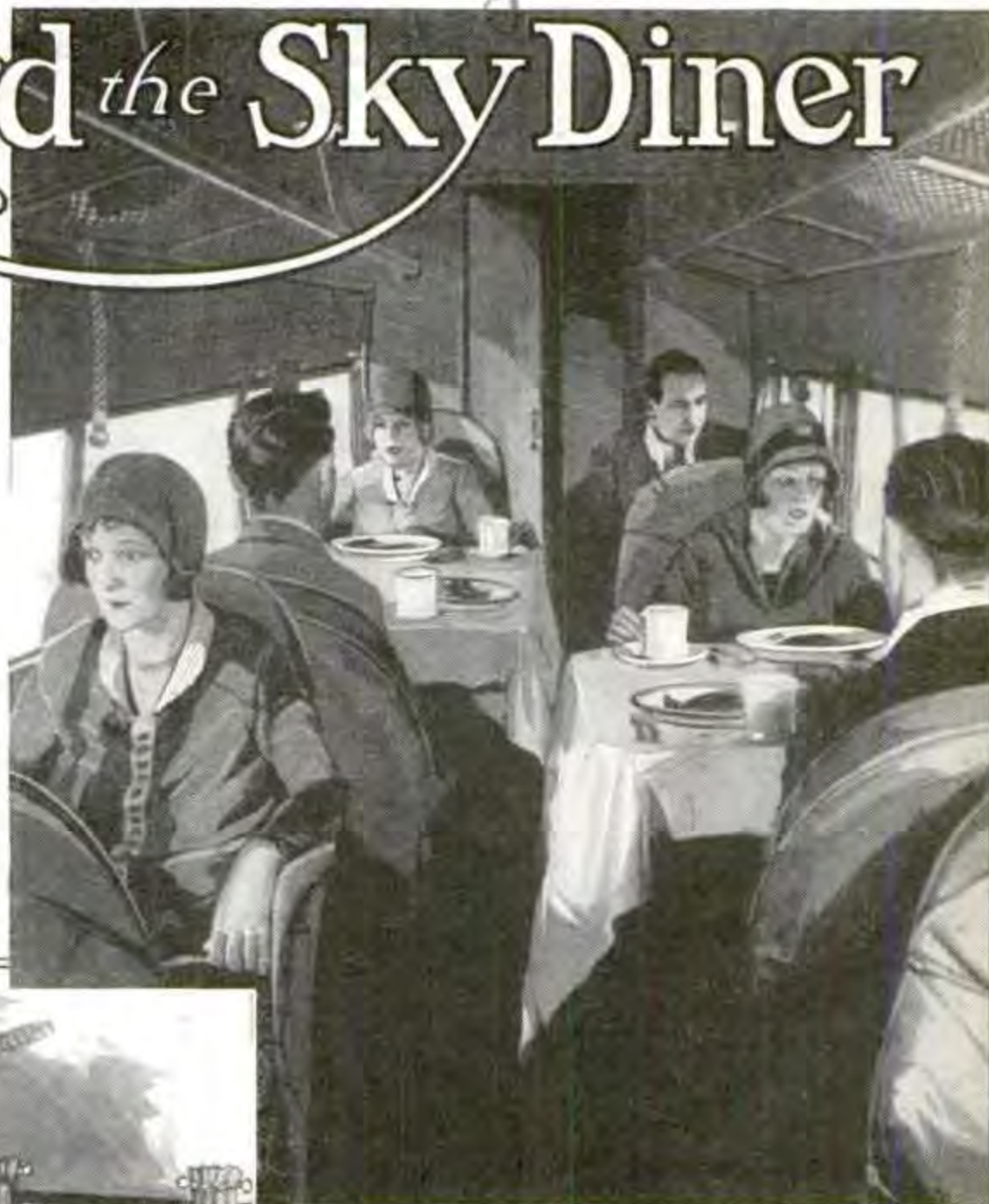


# Aboard *the* Sky Diner

"A BUSINESS man is not investing \$82,000 in an airplane, expecting it to crack up," declared William P. McFail, veteran pilot, who has spent more than 2,000 hours in the sky. He was talking of his latest position as chief pilot for the Universal Air lines on the Twin-City-Chicago route, as he sat at the controls of the new tri-motor Fokker in which hot meals are served to pas-



Dining in the Skies, and Sketch, Showing Method of Adjusting the Tables and the Chair Straps; the Plane Has a Permanent Desk for Writing

sengers—the big "sky diner" that has practically all the conveniences of a Pullman.

