Diego
Buffalo	Tucson
Cleveland	El Paso
Columbus	Fort Worth
Cincinnati	Dallas
Indianapolis	Shreveport
Chicago	Little Rock
Milwaukee	Memphis
St. Louis	Monroe
Kansas City	New Orleans
St. Joseph	Birmingham
Omaha	Atlanta
Denver	Augusta
Cheyenne	Raleigh
Salt Lake City	Richmond
Elko	Washington

This number was later swelled to forty-five to include gas or luncheon stops at Muncie, North



THIS LITTLE MISS IS DEFINITELY FOR COMMERCIAL AVIATION

In ten years this article will seem quaint to her

Platte, Rock Springs, Sacramento, Bakersfield, Abilene and Pensacola. To take care of any unusual weather, several days were allowed for stopovers at Chicago, Salt Lake City, San Francisco, Los Angeles, and New Orleans. Only one of these days was necessary for that purpose, and had our arrival dates not been announced ahead of us, we could have pushed on and

completed the tour at least eight days sooner. As it was, we arrived in Washington three days ahead of time, by omitting one city where the landing conditions were doubtful, and by flying on two Sundays. This was done so that the crew could be at home on Thanksgiving Day.

LONG before the tour was well begun we had ceased to doubt the success of the actual flight. Most of our worries concerned such matters as making speeches, giving radio talks, inspecting airport sites, keeping in touch with Mr. Kusterer, our advance man, and trying to get a little sleep in between packing and unpacking at hotels.

Flying was a relief. For as soon as our wheels left ground we could sleep or catch up on ever-present expense accounts, reports and other correspondence. The business man who considers it a sin to waste a single second of time should travel by air in a modern plane. The air is usually steady at regularly traveled altitudes, and writing by hand or by typewriter is much easier than on the smoothest running train. During the 104 hours we spent in the air, Mr. Kunkel and I pounded out not less than 150,000 words of typewritten matter. There was only one time when we were forced to suspend operations. This was during our flight from Dallas to Shreveport, when our low flying brought us into contact with an unruly Texas wind. After writing printers' pi for two or three minutes, and diving into the aisle several times after the typewriter, I gave up and substituted reading for a pastime.

At the beginning of our journey we had outlined certain methods for explaining commercial aeronautics, but within a day or two we found it necessary to change our plans. Most of the people to whom we had talked were "un-airminded," if there is such a word. They were interested in



seeing the *Josephine Ford*, in meeting Floyd Bennett, but only vaguely in the subject of commercial aeronautics. They had many erroneous ideas of flight, and no one had taken the trouble to erase those impressions.

They still believed, for instance, that when the motor of a plane stopped it was bound for certain disaster. They still talked of "air pockets" as some dreadful, invisible snare awaiting the airman who was not perpetually on his guard. They believed that only those people immune to dizziness when looking down from the edge of a cliff could ever hope to qualify as flyers. In regard to this last, I might relate an incident of the tour showing the vast difference between the two sensations.

HAVING flown since 1919, I was naturally past the stage of being a stranger in the air and like all the rest of the crew I used to walk freely about the cabin of our ship. One morning, as we were passing over Niagara Falls, I unfastened the rear compartment door and looked out for a better view of the famous cataract. There was no change in my position—but the door was open. Yet I experienced immediately all the sensation of standing at the edge of a precipice, from which somebody was about to push me. I closed the door hastily, deciding not to repeat the experiment. Later, Bennett and others of the crew admitted the same sensation. Quite evidently it is a matter of psychology, of being able to imagine stepping forth into space, rather than actually being elevated to any

great height. Certainly, there is not the least similarity to the feeling had in flight, whether in open or cabin planes.

Many of those who inspected the Polar Plane were astonished to note the ease and comfort with which we traveled by air. After viewing the leather cushioned chairs, the wide-vision windows, and the roomy cabin in which we spent our time, almost everyone expressed a willingness to fly in such a plane. Their ideas of flying had been gathered from witnessing light airplanes going through the customary stunt performances at low altitudes, and from press reports of accidents.

