

The EMBRY-RIDDLE^{INC. Q.} SKY TRAFFIC

VOL. I.

FEBRUARY, 1929

No. 6.

Embry-Riddle's Flying Basket Ball Squad



Top Row (left to right): William Nutty, Eugene Jones, Merle Todd, Lionel Stephan.

Seated: Harold Pielemeier, Carl Anderson, Coach, Rex Harker.

Bottom Row: Chester Huffman, John Milholland.

The team will fly to Indianapolis March 6th, to play the famous 'Strauss Says' Team.

"Tough" Course in E. R. Ground School

Thoroughness of Study Enables Graduate to Pass Transport Exam.

It is probable no ground school class offered in any flying school other than the military training branches is so thorough and effective as that installed January 1 in the Embry-Riddle Flying School here. The second course begins February 25.

Under the direction of Robert L. Rockwell, head of the flying school and former member of the Lafayette Escadrille; Walter H. Cunyus, head of the ground school, has prepared a course which will make it easily possible for any student pilot to pass the written examination for a transport pilot's license. The course consists of 30 lessons, taught five nights a week for six weeks. Two written examinations climax the course.

Following is the synopsis of the course:

Lecture 1—Department of Commerce Rules and Regulations.

Lecture 2 — Aeronautical Nomenclature.

Lecture 3 — Aerodynamics; Resistance, shapes.

Lecture 4 — Aerodynamics; Lift, airfoil design.

Lecture 10—Airplane Construction;

Lecture 5—Aerodynamics; complete airplane.

Lecture 6—Aerodynamics; stability.

Lecture 7—Aerodynamics; performance.

Lecture 8—Aerodynamics; stresses; practical flying.

Lecture 9—Airplane Construction; materials.

fuselage, wings, etc.

Lecture 11—Airplane Construction; controls.

Lecture 12—Airplane Construction; dope and fabric.

Lecture 13—Airplane Construction; wires and cables.

Lecture 14—Airplane Construction; rigging, general repair.

Lecture 15—Propellers.

Lecture 16—Review and Examination.

Lecture 17—Power Plant Theory.

Lecture 18—Power Plant Theory.

Lecture 19—Power Plant Parts.

Lecture 20—Power Plant Valves and valve mechanism.

Lecture 21—Power Plant Carburetors and carburetion.

Lecture 22—Power Plant Lubrication and oil.

Lecture 23—Power Plant Ignition.

Lecture 24—Power Plant Ignition.

Lecture 25—Power Plant Water-cooled Engines (OX5).

Lecture 26 — Power Plant Air-cooled Engines (J-5, Wasp).

Lecture 27—Power Plant Installation and Inspection, etc.

Lecture 28—Meteorology.

Lecture 29—Navigation.

Lecture 30 — Aerial Photography and Mapping.

Lecture 31—Review and Examination.

Lecture 32—Examination.

"Will they stand for it?" was the first question asked when Cunyus prepared his outline. It was believed that students at a flying school are not inclined to study hard, no matter if hard study is necessary in obtaining a pilot's license. It is so much fun to take flying instruction, mingle with the boys around a school, and pile up solo hours, that the effect of the thoroughness of the course was brought into question.

Enrollment in the first class of 1929 was 35, two of whom are girls. The average attendance has been 33. Classes are scheduled to last from 7:30 until 9:30. They frequently last until 10 and later, at the discretion of the students. School heads have concluded that novice fliers have no fear of serious study.

For students in the advanced course, this ground school instruction is extended into more detail in certain subjects, such as aerial navigation, meteorology, etc.

The ground school course sells for \$50.

THE AIRPLANE IN BUSINESS



J. H. Stewart

Many business men of today are asking themselves and their friends whether or not the airplane is practical for business purposes. It is difficult for them to obtain first-hand information of sufficient accuracy to warrant a decision, the reason being

that although there are a large number of business houses which have taken on an airplane for purely business purposes, yet there has been no real incentive for these houses to publish facts and figures pertaining to their operation. There are one or two notable exceptions.

The A. W. Shaw Publishing Company purchased \$12,000 airplane and put it to work transporting their executives with the announced purpose of determining in a scientific manner whether or not the airplane held advantages for the business man. Month by month they published the results of their experiences and after a year of operation they assembled these monthly articles under one cover. The story in full is now available for anyone who is interested and can be obtained by addressing the A. W. Shaw Publishing Company of Chicago.

The Standard Oil Company of Indiana, purchased a Ford tri-motored plane which they use in transporting executives over their territory and in taking friends and customers on pleasure rides in the cities they serve.

The Curtiss Candy Company has a fleet of five Waco planes used in transporting salesmen and in giving free rides to customers.

The Kendall Oil Refining Company has a \$12,000 airplane which is used

in transporting executives and salesmen to fields and airplane factories selling aviation oil.

The Packard Cable Company of Warren, Ohio, has a \$12,000 airplane used principally in advertising high tension wiring for automobiles, planes, etc.

The Union Trust Company of Detroit, has a \$6,000 airplane used by a flying officer of the Company who looks up aviation business for the Company, speaks in the interest of aviation and shows the Company to be friendly to new enterprises.

Mr. C. A. Griffith of Knoxville, Tenn., has an \$8,000 Waco airplane which he uses to fly from his home to his mine in Pruden, Tenn. This trip by train occupies over five hours. In his airplane he makes the trip in thirty minutes.

Ted Hubbell of Cleveland, Ohio, has a \$10,000 plane which he uses in selling insurance.

Space prevents the mention of many more.

There are logical reasons for the use of airplanes in business. Today, more than ever before, time is a valuable factor in business. As an illustration, would any sane or intelligent business man use a horse and buggy to cover the distance, we will say, between Cincinnati and Dayton or Columbus? Likewise, would a business executive, who must transact urgent business in New York and return quickly to his office, think of employing an automobile for the trip? No. He will take that mode of transportation which will save him the most time. Until one or two years ago the railroads offered the quickest method of transportation over long distances. Today, the train time between Cincinnati and New York is about 18 hours. It is perfectly practical and feasible with the airplanes available today to make the journey in about five hours.

The question of safety is, of course, a most important one to be considered in undertakings involving important

(Continued on page 14)

AVIATION IN 1944

Can You Imagine What Will Be Happening Then?