"This really isn't flying," he continued, recalling some of his earlier planes. He learned to solo after an hour and forty-five minutes in the air, but he doesn't recommend such speed to the youngster who wants a job as pilot today. "Flying means thrills and more action," he said. "I like to get into a smaller ship, something like that slick Lockheed-Vega over there. It will do 170 miles an hour and a few stunts on the side, but, of course, aviation wasn't planned just for the fun of the pilot. This is the day of sky travel. Why, they're already planning a bigger ship than this. The next step is a four-motored, thirty-two passenger, sixteen-berth sleeping-car plane. The motors will have 2,100 horsepower. You see, the flying idea of the day is for bigger size as well as greater speed. These big planes are just air busses, and the pilot—well, may be you can call him



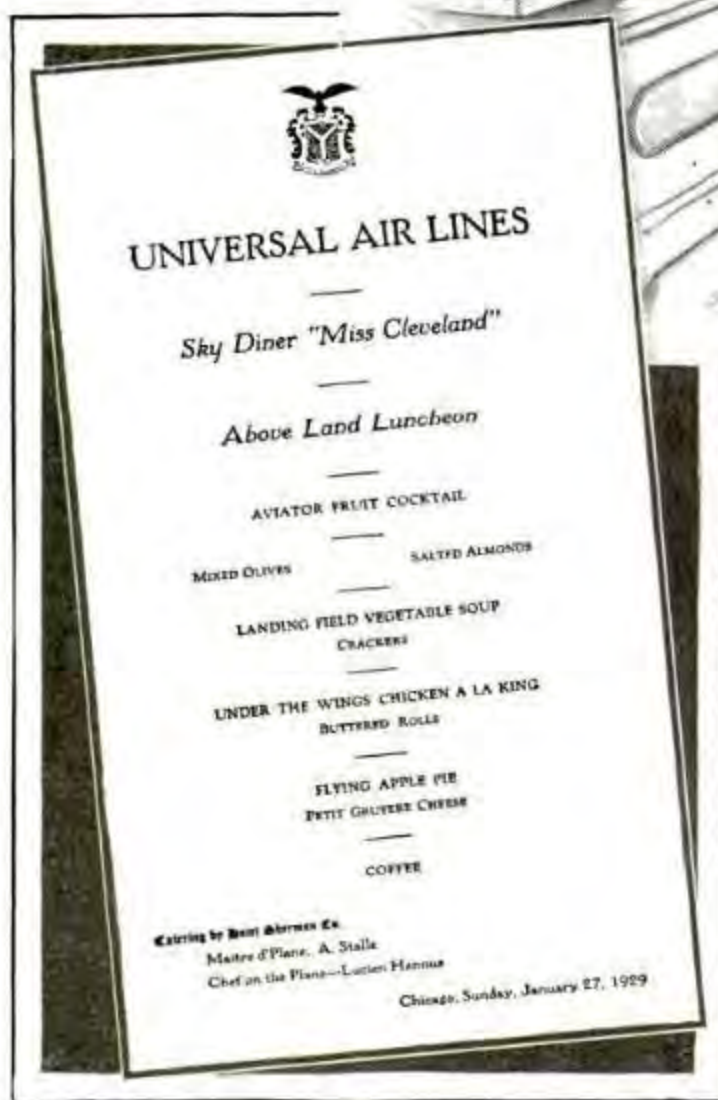
Instrument Board of the Fokker Tri-Motor Dining Plane



a cross between a motorman and a bus driver, and, when the flying sleeper comes along, he'll have a dash of Pullman porter."

The armchairs of the latest sky diner are deeply upholstered and there also is a sort of lounge inviting to a nap. At one side of the little door that leads to the pilots' compartment is a handy writing desk, similar to that in a Pullman club car, and on the other side a cabinet for supplies. An ample rack above the seats holds coats and smaller bundles, magazines, ash trays—yes, smoking is permitted in this roomy cabin plane—and other conveniences are generously distributed. Over the pilots' door is an altimeter so that passengers can always see how high they are flying, and a clock in true aviation style, its face showing only the quarter divisions of a twelve-hour day in numerals. Wide, sliding windows afford a clear view of the ground.

