

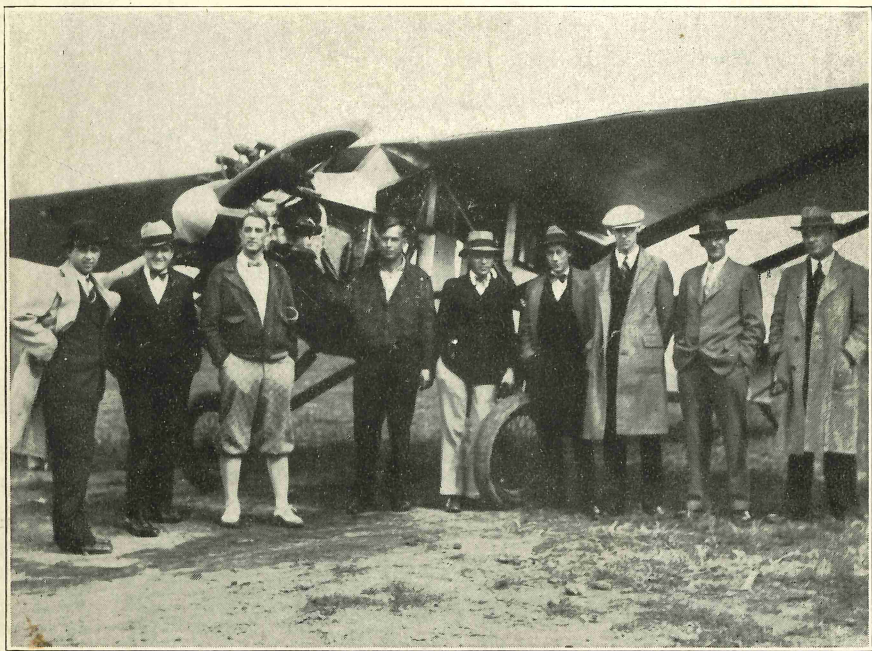
The EMBRY-RIDDLE^{INC.} SKY TRAFFIC

VOL. 1

NOVEMBER, 1928

No. 3

TELLING THEM HOW TO TELL
THE WORLD



Reporters from four Cincinnati newspapers, most of them assigned to the writing of aviation news for their respective sheets, were students in a "short course in aviation" at the Embry-Riddle field in Cincinnati, October 17. (See story inside.)

YOU'VE ALWAYS WANTED TO FLY

Give yourself a Christmas present this year, and learn to fly before 1929.

Winter flying at Lunken airport is wonderful sport. The climate is just snappy enough to make a he-man enjoy the air.

REMEMBER that flying instruction is given by pilots who are regularly flying the air mail between Cincinnati, Indianapolis and Chicago.

Instruction in ground school subjects is given by men, all of whom have had more than 2 000 hours experience in the air, and who are specialists in their subjects of aerial navigation, meteorology, motors, rigging, etc.

An idea of the popularity of these ground school subjects among the students is gained from the fact that classes scheduled to last for 90 minutes, often run from 8 until 11 o'clock.

If you learn to fly now you will be a pilot of considerable experience by Spring.

Investigate before you enroll in any flying school.

"ASK ANYBODY ABOUT EMBRY-RIDDLE."

Our school department is prepared to advise you on the kind of a flying course you need. Visit the field or write us for advice and prices.



LUNKEN AIRPORT

Cincinnati, Ohio

Why I Fly My Own Plane



John Wallace

There are several reasons which lead me to buy a plane for my own use. The primary purpose was the sporting element involved in flying.

When one does not have the time to spend in taking long hunting trips, long automobile tours, nor the money and time to afford a yacht and this form of travel, one must of course look elsewhere for his play. Golf, trap-shooting, riding, swimming and hiking are rather usual and not particularly exciting to me. Flying as a sport fills the bill.

Another reason, and a strong one, was a desire to do my small bit in aiding the general advancement of aviation by demonstrating to my associates my confidence in the science.

It is not my intention to commercialize my flying to the extent of making my livelihood in this way, but I do feel that opportunities will arise where the use of my plane will be advantageous from a business standpoint. Business trips in my plane will not only be an improvement over other methods of travel, but they will at the same time pay me a dividend in pleasure. I can be comfortable and content covering journeys in three or four hours that would take a whole day by train, bus or automobile.

I intend as aviation develops to try to follow its advances. I bought a plane which I considered the best for my use which the industry produced at that time. There were several planes of the type on the market, and nearly all private owners have begun with this type, the three-place open biplane.

I considered the reasonableness of original purchase price, the economy of upkeep and finally, the most important feature to the private owner, flying performance. After careful investigation, my choice was the Waco.

One very important thought must be kept uppermost in the private owner's mind: In the present stage of aviation development, a great responsibility devolves on every private owner. He must fly so sanely and carefully that he will never present flying to his friends in any other way than as a new, safe and speedy form of transportation.

There are many of my friends whom I know would never be influenced by the experiences and statements of people actively engaged in the aviation game. They will not believe aviation news, in other words. But they will listen to me, because they know me. The same thing is true for every other private owner. His own particular friends will be greatly influenced by his experience. Thus we are all missionaries.

I see absolutely no danger or unusual risk in flying my own plane. I believe I started with a thoughtful attitude toward this new method of travel. I have no inclination to stunt, or do anything unusual in flying. In addition to these personal points, I have back of me the careful training of a recognized flying school. Experienced pilots have poured advice into me concerning my flying career. They have convinced me of the foolishness of seeking thrills in flying.

As long as I ask an airplane to do only what it was designed to do, I will be safe. My training should prevent my taking chances. If I fail to appreciate this training and get hurt, that's my fault. But I'm quite fond of my own comfort and I don't want to get hurt.

Thus my natural caution, plus the good advice I bought with the flying course at the Embry-Riddle school should prolong my flying career and I'm counting on it.

EMBRY EMBERS

T. HIGBEE EMBRY, Pres.

Mr. Charles E. Planck,
Embry-Riddle Co.,
Lunken Airport,
Cincinnati, Ohio.

Dear Charlie:

I'm wandering around wherever there's an airplane with my ears and my mouth open. Not that I'm talking. I just leave the mouth open to show my ignorance.