Would-be prophets declare that, within 100 years, we will be traveling 1,000 miles an hour, eating nothing but concentrated food in tablets, driving on streets built on five or six levels in the cities.

And Lord Birkenhead says that within 100 years, babies will be made by chemists in laboratories.

Let 'em. Who cares? That's 100 years from now. None of us will be here to check up on such prophecies.

But 15 years from now is a different matter. Who can prophecy what will be happening in aviation in 1944? All of us can hazard guesses. If you are an expert in matters aeronautical, your guess probably would be more logical than that of the layman. But the layman's imagination frequently is more active than the expert's.

The Embry-Riddle Company wants to know what you will think will be the case in aviation fifteen years hence. For that purpose, a contest is announced in this issue of Sky Traffic. Gold prizes are to be awarded to the 10 best essays on the subject "Aviation in 1944." The rules are simple, and no restrictions except as to the limit of the essay are laid down.

Neither will any restrictions be laid down on the judge who is to decide the winners. He may award a prize to the most intelligent paper discussing the subject in what he considers the most logical manner. Another prize may be awarded to some young brilliant with an imagination rivalling Jules Verne's. And another to some contestant who merely records a dream on the subject. The judge will be strictly neutral, but he will be a man who knows aviation. His name will be announced in the March issue of Sky Traffic.

There is no ulterior motive back of the contest. The Embry-Riddle Company does not plan to cash in on the answers by building the kind of planes the contestants write about, or inaugurating the new airlines described, or hiring the super-pilots described be-

fore anybody else can get to them. We merely want our readers to enjoy the papers, and enjoy them ourselves.

The beautiful part is that in 15 years when we are doing all the things the "prophets" say we will be doing, we can look back and check over the prophecies. So the show will have an epilogue. No doubt some of the prophecies will be too far advanced. Some will be much too conservative. At any rate we'll be living 15 years from now, and we won't be living when babies are turned out of laboratory test tubes.

In other words, Birkenhead is safe. But those who write essays in this contest are risking their reputations as prophets. But who cares? We'll have fun taking the risk.

This is the idea of the contest: In 1903, Orville Wright made the first powered flight. He flew 120 feet in about 30 seconds and attained a height of 10 feet.

After 25 years of development, we have flown 350 miles an hour, 4,500 miles without landing. 150 hours in the air without landing, climbed to a height of 8 miles above the earth, and lifted loads totalling 11 tons. That has happened in 25 years.

What will happen in the next 15 years? It's a guess, but it may prove interesting.

You may want to discuss the extension of operating lines during the next 15 years. You may want to tell what the 1944 airplane will look like, and what it will carry and at what speed. You may want to draw a word picture of a 1944 city with its aviation activities.

There are no restrictions. Write about the subject that appeals to you.

Station WLW, operated by the Crosley Radio Corporation, will co-operate in the contest. Details will be announced over that station, and as papers come in, excerpts will be read, to give prospective contestants indications of "how the winds are blowing."

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.

Distributors of Waco, Monocoupe,
Fairchild.

Representatives—Fairchild Aerial Sur-
veys, Inc.

The Embry-Riddle Flying School.

Air Taxi Service.

Local Passenger Flights.

East 4700—Cincinnati.

Belmont 4979—Indianapolis.

Prospect 1752—Chicago.

CHARLES E. PLANCK, Editor.

EDITORIAL

Supremacy Fight



Chas. E. Planck

Several cities of this country are today fighting for the honor of holding the national aircraft show within their limits.

Detroit really began the competition in the spring of 1928, when the first aircraft show of national importance was held

in Convention Hall. Since that time, several other cities have made their bids. Detroit, however, has taken a tremendous step in the direction of permanently locating the leading national show there, by planning the erection of a \$2,500,000 exhibition hall and hangar on its municipal airport. Such a building would clinch the dynamic city's claim, which is already established widely within the industry by the success of the first show.

Certain centers of population are definitely established now as operating centers in this new form of transportation. Some of these are Chicago,

Cincinnati, Kansas City, Atlanta, etc. They are certain to be the hubs out of which aerial transportation lines will operate.

While these giant cities are fighting for the lead in aviation, there is no reason for smaller cities and towns to sit by and wait until aviation interest and activity descend upon them. Every city and town of 5,000 population or more owes a landing field to its citizens and to the aerial visitors that would patronize such a field. The flying population of any town deserves a landing field just as the motoring population deserves good roads.

The motoring population is in sufficient numbers now to demand its good roads. It had to wait for years though, before municipalities and states recognized the need of roads.

This is the day to avoid that mistake in aviation. "Prepare a field and the birds will come," advertises one airport engineer, and he is right. Fliers know of every field that is established and never hesitate to include in their itinerary a city known to have a field.

Establishment of a field by any city today gives it an advantage over any neighboring city that has none. Local supremacy in transportation is important in surface transportation, and as aerial transportation develops its "local" trade, that is, flights on a good schedule between points 50, 100, or 200 miles apart, this local supremacy will become increasingly important. Now is the time to take this first important step.

The day when a few ex-wartime fliers and aviation enthusiasts comprised the aviation interests of any city or town is past. Any municipal governing body not actively interested in the possibilities of aviation in respect to its city, is ultra-conservative, and lacks foresight. When dollars become interested, an industry has just about arrived. Millions are being added monthly to the tremendous sum already invested in aviation enterprises.

The year 1927 was the year of records. Manufacture hit new heights in 1928. An astounding increase in operations will be made in 1929.

Riddle Riddles



John Paul Riddle

Any city the size of Cincinnati will have to have at least four landing fields within the next five or seven years, if present speed in development of this new form of transportation continues.

There will, of course, be a main landing field which will be known as the municipal field and off which the bulk of "official" flying will be done. This will include air mail and passenger lines, and all passenger liners will deposit their passengers at this field first. It is probable there will be taxi ships ready to take passengers to fields about the city nearer their homes.

There will not be very much private flying off this municipal field of

the future when the aerial traffic grows to the point where it will crowd the field. Private owners will want their planes on some field nearer their homes. There will probably be two or three of this type of fields, the owners and operators making their profit just as the garage operator does today through maintenance and storage of private planes.

