

Littlest Line

by EDWARD CHURCHILL

The most unique domestic airline in the United States is 30 miles long and can be traveled in a mere 16 minutes for \$5.

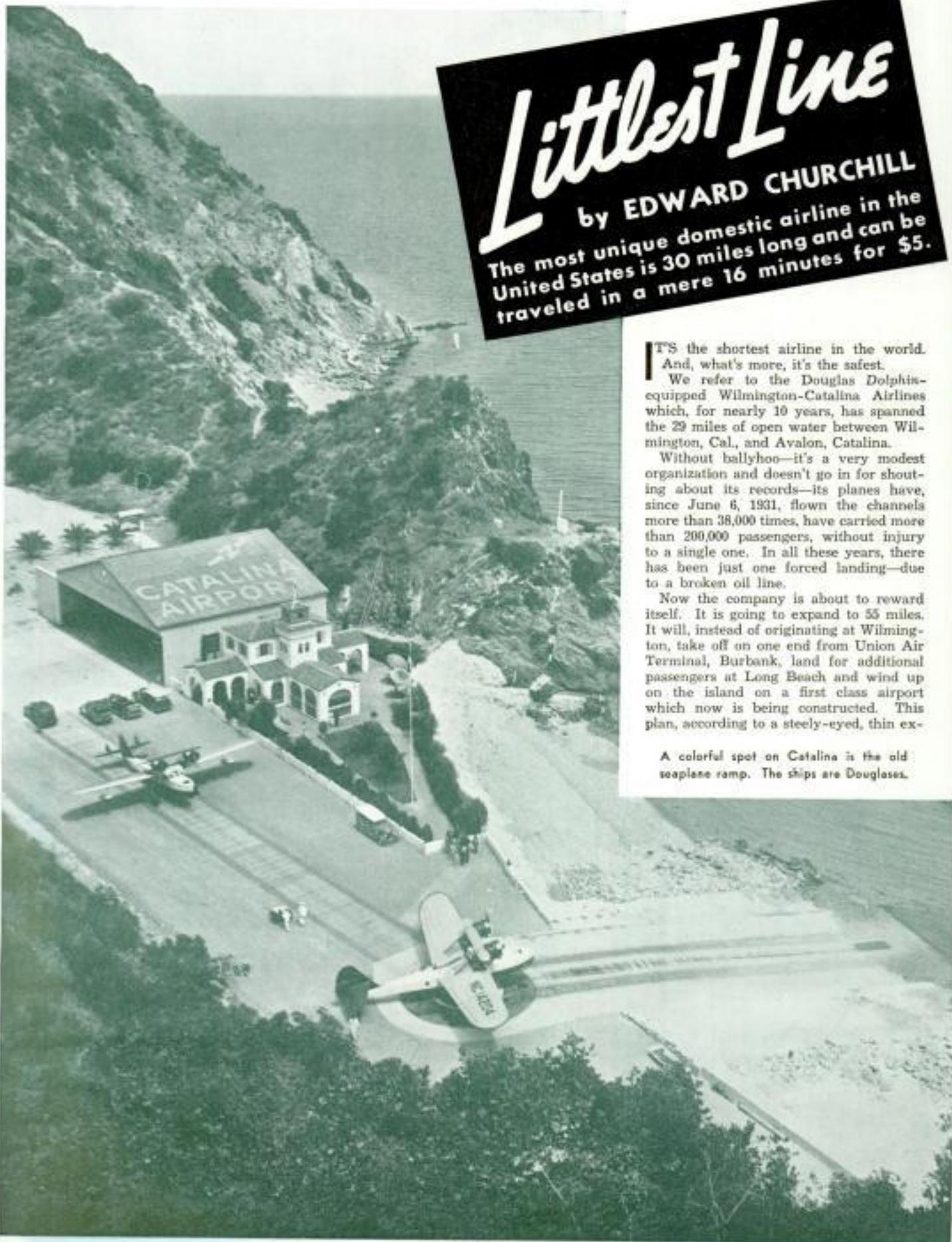
IT'S the shortest airline in the world. And, what's more, it's the safest.

We refer to the Douglas Dolphins-equipped Wilmington-Catalina Airlines which, for nearly 10 years, has spanned the 29 miles of open water between Wilmington, Cal., and Avalon, Catalina.