And you'd be surprised to know what I've learned. I've learned, for instance, that air transportation companies are getting right up to scratch on their literature. I'll have a suitcase full when I get back, and we'll compare it with ours. Whenever I visit an airport I pretend I can't fly, never have been up but once or twice, but admit that I'm crazy about aviation. As you would guess, I get plenty of bunk. But I've heard just about all of it before, so it doesn't register.

On the whole, however, I am finding that everybody in aviation is a self-appointed missionary. People go out of their way to explain to the novice the virtues of flying and air transportation, and patiently answer dumb questions. And I know how to ask them. I've answered all of them myself.

I can see the development in passenger and mail planes at every field. Equipment on these air lines is designed to impress the public, but under all this impressing, the experienced flier can see competence and safety. Incidentally, our equipment is standing right up alongside anybody's in the country.

From time to time I'll write what I learn. By the time I get to Los Angeles and back, I should have about a Sky Traffic full.

My best to the boys,

HIG.

To Build Shop First Modern Airport Building to be in Use in January

By the middle of January the first municipal building on Lunken Airport, Cincinnati's municipal field, will be in operation. This is to be the shop, and according to the plans accepted by Robert N. Olin, director of service, it is certain to be the most modern building of its kind in the country.

A doorway 18 feet high and 104 feet long will face the field. The space in the hangar is 104 x 110 feet, and this will be heated and used for storage. Behind this hangar portion are the shops, consisting of a motor room, motor test room, dope room, offices and shower rooms will be in this section. An extensive mezzanine

space will be available for storage of wings and wing parts.

Olin will advertise for bids before the end of November, and actual operations should begin early in December. It is believed it will require almost 60 days to complete the shop. It will be located just north of the present site of the Embry-Riddle offices along the western edge of the field.

Visitors

L. G. DeArmand, Davenport, Ia., and Morris Levy, Lexington, Ky., were visitors at Lunken Airport, recently. DeArmand is building an airport at Davenport, and Levy is chairman of the Aviation Committee of the Lexington Board of Commerce. Both were impressed with the manner in which Cincinnati has tackled the problem of caring for air traffic.

EMBRY-RIDDLE SKY TRAFFIC

Published by

The Embry-Riddle Company

Lunken Airport, Cincinnati, O.

Operators

C. A. M. 24, Cincinnati, Indianapolis-Chicago Air Mail, Passengers and Express.

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Representatives—Fairchild Aerial Surveys, Inc.

The Embry-Riddle Flying School.

Air Taxi Service.

Local Passenger Flights.

East 4700—Cincinnati.

Belmont 4979—Indianapolis.

Hemlock 7848—Chicago.

CHARLES E. PLANCK, Editor.

EDITORIAL

Careful Prophets

Dipping into the future is always an interesting way of wasting time. Sometimes it is an interesting way of being ahead of one's competitors a decade hence.

While the Wright brothers were trying to get their "crazy contraption" off the sand dunes at Kitty Hawk 25 years ago, they had many curious visitors. One was a native of the region, well versed in the fauna and fowl of the neighborhood. He studied the plane, saw at once that it was too heavy to get off the ground, and then applied his learning to the problem.

"What you ought to do is to paste feathers all over the wings and make it lighter. Then it will fly."

He probably visioned feathered mechanical birds, doing what the Wrights were hoping their more substantial machine would do. Of course his idea was absurd. But supposing some one had prophesied to the Wrights then that some day a man would go through the air 350 miles an hour in a similar machine. That would have been fiction to them not even based on the homely knowledge of the country man.

So today, we may prophecy wildly, and maybe hit the truth. It doesn't take much credulity to believe that we will reach 500 miles an hour, or 250 miles an hour with heavy passenger planes. It might take a little more to believe that some day we will be able to fly beyond the earth's atmosphere, and even navigate the ether safely and rapidly. We might even stretch our imagination and picture whole new planets peopled by such beings as ourselves.

Our present task lies in the more immediate future. We still have vast areas of ignorance to plant with aviation interest; there are still thousands who want to "keep one foot on the ground"; there are millions of dollars burrowing into bank vaults at the mere mention of aviation investments.

But there are many who will believe us when we describe a system of aerial transportation reaching into every county in the country. There are those who will be missionaries for us when once they have had personal contact with this new and faster form of transportation.

Operators, manufacturers and investors should prophecy carefully, and not ask the public to think more than five years in advance.

A Short Aviation Dictionary

The following dictionary was prepared by the editor for use in the "Short Course in Aviation" given newspapermen and described in this issue. It probably will prove of value to those writing aviation news for the general public.

INSTRUMENTS

Air Speed Indicator: To show speed through air. Not always accurate as to ground speed because of head or tail winds.

Altimeter: To show height above point of takeoff.

Earth Inductor Compass: An electrical compass, using current produced by a small windmill in the windstream. Position of plane with relation to magnetic spheres of the earth, enables pilot to steer predetermined course by observing needle of compass. Course is first set on one dial. As long as plane is on course, the needle on a second dial is vertical. It drops toward letter "R" if plane veers to right, etc.

Inclinometer: To show angle of plane to horizontal in flight.

Magnetic Compass: Standard instrument with magnetized bar same as is used on surface vehicles.

Rate of Climb Indicator: To show how fast in feet per minute plane is ascending or descending.

Tachometer: To show rate of speed of motor in revolutions per minute.

Turn and Bank Indicator: To show whether plane is level with plane of earth, and whether it is turning to right or left. Indispensable in fog and cloud flying.

MANEUVERS

(The noun in most of the following is the same as the verb.)

Bank: To incline an airplane laterally. Right bank is with the right wing low.

Chendelle: To start a climbing turn as soon as the plane leaves the ground, completing the turn and continuing flight in opposite direction of takeoff.

Crack-up: An accident less serious than a crash, but one that temporarily incapacitates the plane.

Crash: An accident in which the plane usually is a total wreck.

Dead Stick Landing: A landing from any height in which the propellor or stick is motionless or dead. It is not essential to have power in landing so long as the proper glide is maintained.