There will certainly be a country club of aviation enthusiasts. This probably will be some distance from the city, and will have, instead of, or in connection with the golf course, a landing field for the private flying or aviation events of the members. All other club facilities we enjoy in the country club of today will be available at this establishment.

As Cincinnati is situated with many well-defined sections and strung out some distance apart, the ability of several fields to survive is without question. There will be plenty of traffic, because even now, we know of enough prospective private owners to justify the operation of such a field.

When Was First Air Mail Carried?

Paris Seems to Hold Honors With Balloon Flight in 1870

This business of the first mail carried by air is getting complicated.

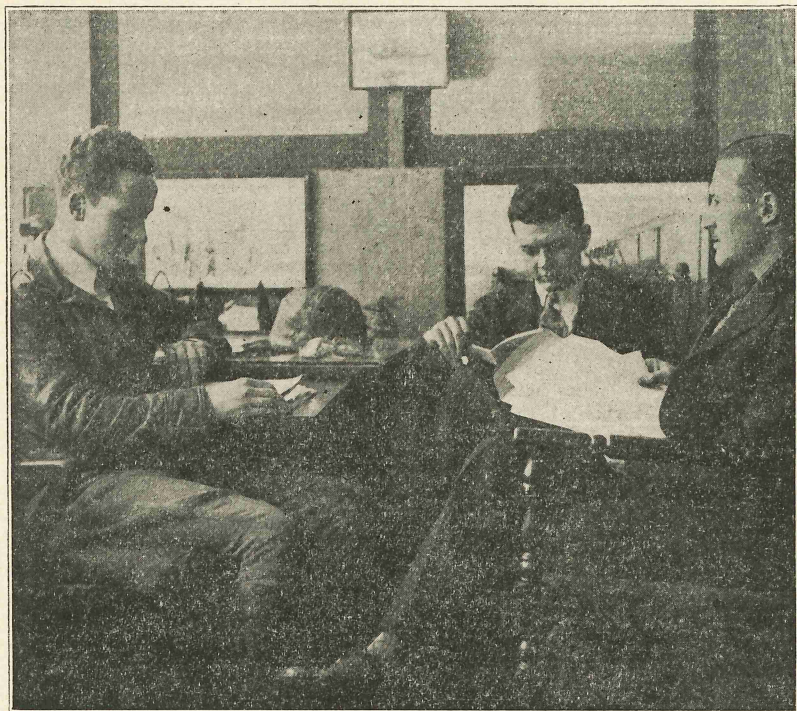
Cincinnati claimed the honor with a flight from Coney Island, a pleasure resort, to California, a nearby village, made by Paul Beck, free-lancing aviator in 1912. Then Mitchell Field, L. I., claimed that a flight had been made there in 1911 in which mail had been carried a short distance.

But it seems both American cities lose. Erik Hilderheim, a stamp collector of New York, has sent the editor of Sky Traffic a piece of mail that was sent by balloon out of Paris in

1870 when that city was besieged by the German army. It is a miniature newspaper detailing events in the beleaguered town, and providing space for personal correspondence. In size it is about 8 x 11 inches, and folds to about 2 x 4 inches. A 20-centime stamp is attached.

This particular letter is addressed to "Mademoiselle Delbourg, a Vaures, par cherveise. ('Dordogne') and signed Paul. It informs "mademoiselle" of the state of health of mutual friends, the high morale existing in the city despite the surrounding German forces. Various stories in the small paper refer to the disposition of troops, and the belief that the inhabitants have that the Germans will not bring up any heavier guns for shelling the city than are already in position. There are a few casualties mentioned in these stories.

ADVICE



Here is a view of the "advice room" where Elmer P. Davis, school pilot representative has interviewed scores of young men eager to get into aviation, and advised them on the kind of a course they should take to meet their particular needs. In the picture also are Harold Matheny, of Berea, Ky., who enrolled for the advanced course, and Lee Kuebler, 439 Melish Avenue, Cincinnati, who enrolled for the primary course.

Davis reports that within the last year he has noticed a marked change in the attitude of students enrolling in the school. Despite the fact they were young and adventurous, it was possible to detect a hesitancy caused by fear in many prospects up to a year ago. Flying, they thought, still

had much danger and risk in it. Today, all the student wants is the advice of experts on which course will most rapidly enable him to carry on through the training period to his goal, the holding of a license as a qualified pilot.

Davis gets the story, discovers the ideal of the particular student, and then describes the three courses offered by the school. Hundreds of young men write in every week, interested in the opportunities existing in this new form of transportation. Scores come to this room for personal advice.

Davis is qualified to advise. He is a graduate of the school in the advanced course, a licensed pilot, and up to the minute on developments in aviation.

EMBRY EMBERS



T. H. Embry

Hundreds of young men who can afford to play and play hard, are overlooking the best form of sport available. They are playing polo, golf, yachting, riding and hunting, and ignoring the new sport of kings—flying.

I believe there has been a good reason for the absence of the young, rich sportsman at the flying field. There have been grease and grime and confusion at the average flying field during past years. At some fields there will always be this distasteful combination. But at the efficiently-managed private or municipal landing field of today, the same system and atmosphere of the polo field, or even the country club can be expected.

In addition, there are many aviation clubs being formed over the

country where the flying field is taking the place of the golf course, and where the social life of the place centers about flying. In Cincinnati, the time is ripe for just such a club.

The cost of a flying school course qualifying a man as an expert private flier compares with advantage to the original cost of and upkeep of a polo outfit. There is no doubt but that the thrill is greater. Men have ridden horses for ages. Man has never flown before..

Until a man has experienced the thrill of flying his own plane, of sitting high above the earth and realizing that he and he alone is in control of the mechanism that bears him through the skies, he has not realized the real sport of this new game. Pleasure flights with a pilot are interesting, but the actual hand on the stick contributes to the real thrill of flying.

Besides, flying brings distant polo games closer together, the yacht closer to the inland home, the distant friend closer in association, and the hunting lodge days nearer.

So Now We Reach For Luckies

The two largest shipments of air mail out of Cincinnati were carried north to Chicago in Embry-Riddle planes January 29 and February 1.