It was not difficult to combat the effect of such newspaper publicity. We gave statistics of domestic and foreign commercial flying, particularly the excellent record of our own Air Mail, and pointed out that such things hardly constitute live news and are therefore generally unknown, whereas the one isolated crash will be headlined, just as a railroad wreck is given wide publicity.

An example of this occurred at one city on our tour, where an inexperienced pilot carrying two passengers in an old plane crashed through careless flying at a low altitude. The local press accounts were being written when we asked for the privilege of adding a few words. The city editors were willing, so we managed to insert the true explanation of the crash. We added that such accidents would be less likely when Department of Commerce regulations and traffic rules went into effect, and when the States realized the need for cooperat-

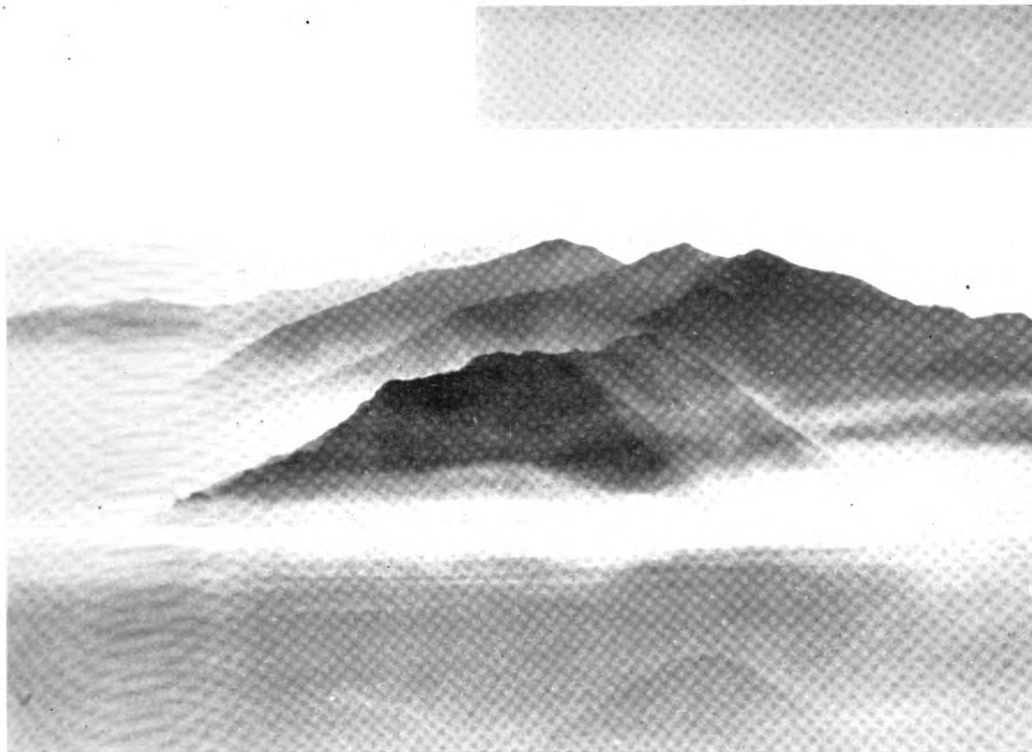
ing through uniform aeronautic laws.

The result was a boost for aviation, instead of the usual knock that follows every crash. Yet there was no white-washing—simply an accurate, true story of the entire matter. This matter of acquainting the people with aeronautics has been covered in a novel manner by Mr. J. Carroll Cone, State Auditor of Arkansas, and a former Army pilot. Mr. Cone has undertaken to make "pilots" of all newspaper men in Little Rock, and has even taught two young women to fly. The result is a better understanding of flying in Little Rock and nearby sections—



FAIR AND WARMER

Floyd Bennett increasing public interest in the airplane



FAIR AND COLDER

"Nature cannot be surprised in undress. Beauty breaks in everywhere"

though no disparagement of the women is meant by this apparent comparison with reporters as news broadcasters.

AS WE progressed, our enthusiasm for preaching airmindedness grew amazingly. Perhaps it was because we had become sold on commercial air travel. We had journeyed comfortably, had read, written, lunched and slept in our air cruiser, and with a great saving of time and energy. We had viewed our vast United States from the best vantage point possible, and there had not been a single disagreeable or startling moment to mar our pleasure and our appreciation. And because *we* were sold, it became easier to sell others.