Fish-tail: To swing the fuselage so that the broadside is opposed to the direction of flight. This is used in landing, and slows the speed of the plane. Failure to straighten out before landing often injures landing gear.

Forced Landing: Any landing unpremeditated on the part of the pilot. Not always serious. Quite generally a minor happening and easily performed.

Glide: To descend without power at a normal angle of attack. Propellor thrust being replaced by force of gravity.

Ground Loop: Motion of plane turning on ground with wheels as pivot. This occurs in taxiing in strong wind, or after landing before momentum of plane has died. Minor accident, such as blown tire, or ripped lower wing tip sometimes results.

Inherent Stability: Qualities built into a plane which make it return to a normal flying position from a slight disturbance. Commercial planes are inherently stable. Military planes are built to be unstable, or maneuverable.

Immelmann: A half roll on top of a loop. Used to change directions quickly and attain more altitude in same maneuver.

Loop: A movement in which an airplane performs a complete circle in the same vertical plane, with the pilot on the inside of the circle. A spectacular but not difficult or dangerous maneuver.

Nose Dive: A sharp descent with or without power. A necessary maneuver but one so frequently observed in connection with accidents, that it is incorrectly assumed always to be fatal.

Nose-over: A minor accident caused by breaking wheel, soft ground, a ditch, etc. Weight of motor pulls plane up on nose.

Pancake: Caused when pilot levels off too high above ground, and plane settles sharply to earth when forward motion drops below flying speed.

Roll: A movement in which the plane is rotated around fuselage as an axis, the horizontal direction of flight being approximately maintained.

Skidding: This results when a plane is turned by the rudder without the proper accompanying banking. The plane slips to the side.

Side Slip: A maneuver used to lose altitude rapidly and safely. The plane is banked sharply, without power, allowing plane to descend wing tip first, with just enough forward movement to prevent stalling.

Stall: The condition of an airplane when it has lost the air speed necessary for support and control. The cause of many accidents with inexperienced pilots. Plane usually goes into spin from stall. Stalling speed is that speed at which the forward motion is not sufficient to cause the wing curve to sustain the plane in the air.

Tail Spin: "An extremely tight spiral, nose down." In a spin the plane is out of control. Bringing it out of a spin is simple. The fact that so many accidents include spins has accounted for general belief they are always fatal. Tail spins result easily from heavily loaded planes. It is not easy to gain control of plane in a spin at a low altitude.

Taxi: To drive a plane under its own power along the ground below flying speed.

Vertical Bank: The condition of a plane when making the sharpest turn possible to right or left. The wings are vertical with respect to the earth.

Wash-out: A plane completely wrecked with very low salvage possibilities.

Wingover: A climb followed by a sharp turn and dive in opposite direction to original direction of flight.

Zoom: Sudden climb, using excess power gained by using reserve power available.

PARTS OF THE AIRPLANE

Airfoil: A curved surface designed to be thrust through the air to produce lift. Thick wings are high lift. Racing wings are thin.

Aileron: Movable section of wing usually at tips which gives rolling motion to plane.

Cabane: Framework for supporting wings at the fuselage.

Center Section: Central portion of wing just above fuselage, separate from rest of wing.

Cockpit: Open spaces in which pilot and passengers sit. When cockpit is completely enclosed, it is called a cabin.

Controls: "Joy stick", rudder and other means which enable pilot to control speed, direction of flight, altitude and power of a plane.

Cowling: Streamlining which extends over or around engine. Usually removable.

Empennage: The tail assembly, consisting of rudder, vertical fin, stabilizer and flipper.

Fairing: Streamlining on external parts to reduce head resistance.

Flipper or Elevators: The movable part of tail surface which gives plane rising or diving motion.

Fire Wall: Metal wall separating engine compartment and cockpits.

Fitting: Any small part used in construction of a plane, usually metal, such as eyelet by which landing gear is fastened to fuselage member.

Fuselage: Structure, usually of streamline form, to which are attached the wings, landing gear and tail surfaces.

Landing Gear: Structural members which bear wheels, skis or other supporting devices for plane. When plane uses water for alighting, pontoons are fitted to landing gear in place of wheels.

Leading Edge: Foremost edge of an airfoil or propeller blade. Also called "entering edge."

Longeron: Fore and aft member of framing of a fuselage.

Oleo Strut: A landing gear strut which combines with its ordinary use, the housing of a shock-absorbing device, usually hydraulic or pneumatic.

Rib: Fore and aft structural portion of wing, in its shape imparting the curve to the wing called the airfoil

Rigging: Wires, braces, struts, etc., used to align the airplane in proper flying position.

Rudder: Movable airfoil used to impart direction to right or left.

Shock Chord: Chord of many small rubber bands, used on landing gear, tail skid, etc., to take up shock in landing.

Spar: The principal transverse structural member of the wing assembly.

Strut: Vertical members of the wing truss of a biplane (interplane struts).

Tail Skid: A runner supporting rear of fuselage in landing. The shock is taken with rubber chord or rubber washers. Wheels are replacing skids on many modern planes.

Trailing edge: Rearmost edge of an airfoil or propeller blade.

Vertical Fin: Stationary part of vertical section of tail surfaces.

Among Our Graduates

F. Gene Foster, who graduated from the Embry-Riddle Flying School October 24, 1927, is now operating the Foster Airport and Flying Service at Crestline, O. "Flying Waco Tens", Gene wisely adds in his letter. Foster's father is an undertaker, but he says neither business has helped the other yet.

Elbert Chino, who soloed April 11, 1928, now has his mechanic's license and is working for the Universal Airlines at the Chicago Municipal Airport on Wasps and Hornets.

"As for flying time, nil", writes Chino. "I haven't had the stick once since I left you and it's eating my heart out. Dad's buying me a new Chrysler, but he won't give me a cent toward a ship. Damn it, that's all I want."

Clarence O. McGuire, Eugene Jones, Ellis Jones, Russell Carrigan, Elmer Davis, Warren R. Vine, Charles C. Wehrung, Eckford Hodgson, Dominic Angieri, Lionel Stephan, James Clark, and Rex Harker, all graduates of the school, are employed by the company. This is in accord with the company's policy as announced in last month's Sky Traffic by Paul Riddle. While it is impossible to employ all graduates, the company is definitely committed to the policy of supplying its personnel from among the most promising of its students.