Both shipments consisted of newspaper cuts of advertisements by the American Tobacco Company, containing the endorsements of Captain George Fried and Chief Officer Harry Manning of the S. S. America, who rescued 39 members of the Italian freighter Florida from a wild Atlantic gale. All the cuts were addressed to points west of the Mississippi river, and air mail enabled the company to

make a simultaneous release of these striking ads all over the country.

Three planes, a Fairchild, a Whirlwind Waco, and a Ryan, took out the first load of mail which totalled about 2,200 pounds. This mail was delivered in Chicago at 6:20. The same night and following day, the west-bound Boeing plane had four forced landings before reaching the west coast, but in spite of severe blizzards the mail reached San Francisco almost a day before the fastest train service could have taken it there.

On the second trip, a Fairchild and the all-metal Flamingo were used, carrying about 2,300 pounds of the plates bearing Manning's endorsement.

The plates were made by the Rapid Electrotype Company of Cincinnati.

LOVE STUFF AND ALCOHOL

Airplanes at Lunken Used To Advertise Magazine and Anti-Freeze

Two visitors illustrating the versatility of the airplane in advertising, reached Lunken Airport January 30.

The first was the Lockheed Vega monoplane, "True Story," flown by Okey Bevins, formerly a pilot with the Embry-Riddle Company, who was accompanied by his bride, who was Martha Croninger, first woman advanced student of the Embry-Riddle Flying School.

McFadden Publications, owner of the plane report that it secured 60,000 lines of publicity last year. It appears at air meets and airport openings, wherever the air clan gathers. It is also used to transport officials of the company over the country.

Of an entirely different character, and advertising in another way is the "Voice from the Sky," a Fokker trimotor which is extolling the virtues of denatured alcohol as an anti-freeze for automobiles. This plane soars over a city while a radio operator aboard talks to the neck-stretching crowds below about the virtues of alcohol in radiators.

Later the Fokker had difficulties when the fuselage buckled while taxiing after a landing. It was taken to the Flamingo plant at the edge of the field and later shipped back to New York to be repaired.

Almost one mile of the dike being erected around Lunken Airport is completed as this edition of Sky Traffic goes to press. The great dragline machine which handles four square yards of dirt at a time, shows substantial progress daily. It has reached the bend in the Little Miami just in front of the office and has turned east toward the Beechmont levee for the long stretch of the dike which is to be along the north bank of that river.

Enrolled by Johnson

Live near Blaine Johnson and you'll learn to fly.

Blaine Johnson is a type of a great number of American men whose interest in aviation has lessened their interest in their regular business of making a living. He is a wholesale commission merchant, but even the most attractive basket of fruit, or the finest carload of potatoes can't get his mind off his Waco Ten.

That accounts for the fact that Blanton Boyd, President of the Globe Printing Company, who lives next door to Johnson at 1242 Grace Avenue, will buy his own plane and learn to fly during the spring of 1929. "Johnnie" is responsible for Boyd's active interest.

Fencing Master to Bookkeeper—

And Back Again—Goes Clements, New Instructor in School Recreation

James M. Clements, Embry-Riddle bookkeeper, is the new instructor in fencing in the program of athletics and recreation in the Embry-Riddle School.

Under the direction of Carl R. Anderson, director of recreation and athletics for the school, various sports such as tennis, boxing, archery, trap-shooting, fencing and shuttlecock, will be arranged for students. A fencing instructor was an absolute need, but it was discovered that Clements had been a member of the fencing team of the Cincinnati Club, and is considered an expert at the game. He will assist Anderson in this particular sport.

The company realizes that a definite program of recreation will be necessary to take care of the idle moments of 50 or 100 students who cannot all fly at one time, and who will have many daylight hours left on their hands after their daily instruction in the air.

The EMBRY-RIDDLE INC. SKY TRAFFIC

Announcing the Great Prophetic Contest for aviation

“AVIATION”

FOR THE BEST ESSAY OF 600 WORDS OR LESS ON
THE FOLLOWING PRIZES:

1st Prize : \$50 in Gold. 2nd Prize : \$

4th, 5th, 6th, 7th, 8th, 9th, 10th

Through WLW, the Crosley Radio Corporation, the details
closes, April 1, 1929. Listen in.

Following are the simple rules:

No member of the personnel of the Embry-Riddle Company

Name, address, age and occupation must accompany each
Station WLW, Cincinnati, Ohio.

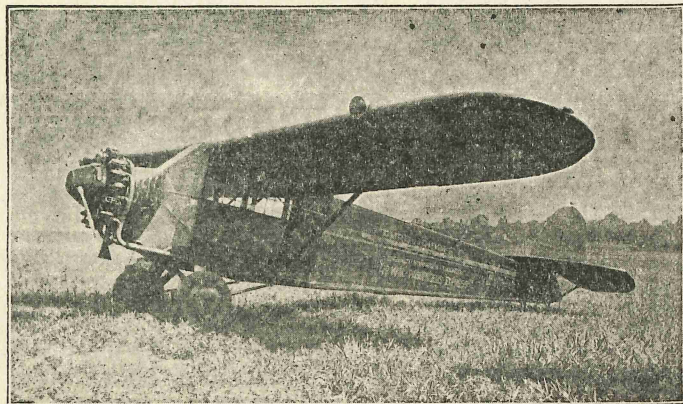
And that's all the rules. Have you an imagination? Can
you an experienced designer with an eye toward the future?

Whoever you are, or whatever you do, you have an equal
all. They may decide the basis on which the winners will be selected
them. Perhaps a cold, clear, logical word picture of aviation in
life and imagination and nothing of the practical will appeal.
expert. And there are 10 prizes. (See story on page 4.)