Without ballyhoo—it's a very modest organization and doesn't go in for shouting about its records—its planes have, since June 6, 1931, flown the channels more than 38,000 times, have carried more than 200,000 passengers, without injury to a single one. In all these years, there has been just one forced landing—due to a broken oil line.

Now the company is about to reward itself. It is going to expand to 55 miles. It will, instead of originating at Wilmington, take off on one end from Union Air Terminal, Burbank, land for additional passengers at Long Beach and wind up on the island on a first class airport which now is being constructed. This plan, according to a steely-eyed, thin ex-

A colorful spot on Catalina is the old seaplane ramp. The ships are Douglases.



Navy pilot who has "skipped" the airline since July, 1931, and to whom goes credit for its safety and maintenance record—Walter L. Seiler, vice president, general manager, chief pilot and at times just a pilot—is being carried out for two reasons.

Let Seiler tell you. "The first," he says, "is that we want to add to the safety, comfort and convenience of our passengers. The second is that we have come to the conclusion, after a careful survey, that there is no longer any equipment of amphibian type manufactured which is suitable to our purpose."

The new ships (two to begin with) are Lockheed Lodestars, already ordered. According to original plans, they were to be delivered in February and placed in service at that time.

"They'll carry 17 passengers, pilot, co-pilot and a steward," Seiler says. "They'll have two-way radio, will be in constant contact with both the Burbank and Catalina (Buffalo Springs) bases and the intermediate stop at Long Beach. We have not had radio up to this time."

That's not all. They'll have a privately financed and constructed airport. This field will have a runway into the prevailing wind of 3,400 feet. The field will be 450 feet wide. There will be hangars, waiting rooms, operations offices and control tower. The buildings will be of old California architecture. The location, at Buffalo Springs, will be 11 miles from Avalon, will be connected with this main community of the island by a scenic high-speed highway.

Financing of the field has been accomplished entirely by the Santa Catalina Island Company, the Wilmington-Catalina Airline and Philip K. Wrigley. Not one cent of Federal money has gone into it and there is a reason for pointing this out. Note it carefully, and don't say we



Walter Seiler

didn't tell you. Or, better, that Seiler didn't.

"Until now we have had only the ramp at Catalina," he says. "Even though there has been no adequate landing place, we have had student flyers and private flyers attempt landings on the island. Successful landings have been made on the golf course, which is privately owned. This is trespass. In each case we have insisted that the pilot dismantle his plane and ship it back to Wilmington by freight. We do this as a safety measure and we will continue to do so even after the new airport has been put into commission.

"We do not want pilots of single-motored ships coming to Catalina over 29 miles of open water. Under the new set-up we will welcome private flyers who have twin-engined equipment which is enabled to maintain altitude even though on only one motor. It will be necessary for the pilot to contact us prior to the flight and get clearance. Under these circumstances, private flyers will be welcome."

Seiler is strictly a safe pilot. He has made 8,400 trips, with just that one forced landing, across the channel. He has carried 44,000 passengers, safely. He knows that there are hundreds of private pilots who would like to fly to Catalina. But, on the other hand, he knows that one motor isn't two. And he has had the experience of seeing in headlines:

"CATALINA PLANE CRASHES IN CHANNEL"

Such headlines don't refer to his planes. But a lot of people just glance at the

streamers and don't read the full details.

When the Wilmington-Catalina Airline was started under the aegis of the W. K. Wrigley interests, it was pioneering transportation in a safe and sane manner—but it wasn't pioneering aviation. A young fellow named Glenn L. Martin did that on May 10, 1912. He made a couple of headlines himself, because he went over in 37 minutes and came back in 51 minutes, bucking a headwind. Sid and Charley Chaplin, of all people, undertook the first airline in 1919 and their equipment made the first scheduled flight on July 1. Pacific Marine Airways took over on June 7, 1922, later gave way to Western Air Express. Then the Wrigley Company took over in 1931.

On June 6, 1931, the line put into service two Loening amphibians, the belief at that time being that the "amphibs" were best because they could be drawn out of the water, out of the weather, and could be worked on more easily. One month later one Loening was retired and the first of the Douglas Dolphins was put into service. Fifteen months from the starting date, a second Douglas Dolphin went onto the line. At the moment the airline consists of two Dolphins, one powered by two Wright Cyclones, carrying eight passengers, and in service nine years; the other carrying 11 passengers with pilot and co-pilot and powered by two Pratt and Whitney Wasps.