Riddle Riddles

JOHN PAUL RIDDLE

On December 17, 1927, the first air mail service for Cincinnati was inaugurated, this route being known as C. A. M. 24. It so happened on this particular date that the weather in Cincinnati, Indianapolis and Chicago placed almost insurmountable difficulties in the operation of mail planes, but, due to the never-give-up qualities of the pilots and personnel of the Embry-Riddle organization, the mail was kept far ahead of train schedule, despite the delays caused by blizzards.

It is now one month before the anniversary of this first air mail service in Cincinnati. Officials of this company, postoffice officials and civil authorities, as well as the general public interested in aviation, should begin to prepare to celebrate this anniversary.

Our entire personnel is to be highly commended for the safety record that has been maintained since beginning operations. It behooves all of us to be constantly on the alert in one respect—the public's disregard for a whirling propeller. This is the most dangerous thing about an airplane. New students and new personnel

should be carefully coached in the ways and means of staying clear.

Time was when piloting a plane consisted of getting into the cockpit after having soloed, opening the throttle wide open and leaving it there until the destination was reached, or the pilot was ready to land. This was the case when flying a Jenny fully loaded, but nowadays, with our improved model airplanes, pilots take the air with full throttle until they have gained some altitude. Then, the motor is throttled back to its most efficient r.p.m., which in the case of the Whirlwind is about 300 less than the maximum r.p.m. and with the OX5, about 100 less.

An airplane motor is somewhat like a horse. It will last you longer, take you farther and use less fuel if you treat it gently. A horse is in better shape after a long trip at a steady, even gait, than he is after a comparatively short, fast dash.

Analyses of forced landings always take into account the habit of the pilot in "beating" his motor or handling it with respect.

October Record

During the month of October the Embry-Riddle company carried 5103 pounds of mail, 21 passengers, and 74 pounds of express.

While the above amount in mail poundage shows a slight decrease over the preceding month, due to bad weather and no connections out of Chicago, it also showed an increase of 172 pounds and 10 ounces northbound out of Cincinnati and Indianapolis.

Stinson Sold

M. G. Mason of the American Eagle Airport at Sharon, Pa., bought the Embry-Riddle Company's Stinson Detrouer biplane November 10. Mason plans to use the plane in general passenger work, and in taxi work. Warren R. Vine, mail pilot, accompanied him back to his own field, to give him some time on the ship at his own field. The plane was bought by the Embry-Riddle company from J. M. Williams, of the Marmon company, Indianapolis, last Spring.

Sales

Sales resistance in winter usually refers to hangar space and comfortable quarters for the private owner who wants to do a little of his own mechanical work. This has been the difficulty in previous winters at Lunken Airport, but the winter of 1928-29 is going to be different.

The Embry-Riddle Company now has eighteen planes of its own, used on the mail line, on student instruction, aerial photography and general air taxi work. There are seven private owners who keep their planes on Lunken Airport, and one hangar will not accommodate all these ships. In fact, \$60,000 worth of the company's airplanes have to be left outside at night.

The construction of the new shop, the first building to be erected on the municipal airport, will be begun by the middle of December, and Robert N. Olin, director of service in charge of the field, is attaching a penalty and bonus clause to the contract. That means that before February 1 at the latest, a heated, commodious hangar will be available for private storage.

Because the winter in Cincinnati is mild, it behooves any one who considers having his own plane to get it now. Deliveries are rapid during winter months. Flying instruction never stops. He-men enjoy winter flying. All the private owner needs is a place for storage and with this available, he can begin his flying career.

Flamingo Factory

The new factory of the Metal Aircraft Corporation of Cincinnati, the first to be erected on the new municipal airport, is almost glazed in, and some of the machinery has been moved from the old factory. The old factory is to be retained in use as an experimental shop. Ten Flamingos are under way, and jiggs, dies and crimping machines are in operation. Chauncey D. Young, of Lincoln, Neb., has been employed as a test pilot.

The Strong Waco First Commercial Ship to Perform an Outside Loop

The first outside loop ever performed in a commercial plane was done on October 18, at Troy, O., when Fred Lund, test pilot for the Advance Aircraft Company, completed the maneuver in a Whirlwind Waco speed wing biplane.

Lund had been experimenting for some time in upside-down flying and he finally came to the conclusion the loop was possible. He put the plane into a steep dive, and at the bottom of the dive did a half roll and started the climb, with tremendous centrifugal force tending to thrust him out of the cockpit. As he completed the loop, Lund did another half roll and then, feeling proud of his ship and himself, did three rolls vertically.

Inspection showed the plane had not suffered in the slightest and no re-rigging was necessary. Lund, strapped in with two safety belts, said he had experienced no great discomfort.

Cary Drops in Former Student on Honeymoon, Returns to His Alma Mater

"Buy a Waco—win a wife."

This motto is getting publicity in Torrington, Conn., where George Stone Cary represents almost the entire air-minded population. Cary graduated from the Embry-Riddle school in December, 1927, bought a new Waco Ten and flew it home. Friday, October 12, he came gliding into Lunken Airport with the "little lady" in the front cockpit. He blushed all over the field, and modestly ascribed his success in wooing to the Waco. Versatile birds, these.

Cary has a little field, a little portable hangar and a little flying time to his credit, some 175 hours. Around Torrington he has a little rough country, too, but thus far has had no difficulties in his flying. Cary's relatives live in Cincinnati.