Winning essays will be printed in newspapers, Sky Traffic,

THE EMBRY-RIDDLE

Lunken Airport,



These are the
of TC

What will
194

The EMBRY-RIDDLE CO. SKY TRAFFIC

ation fans to determine what will be happening in
N IN 1944"

THIS SUBJECT, THE EMBRY-RIDDLE CO. WILL GIVE

**\$25 in Gold. 3rd Prize: \$10 in Gold.
Other Prizes: \$5 in Gold, each.**

ds of the contest will be discussed from now until the contest

y or their immediate families may enter the contest.
ch essay. Mail your essay to the Embry-Riddle Company, or

are you daydream? Are you a practical worker in aviation? Are

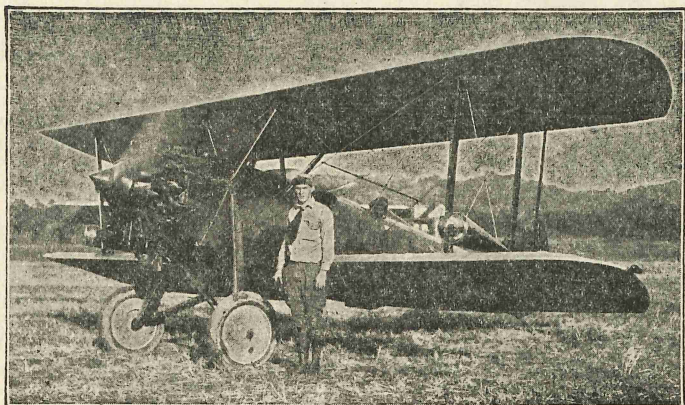
chance in this contest. The judges are not to be restricted at
lected as they please. Perhaps a vivid imagination will impress
in 1944 will win them. Perhaps a cleverly written essay with
Who knows? **The layman has the same chance as the aviation**

and read over WLW.

RIDDLE COMPANY
Cincinnati, Ohio

The Airplanes
TODAY.

they be in
1944?



Nice People!

We only asked for recipients of Sky Traffic to signify their further interest by asking to be kept on the mailing list. We printed a coupon for them to send in, but look what some of them did!

"Am enclosing the clipping duly signed on the dotted line as I appreciate it very much and would not know what to do without it." Marion Bowers, Richmond, Ind.

"Just a few words of praise for Sky Traffic. Being a former student of the Embry-Riddle School, I am naturally interested in what is going on there and get a world of enjoyment in reading your little magazine." Charles M. Brink, Bradford, Pa.

Frank Rickets of Florence, Ind., goes a little too far, we think. Says he:

"Enclosed you will find my coupon for your book, Sky Traffic, which I read from cover to cover till I know it almost by heart. Although I am unable to fly at present, I like to know what the other fellow is doing."

And George Thaubald, 33 Sheehan Avenue, Cincinnati, even risks money in his letter which is as follows:

"Enclosed find renewal blank for Sky Traffic and a check for \$1.00 for the first paid subscription when you are ready to make a charge for them."

That'll leave you owing us \$9 on the first year, George, after we've finished reading these nice letters. We're keeping the check on file.

"Many thanks for the copy of Sky Traffic. This number is an especially attractive one." C. O. Sherrill, City Manager, Cincinnati.

And here's a feller who knows. A Journalist, by George.

"I hasten to fill in the coupon signifying my desire to continue to receive Sky Traffic. No house organ, bulletin or what have you, received here is read with more interest or contains as much readable matter, interesting and enlightening. It bears indelibly and indisputably the hand of a newspaper man." Frederick M. Jackson, Lexington Leader, Lexington, Ky.

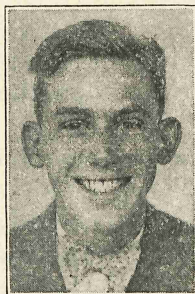
We'll buy you a "coke" for that Freddy.

Thomas L. Reynolds, Holton, Ind., wrote: "I am interested in your magazine and would appreciate very much to be left on your mailing list, and will appreciate it if you will send it to my friends listed below." Many did that.

"Have noticed that Sky Traffic is getting bigger and better every month.

(Continued on page 13)

Questions Indicate Aviation Interest



Evan W. Chatfield

Question:
"How many questions about aviation will be asked one aviation speaker after a radio address?"

Answer:
"Well, now that's a question."

After Evan W. Chatfield, of the Embry-Riddle Company announced over

WLW that he would answer any questions that trouble aviation fans who happened to be listening, the questions began to pour in.

After the first announcement, six letters arrived with 23 questions; the next week, 19 letters, 78 questions; the next, 20 letters, 51 questions, and the next, 34 letters and 120 questions.

Concord, Conn.; Toronto, Ft. Thomas, Pittsburgh, Lackawanna, Fife Lake, Mich.; McGregor, Ia.; Chattanooga, Beloit, Wis.; New Orleans, and Indianapolis, are the locations of some of the questioners.

As to the questions, they ranged from technical questions on motors to "which is the better, monoplane or biplane?" Boys, men and women want information. Many of the questions are answered over WLW each Saturday night at 7:30. Others are answered by letter.

Jiggs' Gems

FOREIGN AND HOME MADE ENGINES.



S. C. Huffman
("Jiggs")

Where are we to look for our supply of engines that will sell at a price which will enable the manufacturer to sell his product at a price that will appeal to the average individual? Shall we look to the European or foreign field?

Lately, there has been an influx into this country of numerous foreign-made engines and planes. Most of these planes have enviable records abroad, especially on the airways of Europe. The manufacturers in Europe realize that the largest market for their products lies in this country. This country has the size that makes the airplane a valuable form of transportation, and we have an average wealth that enables us to buy them. There are many times more airplanes and engines in use in commercial aviation in this country than in all Europe, Asia and Africa combined, and the European manufacturer is turning to this larger field.

Several of the well-known American engine manufacturers have a monopoly on the aircraft engine field today, and they are able not only to get any price they ask, but to make the operator feel obligated when they are able to make delivery. Without a doubt, they are charging exorbitant prices for their products with the result that prices of modern airplanes are going up as war-time surplus motors are being exhausted.

Modern production methods, which have established American supremacy in the automobile field, and have enabled every American to own a car, when applied to this aircraft engine situation, only aid the supply and so

far no decrease in price has resulted, yet it is known that actual costs of production have been cut to as low as one-fourth former costs.

I do not believe we can look to Europe for our engines at a lower price. They are made more cheaply there, but duties run the price up to the American level when they are imported. Even when they are built in this country under license, there is still the problem of maintenance, which is complicated by the use by European designers of the metric system.

The solution, I believe, is the entry into the aircraft-engine building field of American concerns qualified by automobile engine-building experience, and who will give the customer the result of their quantity production methods learned in making automobiles. As soon as good engines are available in numbers that will meet the demand, manufacturers can price their products to where they will be obtainable by almost everyone who wants to fly.

This will also enable commercial operators to offer cheaper rates to the flying public because of lower original investment.