The fare, at the start, was \$5 one way, \$10 a round trip. That fare stands today, although there has been considerable experimenting. Seiler says:

"From April, 1932, until March, the following year, we experimented with a one way rate of \$3.75. Ordinarily, this would boom business, but it didn't. Business seemed to fall off. We've never learned why. The following year we went up 20 cents and that didn't do much good.

The Wilmington-Catalina "Dolphin" has just taken off for the mainland 30 miles away. These amphibians have made 38,000 crossings, carrying more than 200,000 passengers, without one fatality.





Lately there have been so many boats in and around the harbor at Catalina that the line's amphibians have had to operate to and from their moorings with extreme caution.

We finally went up to \$5 and business revived."

The Wilmington-Catalina line never has paid a dividend. In fact, it has averaged a loss of approximately \$10,000 a year, year in and year out. There are two reasons. Bringing in Seiler again:

"The line is established as a service to people who want to fly to Catalina Island. It's a convenience. It is, at times, very much a public utility. And, in last analysis, it has been a life saver."

"Second, we've never wanted to carry the mails. We have wanted to fly our own schedules, ranging from one round-trip a day—sometimes cancelled because of bad weather—to 44 trips per day, a peak reached in a summer rush. We were actually running more second sections than regularly scheduled flights. Which points up, too, why we need 17-passenger Lockheed Lodestars and new operations bases.

"Aviation transport has shown quite clearly that no airline can operate at a profit without the business of the Post Office Department—and we're no exception."

The corporate set-up of the tiny airline is interesting. David P. Fleming is president and chairman of the board of directors. He has general knowledge of air transportation, but leaves the details to the good judgment of Seiler, vice president and general manager, chief pilot and pilot. Secretary and treasurer is Jack Q. Emmerich, who steals himself to those annual losses, pays off with a smile. Jack R. Hill is the long-time maintenance man—the lad who, with nine skilled mechanics under him, has built up the astounding safety record, who keeps those Wrights and PW's purring, who detects the corrosion which goes with marine air transport.

The line operates in the summer with

nine pilots and co-pilots, in the winter with five. Stand-bys under Seiler all are veterans, men who know everything from setting down in a cross-swell or a choppy sea to figuring weather before it happens to them. There's Frank Williams, ex-Navy, ex-TWA, ex-CAA inspector, who is now writing a book about his full life between trips; Harry Downs, ex-Navy, ex-airline, now a Lockheed test pilot once in a while, and Richard Field, ex-Boeing and ex-United Air Lines pilot.

Seiler, out of the Navy himself, not only is a martinet when it comes to operations, but an instructor at heart. So well has he trained his co-pilots that he's constantly losing them. He's proud of the fact that nine of his co-pilots have gone onto the transcontinental lines and have made good. You'll find them spotted around TWA, UAL, Northwest and American Airlines.

Up until now, Seiler's operations have been fairly simple. A pilot, taking off from Wilmington, is checked out. Avalon is notified that he'll be along about 17 minutes later—and there he is. Seiler's operations ceiling is 400 feet, his minimum visibility two miles and he has watched his airline complete about 96 per cent of scheduled flights. Come sunset and the big amphibians are towed up the ramps, put away for the night. Seiler believes in day operations except when you're playing around with potential fog and have no beam.

At Wilmington, a flagman is maintained. If an aquaplaner is cavorting around behind a motorboat, if a barge is being shunted, out comes a blue and white flag that tells the landing pilot, "Proceed with caution." If all is well, he waves a yellow flag. If there's down-right danger, he unfurls a red flag. That red flag has been coming out too much of late.

"We get a lot of aquaplaning," Seiler says. "There's more shipping. More private yachting. In short, the Wilmington landing is getting altogether cluttered up. That's just one more reason why we're abandoning Wilmington and going to the landplanes instead of the amphibians."

On the Avalon end there's a patrol boat. And, just in case there might be a mid-channel landing, there are speedboats at both ends of the line—water taxis, they're called—which are ready to scurry out and do duty. There's the other plane, too. All in all, it's been pretty foolproof to date.