The Flying

Of the 56 employes of the Embry-Riddle company, including stenographers, have licenses; and the other three have sufficient hours in the air to qualify them for pilot's license, believing that this maintains morale and enables any employe to unde



T. HIGBEE EMBRY
Transport
505 Hours



JOHN PAUL RIDDLE
Transport
850 Hrs. Military
150 Hrs. Air Mail
1,700 Hrs. Commercial



STANLEY C. HUFF-
MAN
Transport
400 Hrs. Military
2,200 Commercial
500 Air Mail



ROBT. L. ROCKWELL
Transport
1,300 Hrs. Military
200 Hrs. Commercial



CHAS. C. WEHRUNG
Transport
595 Hrs. Commercial
20 Hrs. Air Mail



CLARENCE O. MEGUIRE
Limited Commercial
180 Hrs. Commercial



WILLIAM T. TAYLOR
Limited Commercial
300 Hrs. Commercial



REX HARKER
Private
65 Hrs. Commercial



LIONEL STEPHANS
Private
25 Hrs. Commercial



VERNON DENNISON
Private
60 Hrs. Commercial



ELMER P. DAVIS
Private
45 Hrs. Commercial



DON GRIFFITH
No License
500 Hrs. Military
1,500 Hrs. Commercial

g Personnel

office help, mechanics, airport workers and hangar assistants, 24 can fly; 21 of these licenses. It is the policy of the company to have every important employee hold a stand and do his job better.



JOHN H. STEWART
Transport
350 Hrs. Military
175 Hrs. Commercial



FRANK C. MERRILL
Transport
1,900 Hrs. Commercial
530 Hrs. Air Mail



SAMUEL H. SHARPE
Transport
700 Hrs. Military
1,650 Hrs. Commercial
30 Hrs. Air Mail



THOMAS J. HILL
Transport
910 Hrs. Commercial
110 Hrs. Air Mail



RUSSELL CARRIGAN
Private
60 Hrs. Commercial



ECKFORD HODGSON
Private
90 Hrs. Commercial



CHAS. E. PLANCK
Private
30 Hrs. Commercial



JAMES CLARKE
Private
40 Hrs. Commercial



RICHARD SHIPMAN
No License
192 Hrs. Military



HAROLD PIELMEIER
No License
105 Hrs. Military
10 Hrs. Commercial



FLOYD S. PROTERO
300 Hrs. Military
150 Hrs. Commercial



WARREN R. VINE
Transport
550 Hrs. Commercial
450 Hrs. Air Mail

Traffic

Floyd S. Prothero
Traffic Manager

It is rather interesting to note the reaction of business executives to suggestions made to them for uses of the air mail in connection with their business.

Very seldom have we found a concern which is not yet in position to take beneficial advantage of the service offered by air mail.

At present, particular attention is being devoted to special air mail campaigns which are to be utilized for direct air mail sales, announcements and drives.

In one instance, in interviewing an advertising manager of a large national concern, we were told that he was having difficulty in getting his message forcibly over to his buyers before competitive salesmen had entrenched their wares in the same buyers' attention.

A direct air mail campaign was suggested because the message would get there first, would receive first consideration, and would be definitely remembered because it came by air mail. This suggestion solved the problem in this case as it has and will in others.

The advantages of air mail are so great in number that we are having difficulty in sorting them out and applying them where they will benefit most, and having done this, our job is to advise the public on our results. The traffic man's job today is in telling each business man where air mail will serve him best.

Having discovered new uses of air mail, we have to show these to the public in the most simple and effective manner.

Caterpillar Member

Ben Craycraft Thrown from Plane as His Initiation

Benjamin W. Craycraft has returned to the Embry-Riddle company from Florida, where he spent 9 months recuperating from the effects of his initiation into the Caterpillar club.

Craycraft was flying in a training plane at Rantoul, Ill., in 1927, when Lieutenant Herbert Vanatta, in the front seat, at that time doing the flying, went into the loop. There was some hesitation on top of the loop, and Craycraft's belt came loose. As he fell from the seat and downward into the path of the looping plane, he was struck by one wing and his right arm broken in two places.

With his mind clouded by the blow and shock, he had to pull his rip chord

with his left hand, and settle to earth. He was unconscious when picked up, and awoke in the hospital. Vanatta was killed, when the plane went down out of control.

Craycraft is foreman of the night crew in Embry-Riddle hangars.

Moving Up

Six advanced students went on "transition" work the first of November, and are receiving their training in Whirlwind Wacos, and various types of cabin planes. They are Lawrence Schmidlapp, Albert Blackburn and Louis Wirth, all of Cincinnati; Rex Harker, East Liverpool, O.; Russell Carrigan, Manchester, O., and Eugene Jones, Elwood, Ind. Each of these advanced students is required to map out and fly a cross-country triangular course while an instructor occupies the front cockpit of the plane. Meanwhile their instruction continues in the ground work of aerial navigation, meteorology and in motors and rigging.

Jiggs' Gems

By Stanley C. Huffman
Operations Manager

This is the season of the year when the aerial service and transport line operator finds a lull in his actual flying operations.

Busy summer flying is past, and his equipment is showing the hard wear of an active season. Winter flying has not yet commenced. He has his operation figures to compare with those of previous years, ships and motors to be reconditioned, and his earnings and costs to compute and classify.

The operator finds a breathing space and some of the following questions to answer:

What will be the demand on equipment for the coming year? Will the reconditioned equipment handle the job, or must new planes and motors be bought? If new, shall it be of the same type and in what quantities?

All over the country, operators are asking each other, "What do you think

of So and So engine, or So and So plane? What will we use when the OX5 is exhausted? What do we want in the way of aerial transports—five or six place fast jobs, or 9 or 10 place planes with slower cruising speeds? Is tri-motored equipment profitable to operate on short runs?"

Every operator is awaiting developments. Many of them are standing by until something new is produced. Many prefer not to order now because of these coming developments. I believe they are making a mistake. If the purchaser orders now, he will be operating during the months that the others are sitting on the ground waiting for delivery. This holds true for large and small operators, and private owners as well. It is better to fly a good airplane that you know is good, than to wait until a new one is made, even if it is better.

The Hangar

By Don Griffith

"Art for Speed's Sake" is the new motto in the hangar, where modeller's clay is being used to streamline the fittings of the Air Mail Wacos. This clay is first applied around the fittings and then covered with gauze bandage cloth. The cloth is then doped with regulation acetate dope such as is used on wings, and the result is a mixture that will not come off until the surface covering has been cut through. When the clay has been removed it retains its pliancy and may be used again.