(Continued from page 12)

Keep up the good work as you are making a national name of Embry-Riddle." L. K. Causey, Bowling Green, Ky.

"I received your booklet today, Sky Traffic. Let me thank you for same. If I were a few years younger, I'd certainly take your course." Ben H. Wilson, Wilsona Kennels, Rushville, Ind.

Any man who raises such good dogs, Mr. Wilson, is still young enough to fly. Come on in. Move your kennels down here. We've got lots of room and we love dogs.

Look at this one Frank Tichenor! "I enjoy reading your Sky Traffic. It comes next to Aero Digest." H. Kornhiser, Franklin, N. J.

The Hangar



Don Griffith

Hangar employs and student pilots of the Embry-Riddle Company have started their own school in aviation mechanics with a view to qualifying for mechanics' licenses from the Department of Commerce. Under the tutelage and advice of Don Griffith, hangar superintendent, seven younger employees in the hangar hold regular sessions on aviation engines, during the noon hours and after the day's work is completed. Sometimes, these occasional classes are held in the motor room while the oil for a mail plane is being heated. Throughout the day lessons and problems are discussed and practical illustrations explained, while Griffith superintends the work of the novices.

Members of the class include Lionel Stephenson, Dominic Angieri, Russell Carrigan, Ivor Stookey, Morris Hall, Ermine Likens, Chester Huffman, and Earl Purdy. Some of these are also members of the present ground school class of the flying school, where they get the theory of aviation power plants from Walter H. Cunyus, head ground school instructor.

Winter repairs and improvements on instruction ships of the Embry-Riddle Flying School include the installation of new safety sticks and an ignition switch in the front cockpit of each Waco used in the school.

The sticks are so arranged that the instructor in the front cockpit can disconnect them entirely by pulling a wire. This leaves the student powerless to control the plane in any manner, and the instructor is in sole command. The presence of an extra

switch in the front cockpit enables the instructor to cut the ignition whenever necessary and never leaves him at the mercy of an inexperienced student.

Two new inspection plates have been installed in each plane, one directly behind the pilot's cockpit, and another near the tail surfaces. Both these plates give immediate access to control mechanisms.

Gosport tubes are being installed in each of the training planes. These will be used by instructors who prefer this system, and in cases where the student expresses a preference.

The substitution of a mixture of glycerine and alcohol for oil in the oleo struts in the Waco 10 landing gear has been found to be an improvement, according to Don Griffith. Changes in temperature have little effect, and the shocks in landing are considerably lessened.

(Continued from page 3)

men in any industry. There was a time, when airplane engines were not reliable. Today, however, newspapers are full of stories of flights demonstrating the great reliability of the modern airplane engine. With the mechanical maintenance facilities available today, the airplane engine can be considered just as reliable as the steam locomotive or the automobile engine.

The cost of operating aircraft has been reduced to a point where it does not offer a deterrent to the plan of any company desiring to increase the efficiency of its men who travel.

There are other factors to be considered besides time saved. Every business man knows the value of advertising and publicity and in no other way can a business derive more favorable publicity than by making continual use of its own airplane. As an illustration of this fact, some one made the remark that in no other business is it possible for a salesman soliciting trade to have his prospective customer drop his own

(Continued from page 14)

work, leave his office, get into his automobile and drive five, ten or fifteen miles out to a field to meet the salesman, but this is exactly what has taken place time after time where a flying salesman is calling on his trade. Of course, this condition is not going to continue indefinitely, but the point is that today the publicity connected with aerial activity is such that anyone connected with flying has an unusual interest. Several companies which are operating aircraft for the transportation of their high priced executives, who are compelled to make long journeys, have actually figured out in dollars and cents from the saving of the executives' time that their airplane has paid for itself in the space of one year, aside from the tremendous amount of favorable advertising and publicity obtained by its use and the tremendous saving in personal effort on the part of the executive himself.

We still read of fatal crashes in the newspapers and that has been one of the greatest factors in slowing up the use of aircraft for business purposes. Few men not connected with the industry take the time to investigate or analyze the causes of these accidents, usually being satisfied to remark that aviation has not arrived and let it go at that. To those in the industry, who are naturally more interested, the cause of these accidents has always been a point of vital interest and they have taken the trouble to investigate and determine the factors mostly responsible for such accidents. The result of their investigation has convinced them that the personal factor, that is, the ability and judgment of the pilot, has more to do with accidents than the failure of mechanical equipment.

As proof of this, the present policy of the Ford Motor Company in regard to the pilot may be quoted. "The Ford Motor Company reserves the right to refuse delivery of one of their planes to anyone purchasing it unless the Ford Motor Company itself puts the pilot through their own course of instruction and thereafter passes on his ability." The reason for this is quite evident. No matter how trustworthy the ship may be, if it is put in the hands of a pilot

who exercises poor judgment, a serious accident may ensue. Even though no one is killed, the adverse publicity in having their ship smashed up may be of serious consequence to the future of their business. The company's attitude is absolutely sound.

Reputable and reliable manufacturers of airplanes build utmost mechanical reliability into their products today and if this mechanical reliability is coupled with good judgment and flying ability on the part of the pilot, flying today is as safe as any other mode of transportation.

As an illustration of what an airplane makes possible for the busy executive let us take for example a business trip to Chicago, Detroit or Cleveland. To make the most efficient use of his time, the business man will take the night train out of Cincinnati for either of these cities arriving there in the morning, taking breakfast, meeting the parties involved in the transaction for an hour or two of discussion. Then he hangs around until late that night and takes the sleeper back to Cincinnati. This has occupied at least a period of 36 hours and has involved two nights away from home and the broken rest so customary on sleepers. As an alternate proposition he can take breakfast at home, drive to the airport, take off in his own airplane piloted by a thoroughly qualified pilot, and reach Chicago in a matter of 2½ hours. In Chicago by 11 o'clock he is immediately ready to go into conference, which on the same basis we will say lasts for a couple of hours adding another hour for lunch, he will find himself at 3:00 o'clock or 3:30 at the flying field ready to take off again for Cincinnati, where he will arrive by 6:00 o'clock, step into his automobile and drive to his home for dinner with his family. All this is done in the space of 12 hours as against 36 required by the other means of transportation.