"The new line," Seiler adds, "is going to be even more foolproof with radio and all. We're going to reach out and get our customers. It'll be a lot better. We'll stay at Burbank until the other airlines move, then we'll go with them to the Los Angeles Municipal Airport at Inglewood."

There won't be much change in the rate structure, although the passengers will get a longer ride. Proposed fares are \$5.50 one way, \$11 round trip from Burbank, the same old \$5 and \$10 from the Long Beach Municipal Airport.

The saga of Walter Seiler is interesting, for the simple reason that the story of the line—and safety—is his story, too. "Walt" is a native of Dayton, O., one of those fellows who had flying born in them. He recalls, as a kid, playing hookie from school to go down to a garage run by "those crazy Wright fellows"—to the famous garage at Harshmanville—to "oversee" their latest product.

At 17 he ran away from home, joined the Navy for one cruise, came home, went into the payroll department of White Motors, then went with Packard. He spent more time in the shops than in the offices and developed a natural mechanical ability. Just before the United States entered World War I, two men were being chosen from each state to go to Pensacola for flying training. In Pittsburgh at the time, he jumped at the opportunity, qualified, found Pensacola filled but was shipped to England, where he trained with the Royal Naval Air Service.

After completing the course he went to Dunkirk, flew seaplanes on anti-submarine patrol with the British and French. He returned to the United States, served for several years as an instructor at Pensacola, instructed at San Diego, then patrolled and instructed at Coco Solo, Canal Zone. He went into semi-retirement from the Navy, became chief test pilot for Emsco in 1929. When this company ceased operations he concluded, at 40, that he might as well retire. It was with this in view that one day in June he stood studying the Wilmington Catalina Airline operations at Avalon. A man beside him began talking to him.

"Pretty nice, isn't it?" said the man, indicating the ramp, hangar and planes.

"Yes," agreed Seiler, "but I think—"

He went into a few suggestions with considerable air-marine terminology. The man's mouth fell open.

"Say!" he exclaimed. "How do you know so much about this?"

That started something, because the

(Continued on page 78)

PILOTS WHO CAN SEND AND RECEIVE CODE

Are of more value to commercial aviation than to the pilot who can only send a code receive 20 words per minute. **LEARN NOW!** The Instructograph Automatic Code Teaching Machine completes 100% of its instructions in 10 minutes, without the usual method of learning the code that has been used. The Instructograph is a scientifically constructed machine, enclosed in an attractive leather case, and usually takes the place of an operator-instructor. Anyone can learn to receive and send code perfectly without further assistance. Ideal for beginner or advanced student—a large variety of tapes are available ranging from the alphabet to typical messages on all subjects. With Instructograph's 5 to 40 words-per-minute variable speed range, progress comes easily and satisfactorily.



YOU CAN BUY OR RENT

The Instructograph Code Teaching Machine can be brought outright or rented at attractive day terms. All rental payments may be applied on the purchase price should you decide to buy the equipment. Start learning the code now! The fast, easy, exciting way—with an Instructograph. Write today for prices and full particulars.

INSTRUCTOGRAPH COMPANY

DEPT. AP, 4701 SHERIDAN RD., CHICAGO, ILLINOIS

AVIATION NEEDS TRAINED MEN



Engineering, Mechanics and Administration

Aeronautical University founded by Curtiss-Wright... has specialized in this training for the past twelve years.

AERONAUTICAL UNIVERSITY

training is highly recognized by the men who do the hiring in the aviation industry. Our graduates are with all leading aircraft manufacturers and air lines. Send for FREE Illustrated Bulletin describing courses in:

Aeronautical Engineering

(B. S. Degree)

Certified Mechanics

(Approved by U.S. Civil Aeronautics Board)

Drafting

Administration

Day and Evening Classes

Now Forming

AERONAUTICAL UNIVERSITY

Contractor to U. S. Army Air Corps, Curtiss-Wright Bldg., Dept. 1-A,

1338 S. Michigan Blvd. Chicago

ery is initiated. During recovery the aileron and rudder should be in neutral or, at least, should not be used.

The advanced stall has no place in primary instruction. It may be demonstrated to the student, if for some reason the instructor deems this advisable. The advanced stall is a maneuver in which the aircraft is completely stalled, the stick is brought to its full rearward position and the flight path is controlled with the rudder, usually in a straight line. The ailerons should not be used. This stall can be said to be the basis of a number of aerobatic maneuvers. With slight changes of timing in the use of the elevators and rudder, this maneuver can be made into a falling leaf, snap roll, vertical reverse or spin.