Some disappointment was expressed that we were unable to tell of more thrills in connection with the tour. The absence of these thrills proved our contention—that commercial transportation by air is quite easy and practical. Thrills come from unexpected incidents, often perilous ones, and their presence would have defeated our ends. I can truthfully say that there was no motor or other mechanical trouble, nor any other difficulty except the flight through the snow mentioned at the beginning of this story.

Not that our trip was without interesting moments. It was packed with them, and for one whose jaded senses require new joys, I can recommend nothing better than an aerial transcontinental tour of this country. For the house-wife who is bored by never-ending cleaning, it will be a boon. We cleaned our cabin by the simple expedient of sliding open the windows and tossing out whatever of our cargo we decided was unnecessary. A certain amount of discretion was used, of course, such as choosing uninhabited sections for dropping of any heavy object. It may be that laws will soon cause such housecleaners to be met on landing by a policeman, or even chased down by an aerial patrolman, but we had no trouble. True, Mechanician McPhail learned through experience that it was unwise to put his head out of the rear window when the airplane was being emptied by means of the forward one. At another time, Mr. George Noville, a passenger for part of the tour, forgot that it was air etiquette to remove his glasses when looking out of the window, and the wind forcibly reminded him by tossing them far astern as we sped over the Arizona hills.

Then there was the moment when we passed the Air Mail plane while we were enroute from

Salt Lake City to Reno. It may have been that the pilot was lonesome, for there are few planes in that region. It may have been that the Western mail planes are so well-trained that they fly a straight course while the pilot dozes. Or it may only have been an example of true Western hospitality, and a desire to grip us by the hand—but at any rate, there was a second when it seemed that two rapidly moving bodies were about to defy physical laws by occupying the same space at the same time. The *Josephine Ford* sturdily stood its ground—

or air, if you wish, while I hoped that Bennett would not be too stubborn. Then, as if by common consent, both pilots executed right skid, and the man from the great open spaces was gone. I looked over at Kunkel. His lips were moving, perhaps in belated prayer, but I doubt it. McPhail was asleep. Fortune favors some of the Irish.

There were other incidents, such as dropping letters at cities, taking our turn at the controls, flying under a huge, oily, yellow-black cloud of forest fire smoke just out of San Diego, and by way of contrast, the affair of the stowaway at Fort Worth,



HEADING FOR DENVER FROM OMAHA

The Fokker plane completed its journey three days ahead of schedule

which story, incidentally no one yet has believed.

Some day people will smile at the quaint idea that this tour was considered unusual. They will be amused at this record, if it should still exist, as we would be amused at an account written by a passenger on the first transcontinental train, decades ago. But the tour has done its part toward promoting aeronautics. It has helped awaken cities to the need of airports, and to the value of the air mail. And no more fitting tribute could be paid the *Josephine Ford* than to have been assigned this duty as a climax to its list of achievements.

The Kiwi's Air—(Almost a Song)

LIEUT. DONALD DUKE, U. S. A.

SING a song of Kiwis
(Birds that do not fly)
Four and twenty reasons
Why their wings are shy.

When our paper's opened,
Scribes are wont to sing
Of falling planes in country lanes,
That drop without a wing.

For years they've fed the public
In headlines bold and black,
Fictitious tales of flyer's ails,
Veracity they lack.

The railway crossing's casuals
Don't interest any more,
But if a plane lands, due to rain,
It's news in every store.

So let's forget the antics,
The stunts required for test,
That in past years have taken
Our country's very best.

Winged harbingers of progress
Now are speeding night and day,
Yet a disillusioned public
Fears to profit in this way.

May the press then reconsider
All its stories of the air;
Let the beacon lights of progress
Prove fallacious all this scare.

Give the public facts, not fiction,
And inspire a lofty aim,
Lest the glory that was Nero's
Shall again be put to shame.

So sing a song of safety,
Let's start the New Year right,
Airworthy planes, supplanting trains,
When we have conquered fright.