This, of course, is only one illustration of what can be done by the business man who makes use of the airplane, but it shows the tremendous possibilities available and waiting for the progressive man of today.

Traffic



Floyd S. Prothero

"If wishes were horses, etc....."

If wishes could make it possible, I'd wish that every one using mail to any extent whatever, could be made to realize overnight that they have daily at their service nearly 20,000 miles of mail airways.

That Air Mail really does save time; that to keep up with his competitor, the business man must use Air Mail; that an hour saved is an hour gained.

Our solicitors find it a difficult job, in many cases, to sell the average person on the consistent use of Air Mail, whereas it should be a very simple matter.

That word "consistent" is the key-note of the whole situation. Let us explain. Hardly a day goes by that we do not receive complaints on Air Mail service. We receive it at this office, or indirectly from the Post Office. Sometimes the criticism is justified, and sometimes it is not. But regardless of whether it is or not, criticism and its response reverts back to that one word—consistency.

A concrete example was actually enacted only a few days ago. Our solicitors are striving to educate the public to the use of Air Mail through personal calls. In most cases their reception is enthusiastic, but in some cases it is not.

The writer received a letter a short time ago from a Cincinnati concern stating that one of our solicitors had been in to call on them in an endeavor to sell them on the use of Air Mail. The letter went on to say that only 15 minutes after our man had left they received an Air Mail letter from Los Angeles mailed there on the evening of the 2nd and did not arrive at their

office until the afternoon of the 5th. We were informed that this was "very poor service."

We advised the writer that upon tracing his letter we found that it had been delayed in a crash, had flown through some almost impossible weather, had arrived at Chicago too late to make connections with our South bound plane, and had been sent from there to Cincinnati by train. Even so it arrived on the 5th. As a matter of comparison, we pointed out that had the letter been sent with the ordinary 2-cent stamp, it would not have arrived at their office until the morning of the 7th.

Even with all the odds against it as in this case, multiply the time actually saved on this one letter by 365 such letters per year and note the astounding saving accomplished.

So we wish to emphasize the word **CONSISTENT**. Use Air Mail consistently. In doing so you can not help but be the gainer and beneficiary in the end.

Air Mail still offers wonderful facilities for emergency purposes, and quite often averts embarrassing situations. But greater profits will be realized, more business consummated in a speedier, more efficient manner through the **CONSISTENT** use of your ever ready and willing servant, the Air Mail.

Audit Completed

Lamb and Decker, Cincinnati auditors, have completed the second audit of the Embry-Riddle books and the bookkeeping of the firm is now on a systematic basis. For the first two years of the company's growth, expansions and enlargements of the business came so rapidly that bookkeeping could not keep up. Commercial operation of aircraft presents many new problems in this particular office work and a special variety of records are necessary.



Pete Will Have Girl on Venus Plane

Second Trip of Noah's Ark Ready for Flight to Planet

Sportsmen Enthusiastic Over Prospects for Good Hunting

A partner for Pete is aboard the "Noah's Ark," Fairchild Interstellar plane owned by "Paradise Hunters, Inc." and ready at Lunken Airport for its second trip to Venus with a stock of big game.

Pete is a rare mountain goat from Tibet, whose mate died on the first trip to the planet, and who now is in captivity on Venus, waiting until a mate has been brought for him on the second load, when he will be turned loose in the new Eden to propagate big game for the sport hunters from the Earth. Of the 18 animals transported on the first trip, the female mountain goat alone showed any indisposition. The goat died after 150 days in the air, and Pete found himself the only representative of his specie on the planet.

The other animals were placed about the planet in surroundings conducive to their best health and growth. They included eight deer of four differing specie, two hippos, two Bengal tigers, two Nubian lions and two orang-outangs. Ibexes, panthers, moose, polar bears, deers, and wild boars, make up the second load. Concentrated food will be used as in the first voyage.

According to Bart Hornell, head of the 100 sportsmen promoting the plan, one more flight will be made, and the total of 54 animals left alone on the new planet for three years before any hunting will be done. Only old-fashioned powder guns will be used by the sportsmen in an agreement each has signed.

The Bottom Dropped Out

New York, February 15.—Aerial Eateries, Inc., filed suit in bankruptcy here today ending a 10-year contest between the two chain restaurant companies catering to passengers on aerial liners. Representatives of the second company, Skyfood Caterers, are said to be bidding for the assets of the dying corporation. Various travel agencies have written letters importuning operating companies to install their own restaurants in air liners, fearing the effects of an absolute monopoly in this service.

"Ginny" Huffman Grounded Again Irrepressible Woman Pilot Caught in Wrong Level

Virginia Huffman, 54-year-old Cincinnati flier, was haled before Aerial Traffic Judge Rossman for the fourth time in one week, and her license to fly suspended for two weeks for a violation of the "level" law.

Miss Huffman, who in 1960, "devoted her life to flying," was found Tuesday by Patrolman Robertson of the aerial squad, flying her fast sport plane in the 2,000-foot levels, darting in and out among heavier and slower freight planes, and bouncing her wheels on an air-freighter operated by the Embry-Riddle Company.

"I was just kidding the pilot," she explained. "I've known that boy since he was as high as a joystick, and I know he was peeved because he had to fly that route yesterday. I was just teasing him, and not doing anybody any harm."

Judge Rossman "grounded" the energetic woman flier for two weeks.

Crook Gives Up; Shrunk World, Cause

"It's Getting So You Can't Hide Anywhere," Swindler Says

San Francisco, February 15.—"What's the use? This world is too small. Those danged airplanes have shrunk it to the size of a crabapple." Robert Boswell, swindler told police here today when he gave himself up to answer to eight charges of obtaining money under false pretenses.

"I hid out in Turkestan, and saw one of my victims. I tried the interior of Australia, and a flying American woman recognized me as having lived next door to her in Denver. I even tried Siberia, but people from Hamilton, O., who know people I had sold stock to, saw and recognized me. It got to be a bother hiding from everybody, so I'll give up and take my rap and reform. It used to be a fellow could get out of the country and feel safe. That was when we traveled less than a mile a minute. There's no hiding anywhere now." Boswell was held for Massachusetts officials.

What Does It Cost To Own An Airplane?