Step to the cook's galley which is just to your right as you enter the plane and back of the well-appointed lavatory. Like



Sketch of the Chef Preparing a Meal, and Menu Served on "Miss Cleveland's" Initial Trip

all dining-car pantries and kitchens, this is small and compact but completely equipped, ready for serving anything from a five-course dinner to a light luncheon. The chef is blazing a new trail in the culinary arts and already is discovering new problems. For instance, a three-minute egg may not be as hard as a patron may like, but the chef is not to blame and neither is

the water, nor the egg. The sky traveler must remember that the boiling point of water varies every 300 feet of extra altitude or about sixteen degrees to the mile and the sky diner sometimes cruises at an altitude of 5,000 to 10,000 feet. Cooking is done on a small electric stove supplied with current generated by the plane. The dining tables swing out from the side of the cabin and, to the person unfamiliar with the luxury of travel in a cabin air-

EAST BOUND	:15	:30	:45	1:00	1:15	1:30	1:45	2:00	2:15	2:30	2:45	SCHEDULE
ACTUAL												
WEST BOUND	2:45	2:30	2:15	2:00	1:45	1:30	1:15	1:00	:45	:30	:15	SCHEDULE
ACTUAL												

plane, are surprisingly steady. The movements, if any, are slow and deliberate, not jerky as in a railroad diner, and there is no need of devices to clamp the dishes to the table as is sometimes necessary in ocean liners. The diner's schedule permits you to leave Minneapolis at noon, arriving in Chicago at half-past three o'clock—plenty of time for luncheon on the wing—or you may leave Cleveland at about seven o'clock in the morning and breakfast among the clouds while your plane soars along in time to land you at Chicago shortly after half-past eight. The three big motors of 400 horsepower each roar smoothly along, but the noise is scarcely greater than that experienced in a train.

The commercial success of flying lies largely in the tri-motor ship, according to Pilot McFail's estimate of the passenger situation.

"The hazards of the single-motor plane have been reduced to a minimum," he



Time Card Issued Passengers, So That They May Check the Route as They Fly, and Steward Serving

said, "but there is no question about the value of those two extra motors. Instances of a failure of all three are exceedingly rare. If one quits, you can still proceed with the other two. Even if two should stop, you would be in a much better situation than with a dead motor in a single-engined ship, for, with just one going, the tri-motor ship can glide a sufficient distance to enable the pilot to pick a suitable landing field. Of course, you can glide a long way in any good ship without a motor running, but your gliding radius in such a case depends almost entirely on the altitude. With one engine going, the

ship's gliding area is greatly extended. No pilot worries any more about the so-called 'air pockets.' They aren't pockets at all, simply ascending or descending currents of air and their effect on the plane is simply that of a small bump, not so violent as to frighten anyone, and rarely even jars the dishes on the tables.