A compilation of questions and answers for use by students of the school in taking Department of Commerce tests for pilot's licenses, has been made by the hangar crew, under the direction of Don Griffith. These questions are guaranteed to any student who will learn them thoroughly and use his information wisely.

Safety glass has been installed all around in the Ryan monoplane. Two new seats, both of the double variety and both reupholstered, have been installed. The back of the front seat bends down to allow passengers and the pilot to get forward.

The School

Major Robert L. Rockwell

A transition period for more advanced students in the flying school has been instituted. This course includes instruction in the Wright Whirlwind Wacos, Fairchilds, Stinsons and Monocoupes, as well as advanced training in cross-country flying.

The first cross-country student under the new plan was Lawrence Schmidlapp who was given the problem of mapping out a triangular course of 150 miles, and flying it himself with an instructor in the front seat to check his errors and criticize after landing. After 45 hours in the school training planes—Waco Tens—the student is soloed without further checking in the Whirlwind-powered Waco mail planes. Five others are eligible for this type of training.

A second inspection visit to the laboratories at Wright Field will be taken by students of the school under Major Rockwell's direction. When the Wright Memorial is unveiled in December, the school will attend the ceremonies in a body.

Within the last month, 12 students have been soloed, nine of these have signed up for advanced courses, one has placed his order for a Waco and another arranged to complete his 50 hours solo near his home. Six now engaged in the primary course plan to continue on the advanced course when they have graduated.

Nineteen air mail contractors have averaged 92.6% efficiency in the delivery of mail, according to figures prepared by the Department of Commerce. This means that over periods in some cases as long as two and a half years, the planes of the operators have been almost perfect. Occasional delays in the transportation of air mail sometimes have greater effect on individual users than long records of efficiency.

Mapping Job

Cumberland River Job Finished
by Vine and Russell

World's records these days may be in any sort of endeavor, but there are few of them that occur in the regular business of making a living.

Warren R. Vine, Embry-Riddle pilot, and A. O. Russell, aerial photographer of the Fairchild Aerial Surveys, Inc., probably established a record for a day's work when they were in the air 8 hours and 30 minutes one day taking pictures for the aerial map of the Cumberland river for the War Department.

Vine and Russell flew 120 hours photographing the 1700 lineal miles of the Cumberland and its tributaries. They used a Fairchild Cabin Monoplane with a Whirlwind motor, and never once during their hours over the rough terrain that surrounds the river did they have a moment of suspense over motor or ship. The ship carries 105 gallons of gas, giving what Vine estimates at about 10 hours flying time. With full tanks, and full load, corresponding to three adult passengers, Vine climbed frequently to his required height of 10,000 feet in 30 minutes.

To locate themselves, Russell and Vine used three types of maps, the government agricultural maps, road maps and the U. S. Geological Survey strips. These latter were made in 1890, and none of the three were accurate. The map which the War Department will make of their pictures will be used in flood control, navigation, power development and similar enterprises.

Operating out of Nashville the aerial mappers flew 200 miles one day to the site of their day's work. They were delayed about two full months because of weather. Starting from Nashville early in the morning, they would climb to the 10,000 foot level and reach the point where they were to begin "shooting". Then they would find that a strata of clouds would have

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BALLOON HOSPITAL READY AT PARIS

**Dr. Darbreux Perfects Air Sanitarium,
Founded on Old-Time "Goofy" Dream**

PARIS, November 13. AP—Practical application of an ancient "wild" scheme in aviation is nearing completion here. Dr. Andre Darbreux, head of an internationally known hospital for treatment of nervous disorders, will inaugurate a new aerial system of treatment within a week when he takes 50 patients aloft in the "Chambonix", the hospital of the sky. In 1899, Pierre Chambonix suggested that Parisians might be sent aloft each night in a balloon to high altitudes, where they would get the advantage of rare atmosphere without having to travel to Switzerland and the mountains. Chambonix had no plan for keeping the balloon over Paris except that it was anchored. Darbreux will use a modified dirigible with turbine motors that will enable the hospital to retain an even altitude and to counteract the most severe winds. His paper on treatment of the cases represented among the 50 patients was read before the French Academy in June, 1979.

"Airmail" Merrill Leads Wehrung in World Race 2,000 Miles Ahead in 100,000 Mile Round World Race

Father Still Backs Winner

**Crowds Block Post Square to Watch
Progress of Fliers**

The old days when the world series baseball games were followed by sidewalk crowds on illuminated scoreboards in front of the Post Offices were recalled yesterday when a crowd of 5,000 watched the progress of the race around the world between "Airmail" Merrill and "Chuck" Wehrung, Cincinnati pilots. Motion glimpses of the progress of the two ships on each 25,000-mile lap of the race are cut in occasionally for the crowd, but models on the illuminated globe are used mostly. The difficulty of carrying a motion cameraman near the fast ships, fast enough to get any footage of film, makes this method of display unsatisfactory. At Rangoon, yesterday, Merrill was leading by 2,000 miles with two laps to go. The race is still considered close with 73-year-old Charles C. Wehrung, father of the famous "Chuck" predicting emphatically that his boy will win.

THIS ENDS IT

**Two Generation Suit Ruled Out by
World Court**

The famous "two generations" suit against the city of Cincinnati was finally settled forever yesterday when a decision was handed down by the Supreme Court of the World in favor of the city. Two generations of the Hopkins family have fought the city's condemnation of property along the Ohio River bank for use as an airport. The condemnation was effected in 1932, and the case has been through every court. The auxiliary "downtown" airport was used for mail times from 1932 to 1965, and then turned into a park. The world court decision makes the city's use of the field legal and there is no further litigation possible.

Outsiders Buy Almost Half of Cincy's Sales

**Aerial Commuters as Numerous as
Extinct "Suburbanites"**

Cincinnati merchants estimate that 46% of their trade in the Fall purchasing campaign recently completed were aerial commuters, most of them coming from Indian Lake, in Ohio, and Herrington Lake, in Kentucky. Everything from baby clothes to refrigerators were bought by these suburbanites, the merchants report, and airport employees recalled the days when the family flivver was loaded full of paraphernalia by the summer camp dwellers in the old days. Cincinnati's workmen who live at the lakes mentioned above and commute daily, now number 3,200, according to Chamber of Commerce figures.