The following figures are based on the manufacturer's guaranteed gasoline and oil consumption figures, our own experience in engine overhaul, and for the sake of a concrete example an assumption of 100 hours of flying per year which would be equal to 10,000 miles per year thus bringing the figures to approximate average automobile mileage.

The airplane in this analysis is the famous Monocoupe, manufactured by Mono Aircraft, Inc., of Moline, Ill., a subsidiary of the well known Velie Motors Corp.

The Monocoupe is a two-passenger cabin monoplane of the high wing type. The passengers sit side by side with large windows all around. No special flying clothes are necessary as the cabin is enclosed and the blasts of air do not reach the occupants. The plane has dual control so that either passenger may fly at will. The plane will fly at 100 miles per hour at full throttle and land at 35 miles per hour. It is at once very strong and exceedingly easy to fly. It delivers at Cincinnati for \$2,775.00.

COST, DOLLARS PER HOUR

Gasoline	\$1.41
Oil21
Depreciation (one plane only, 20% per year at 100 hours per year)	2.55
Engine overhaul (each 100 hours, @ \$75)75
Actual flying costs, including depreciation and engine upkeep	4.92
Insurance at 20% per year on 50% of the new value of ship (fire, crash, etc.)	2.67
Costs, including insurance	\$7.59
Rent of hangar at \$15.00 per month, 100 flying hours per year. This charge includes pulling plane in and out of hangar, cranking engine, oiling rocker arms, serving for gas and oil and a daily line inspection of the rigging	1.80
Total	\$9.39

These figures translated into cost per mile are as follows:

COST, CENTS PER MILE

Gasoline and Oil	1.62c
Depreciation	2.55c
Engine Overhaul75c
Total	4.92c
Insurance	2.67c
Hangar Rent	1.80c
GRAND TOTAL	9.39c

Actually less than ten cents per mile for the complete operating costs of one of the sweetest flying machines on the market today.

Remember—10,000 miles in the air are equivalent to nearly 15,000 miles by road because you can travel in straight lines from point to point and our geometry tells us such is the shortest distance.



C. O. Meguire

WHAT C. O. MEGUIRE

HAS DONE ---

You Also Can Do

"Mac" worked his way through. He went the long way round. There is a shorter path to a good piloting job for you.

In 1924 Meguire was attending the night law school of the Y. M. C. A., and spending all his spare time with the members of the 147th Pursuit Squadron of the Air Corp Reserves at Grisard Field, Blue Ash, O. By making himself useful all week, he got a 10-minute hop on Sundays.

In 1925 he helped move the squadron to Lunken Airport and when the Embry-Riddle Company was formed, began to work for them gratis, or in exchange for airplane rides. Then Captain John W. Pattison decided to give a \$100 finishing course to each of six young men like Meguire, in the Embry-Riddle School, and the latter soloed June 9, 1926, with S. C. Huffman as his instructor.

Beginning August, 1927, he worked for the Embry-Riddle Company, taking part of his pay in flying time. In February, 1928, he had 22 hours. One year later, February 1, 1929, he has 205 hours and is waiting for the Department of Commerce inspector to reach the field to give him his examination for a transport pilot's license.

Thus in 19 months of flying, Meguire has reached the top as far as desirable licenses are concerned. It was three years after his first airplane ride.

Now, in your case, a perfectly-organized school is available to instruct you in flying and ground school work. Within 18 months, you should have your own transport pilot's license.

Remember that we advise you in this school, and do not try to "sell" you by high-pressure methods. We advise you what course will fit you for a career in aviation.

THOUSANDS OF PILOTS ARE NEEDED IN 1929.

CAN YOU SEE THE OPPORTUNITIES IN THIS NEW FORM OF TRANSPORTATION?

YOU SHOULD LEARN TO FLY THIS YEAR.

Write for information or visit us at Lunken Airport.

THE EMBRY-RIDDLE FLYING SCHOOL

LUNKEN AIRPORT

CINCINNATI, OHIO

What Do You Want In Your Airplane?

You are reading the ads now, considering price, performance and upkeep. These three items are most important to you as long as the airplane in question is licensed by the Department of Commerce.

BUT—there is another important consideration for this year of 1929. You want an airplane manufactured by a firm of sufficient age; experience and accomplishment. You would not buy a car that would be orphaned within a year. Now is the time to avoid buying an airplane headed for the same fate.

We have followed this reasoning in becoming distributors for Waco, Monocoupe and Fairchild. Which one do you need?

THE MONOCOUCPE

Here is a real coupe of the air. You and a friend sit side by side and converse easily at full speed. (Something new in airplanes). You travel at 100 miles an hour without effort or strain. The remarkable feature of this ship is that its operating cost, including depreciation, is only six cents per mile if you fly it yourself. This is less than automobile upkeep.

See it, fly it, buy it at. \$2775

THE WACO TEN

(Standard). The familiar, famous WACO. 3-place open biplane. The leader in its class in sales, performance, price. Furnished with engines from 90 h.p. to 300 h.p. A few 0x5 engined jobs are left at \$3235

THE SPORTWING WACO

Here is the ship for high speed transportation. An easy 150 miles an hour top speed, or cruise at 120 miles an hour. From Cincinnati to Chicago in two hours if you want to. Or, if you want to play in the air, this plane has all the performance you need. It is the first commercial plane to perform an outside loop. Complete with instruments, upholstered cockpit and choice of colors. \$8575

THE MONOCOACH

The lowest price quality "family plane." Powered with the new Velie 180-h.p. air-cooled motor, seating four. Cabin comfort, reserve power performance \$6500

THE FAIRCHILD 21

Here is a new sport plane. A two-place, open, low-wing monoplane powered with an 80-h.p. motor. Excellent for training and the private flier who likes his "roadsters" \$4550

THE FAIRCHILD 41

This plane became a sensation the moment its price was announced. Imagine Fairchild quality, performance, comfort and convenience features in a modern cabin plane at anything less than \$10,000! The 41 carries four and sells for \$9250

THE FAIRCHILD 71

The outstanding single-motored airliner. The ultimate in comfort with speed and wearing qualities. Powered with the famous Wasp, and seating seven. \$19,200

The  EMBRY-RIDDLE ©
LUNKEN AIRPORT
Cincinnati, Ohio