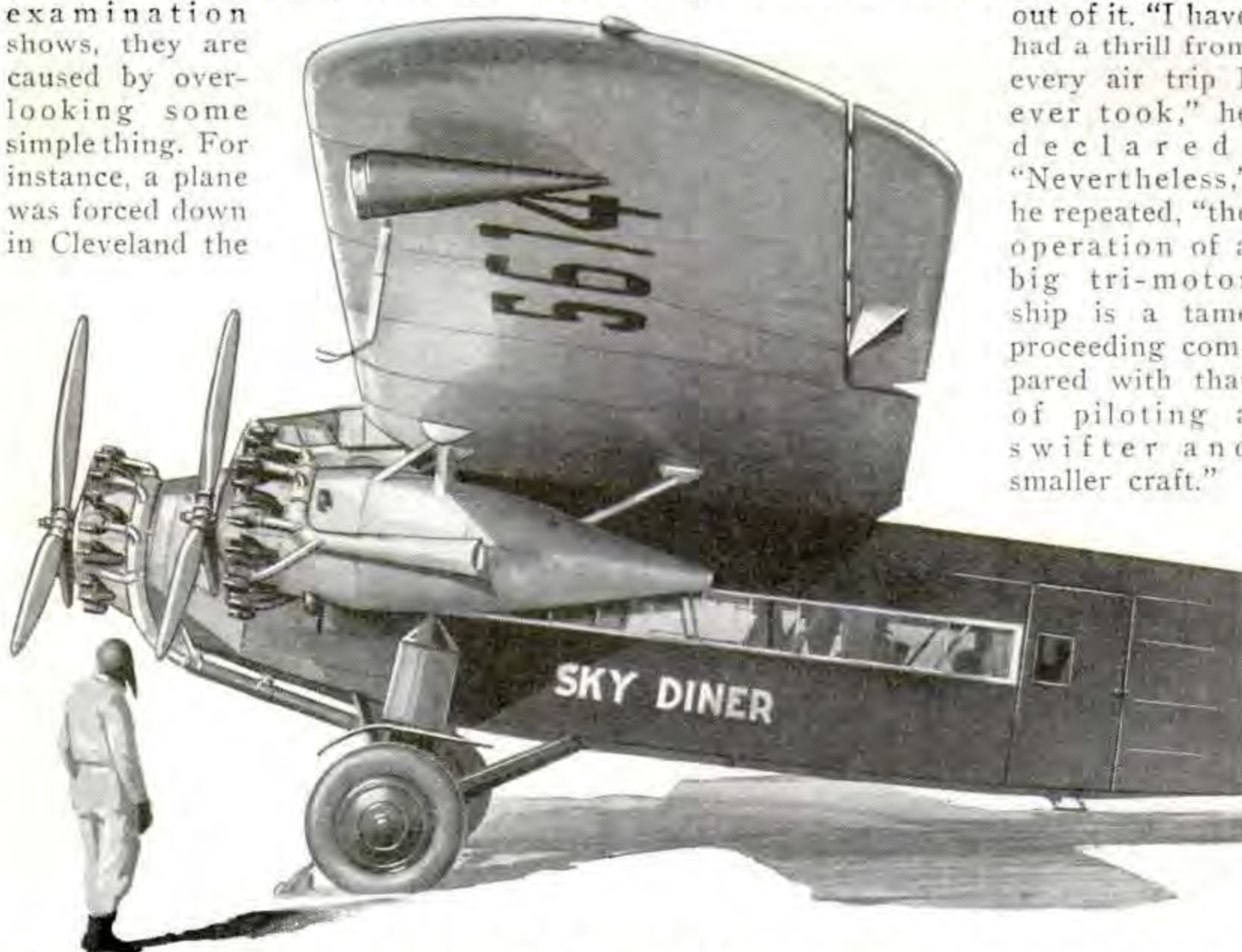
"Some people worry about lightning. But airplanes do not attract lightning. They haven't any ground. And you can run around a thunderstorm or turn back, or even sit down if you have to and fly away again, but forced landings are rare these days. I've flown more than 200,000 miles, I should say, and I've never hurt a passenger or even 'scratched' a ship." He smiled and tapped his knuckles on a convenient piece of wood.

"Flying," he continued, "is a matter of using your noodle. We know that the laws governing the flight of a ship are complex and all that, but, in a way, they are very simple. A ship must fly if it is properly designed and handled. The big passenger planes of the tri-motor type carry relief pilots and there are dual controls. In place of the old-type joystick, there is a control wheel like that of an automobile. This operates the eighty-foot ailerons on the diner and the elevators with practically no effort on the part of the pilot. As I said, instances of forced landings are extremely rare and often examination shows, they are caused by overlooking some simple thing. For instance, a plane was forced down in Cleveland the

other day—a tri-motor ship. The pilot landed safely with all the passengers and no one was hurt. The ship wasn't even damaged much; but what was the reason for the descent? The motors ran out of gasoline! That is likely to happen to your automobile. There are really just a few hazards left in the whole flying business. Bad weather is the worst of these. Fog is a problem, and when ice starts forming on your wings; well, that is bad, too. But the pilot can turn back when such an emergency arises and that is just what a wise flyer does when possible. The other alternative is a landing. I have had just two forced landings since I started carrying passengers. One was caused by a storm and the other was due to a frozen oil vent."

McFail is typical of the pilot who is being placed in command of the big passenger ships of our air lines. Resourceful, experienced and cool, he nevertheless thoroughly enjoys flying and says that his passengers enjoy their rides all the more when they see that he, too, is getting a "kick"

out of it. "I have had a thrill from every air trip I ever took," he declared. "Nevertheless," he repeated, "the operation of a big tri-motor ship is a tame proceeding compared with that of piloting a swifter and smaller craft."



Three-Bladed Propellers Bore through the Air in Front of the Sky Diner's Powerful Motors; Side View of the Ship with Its Wide Entrance Door and Roomy Cabin