Bombers at Lhasa

**English Assist League to Impress
Warlike Tibetans**

BOMBAY, November 15. AP—A concentration of 26 bombers was sent over Lhasa, the sacred city of Tibet by the English Indian Air Force at the request of the World League to deliver the ultimatum of the League to Tibetan rulers threatening war on the Luchowfu Mongolian State. A description of the destructive abilities of these bombers was telegraphed so as to reach the Tibetan ruler simultaneously with their arrival. The description was followed by the League's ultimatum. This is the first time in 14 years this method of discouraging war has been used by the League, and it is expected to be entirely successful.

(Continued from page 14)

moved in beneath them, and they would have to abandon the job for the day. Haze is cut by special filters, but smoke and clouds are obstacles insurmountable. When they had finished the job, they found about 30 miles of the river had to be retaken, a low percentage of "retake" as such jobs go.

They used the Fairchild K-3 camera, the standard of the U. S., Canadian, Brazilian and other governments.

Some consolation was afforded the workers in the matter of weather when they left Nashville several mornings in a temperature of 80 and spent the day working at 10,000 feet in a temperature of 35 or 40. The work was finished November 6, when certain tributaries of the Cumberland near Burnside, Ky., were photographed.

The Embry-Riddle Company is the representative of the Fairchild Aerial Surveys, Inc., in Cincinnati and this section.

School for Reporters

Cincinnati Newspapermen Learn of Fliers About Aviation

Nine reporters and copy readers of the four Cincinnati newspapers attended a "short course in aviation" staged by the Embry-Riddle company at Lunken Airport, October 17.

Experts in flying, airport operation, plane and engine maintenance and aviation history, lectured, demonstrated and explained to these purveyors of the news, the differences that exist between a chendelle and an oleo strut, declaring that a wingover has nothing to do with the covering of a plane's wing.

Don Griffith, hangar superintendent, first explained motor and plane construction, showing the parts of a plane usually injured in accidents, and pointing out that a plane may be a total

wreck and the pilot easily escape injury. The mysteries of radial motors, and the intricacies of steel construction of fuselages, was also a part of Griffith's lecture.

Then, while T. Higbee Embry, president of the company, and Charles E. Planck, director of public relations, explained, Major Robert L. Rockwell, in charge of the flying school, demonstrated the common mistakes in flying that usually lead to accidents. Rockwell slipped, spun, looped, ground looped, pancaked, stalled, and performed various military maneuvers for the instruction of the scribes. Sitting on the observation porch of the airport office, these writers saw and heard descriptions of the most frequent causes of accident, and learned the meaning of terms used in the flying business.

Particularly, were they informed in crashes, washouts, and crackups, because of the frequent mistakes of the uninformed in recording aviation accidents.

Planck prepared a dictionary of terms commonly used in aviation news, for the especial use of a newspaper copyreader. These terms were explained in a non-technical manner and are printed in this issue.

The school closed with an aerial luncheon with Embry as the host, in Fairchild, Stinson and Waco planes. These planes were a part of the regular weekly parade of Embry-Riddle planes over Cincinnati.

Attending the school were: R. W. Ryan, city editor of the Commercial Tribune and George Mesham, reporter of that paper; Nixon Denton, Fred Burns and William Reeves, sport, automobile and copy editors of the Times-Star; Lou D. Mueller and Harry McClain, aviation and telegraph editor of the Enquirer, and Marion Wentz and Joseph Aston, reporters of the Cincinnati Post.

Lock up the Safe

Fish Club Organizer, Snappy Number, is Headed North

An organizer of "Fish Clubs" is loose, and on the way north from the airport at Nashville, Tenn., where she collected \$38.50 to be used in relining her brakes.

Lionel Stephens, Embry-Riddle mechanic, working with Warren R. Vine, pilot, in the Embry-Riddle Company job of mapping 1,700 miles of the Cumberland river from the air, is "Heap Big Fish" of the Nashville club. The Sky Traffic correspondent at Nashville submits the following account of the visit of this latest "sweetheart of the regiment":

"Some ten days ago a girl came out to the field in a new Buick roadster and was introduced to the boys. "Shick Steve" taxied right into the queen, and for a time seemed very popular. Loaning her \$12.50, he felt very much at home. Of course, such a fast girl had to have her brakes relined, (on the Buick). So she canvassed the field, collecting a total of \$38.50, and is now headed north. And in Nashville are her many bereft friends and kin-folks, as follows.

| | Amount of kin |
|---|---------------|
| William H. Berkley----- | \$ 4.00 |
| Sergeant Boise ----- | 10.00 |
| Sergeant Blanton ----- | 2.75 |
| Louie Gasser ----- | 4.00 |
| Dick Schab ----- | 3.00 |
| Lionel Stephens, with the aid of Warren Vine ----- | 12.50 |
| W. N. Kirkland (he relined the brakes) ----- | 1.75 |

The warning is passed along for what it is worth. Stephens was heard later muttering, "Now, why should a new car need brake lining?"

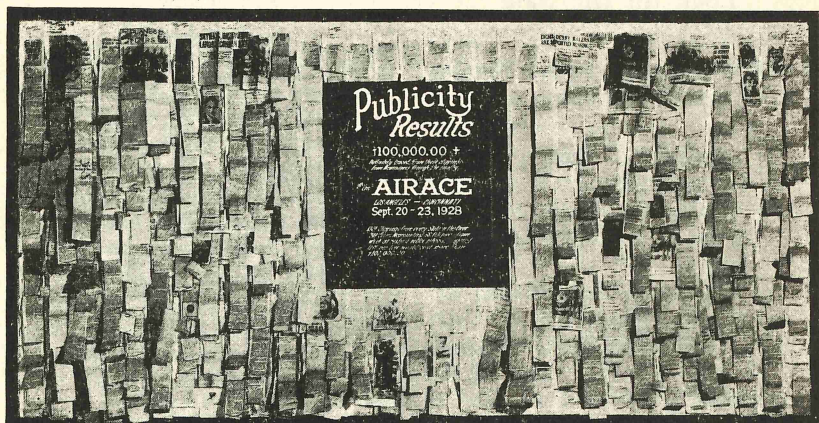
Air Freight

Sewer pipe by airplane is about the height of the ridiculous, but it has happened. Harry Pett, dam, dike and lock contractor of Louisville, Ky., found that a job at Robinson, Ky., would be held up for more than a day and a half unless he had certain essential fittings of eight-inch pipe. He flew to Cincinnati, landing at Lunken airport, in his Waco 10, brought 300 pounds of pipe to the field and was away within ninety minutes toward the job which was at a standstill.

When you have read your copy of Sky Traffic, why not pass it along to some friend whom you know is interested in aviation. Subscription to this magazine is free. It is designed to awake and maintain interest in aviation, and to show to the world what is being done by Embry-Riddle and Cincinnati in the new game of air transportation.

The name of your town can not be too long to put on a roof. Look at McConnellsville, Pennsylvania. How's that for a name? And yet, the name is on a roof there. Art Goebel found it helpful when he came down out of the clouds and looked about to see where he was. The name located him at once. You can win the admiration of the passing airman for your town by identifying it, and some day, when you are a flier yourself, you'll understand why he is so appreciative.

Charley Dolan, former member of the Lafayette Escadrille, takes the cake as the farthest away reader of "Sky Traffic." Dolan, who is a close friend of Robert L. Rockwell, head of the Embry-Riddle Flying School, is with the Inter-Island Steamship Company stationed in Honolulu.



How to Advertise Your City

First, arouse sufficient interest in aviation to finance a race.

Second, put a live aviation company back of your arrangements.

Third, stage the race.

Cincinnati did that. The interest was already present. The live organization was operating. Henry C. Yeiser, Jr., said he would underwrite the race, and above is shown one result of the race. These are 1301 clippings, gathered from papers in every state in the union. They total 58 solid columns of reading space which cannot be purchased. At a conservative estimate of \$1 a line, this means more than \$100,000 worth of publicity for Cincinnati. This collection was made by the Cincinnati Chamber of Commerce.

Night Life

The Monocoupes, one of the three clubs among Embry-Riddle employees, entertained November 1 with a party at the country home of Major Robert Rockwell, one mile north of Mason. Seventy guests were present, and the usual Hallowe'en amusements were enjoyed. Following the party, 25 of the guests went to the WRK studio in Hamilton, Ohio, operated by a student of the Embry-Riddle Flying School, and put on an hour of singing and speaking as a part of his 100-hour program.

How Do Students Play?

Recreation of students at the Embry-Riddle Flying School and the employees include basketball and bowling. The basketball squad includes C. O. Meguire, Charles E. Planck, Rex Harker, Stanley C. Huffman, Milburn Hendricks, Vernon Dennison, John Milholland, Chester Huffman, Robert Rockwell, Charles C. Wehrung, Floyd Prothero, Ralph Meguire, John H. Stewart.

The bowling team is composed of W. T. Taylor, Charles C. Wehrung, Edward Rutledge, Samuel Sharpe, and John H. Stewart.

FOR YOUR INFORMATION

RADIO

Every Tuesday at 7:20, the Embry-Riddle Company conducts an "AVIATION CONVERSATION" over Station WLW, the Crosley Radio Corporation's station in Cincinnati. Current aviation events are discussed in this program.

SPEAKERS

Speakers on aviation topics are available from the personnel of the company for meetings in Cincinnati and within a radius of 100 miles. Phone or write C. E. Planck, Embry-Riddle Company.

ADVICE

Advisers to groups of young men considering aviation as their work will be sent from the company to schools or colleges.

SKY TRAFFIC

The mailing list of this magazine is open to all who are interested in aviation. If you have friends who will be interested, send in their names. Subscription is free. Each month the magazine will contain the news of activities at Lunken Airport, the Embry-Riddle Company, and aviation news generally.

QUESTIONS

What information can we give you? Our school faculty is available to answer your technical questions on aeronautics or flying. Our experienced air mail pilots will be glad to answer your questions. Write or visit the field.

TRAVEL INFORMATION

THE AIR TRAVEL BUREAU, in the lobby of the Gibson Hotel, furnishes complete information on air travel over any line anywhere in the world. Miss Maxine Wiegand is in charge. Write, phone or call for whatever information you need.

The Salesmanager Speaks—

"A wonderful sales opportunity exists right now, today, in the retailing of airplanes. Any man who knows how to sell and is willing to work as hard as he is accustomed to in his present line of endeavor will make more money in twelve months selling Embry-Riddle's line of airplanes than he will in selling Automobiles, Household Electrical Equipment or other similar lines.

"One of the best promises of success in selling any device or industry is the amount of publicity space afforded same in the newspapers. If one will stop to consider the tremendous amount of space given over to aviation daily in our newspapers, it will be immediately evident that the public is tremendously interested in flying, and the public buys whatever it is interested in.

"What the public does not know and consequently what the Airplane Salesman has to inform them, is that it is really easy to own, operate and keep an airplane. One of the first questions that enters the mind after the thought of owning an airplane is, "where would I keep it, how much would it cost to keep and fly, and how would I learn to fly the plane?" As a matter of fact it is quite easy to own an airplane and its actual cost of upkeep compares very favorably with the upkeep of a car of similar price.

"In the coming year 150 airplanes will be sold out of Cincinnati and someone will earn the commission on these planes.

"The Embry-Riddle Company is interested in obtaining high grade salesmen with vision and dealers in our outlying territory to represent us in the sale of Monocoupe-Waco and Fairchild airplanes."

JOHN H. STEWART.

What Sort of Airplane Do You Need?

The WASP FAIRCHILD, seating six, including the pilot, is ready for you.

Here is a plane that defies comparison. You know the standard Fairchild features—folding wings, amazing vision, commodious cabin space, and every flying instrument necessary—these are included of course.

Or perhaps you want sporty performance in an open plane.

Then you'll need the SPEEDWING WACO. This plane, which won the New York to Los Angeles race, and which is the first commercial airplane ever to do an outside loop, is available now with a Whirlwind or J-6 motor.

Here is speed, strength, safety, maneuverability which you have never experienced before.



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