The instructor should realize that the student learns to recognize stalls in three ways: visually, aurally and by muscular reaction, commonly called "feel." He must learn to take heed to the warning of these three senses and make automatic his recovery or correction of the stalled condition.

Regardless of speed, an airfoil stalls at only one angle of attack, so the proper way to correct a stalled condition is to reduce the angle of attack and this is almost invariably attended by an increase in speed. In simple words, get the stick forward, usually by relaxing the "back pressure."

The instructor should be careful that he does nothing to hamper the student while he is learning stalls. The slightest pressure on the controls by the instructor when the student is practicing a stall, eliminates the use of the student's "feel" in recognizing the stall. Too much conversation during the student's practice of stalls hampers his aural perceptions and hand signals during the maneuver should be kept to a minimum in order that he may use his eyes to the best advantage.

In closing it will be well to mention that excessive speed should not be built up in recoveries from either stalls or spins, as this may overload the ship past the point of safety.

The instructor who can bring his students to a high state of proficiency in the execution of turns and stalls, will have no reason to "chew his nails" at the time of the inspector's visit.

END

We followed this thin lead:

It was 3:30 a.m. on a cold January morning in 1932. The late William Wrigley, Jr., was seriously ill at his Arizona home. Seiler piled out of bed, got Hill, trundled out an amphibian, warmed it, roared over to Glendale, lowered his wheels, picked up a specialist and turned his ship east to Phoenix. He got there after daylight and, according to his story, "pretty soon Mr. Wrigley felt better."

Another one:

It was late in 1931. The steamer Colombia, owned by the Panama Mail Lines, had struck a reef off Baja, California, 650 miles south. It was breaking up fast. In a safe in the hold was gold amounting to \$850,000 destined for San Francisco banks. They couldn't get the safe open. Would somebody please fly down a load of dynamite? Seiler did; they got the gold.

And still another:

Wires and radio shrieked the news that two Navy pilots had crashed off the southern tip of the island. Seiler went out in an amphibian. He found one pilot injured seriously, the other shaken up. He got them aboard, rushed them to a hospital on the mainland. Both recovered.

"We got credit for saving their lives," he says.

Then there was the time he raced up to the Isthmus where a boat had just exploded. He helped get the burned men into the amphibian and flew them to the mainland, where he helped load them into an ambulance.

"One died," he says. "We were too late."

There are a lot more stories. The one about the three-day-old baby who had to be rushed to the specialist on the mainland, who had to be rushed back three days later. Seiler did both jobs. And when it comes to childbirth, heart attack cases, appendectomies and other ailments to which all mortals are heir, Seiler refuses to give any kind of an estimate on the number of lives the line has saved. He tells, too, of ships of all kinds sighted in distress in the channel, of telephone calls at the end of those runs which have saved plenty of people.

"That's why I say," he points out, "that the airline's a service. Profit and loss doesn't count."

Seiler, balding, is slim and straight as an arrow, keeps that Navy stance. In spite of all his experience, he's still on the sunny side of 50. He's married, has a 15-year-old daughter. His wife and daughter have to live in Glendale. Because of the press of work, he has to spend a lot of time at Catalina. He has quarters in Bachelor Hall, the famous home of the late Zane Gray, novelist. He's a Quiet Birdman, has logged 6,000 hours and is a member of the Pacific Aviation Club.

Right now, he's planning to get the name, Wilmington-Catalina Airline, changed to plain Catalina Airline [this recently was done—Ed.], mainly because it won't run to Wilmington any more. He's like a skipper abandoning ship with those Douglas Dolphins, which he calls the greatest amphibians ever made. He doesn't know yet what'll happen to them.

Free Catalog

Ready March 1
Fully illustrated, showing special foot wear and clothing for fishermen and campers, also special fishing tackle.

L. L. Bean, Inc.

29 Main Street, Freeport, Maine
Mfrs. Fishing and Camping Specialties

Littlest Line

(Continued from page 28)

man was D. M. Renton, vice president and general manager of the Santa Catalina Island Company.

"We need a chief pilot," Renton said, finally. "How's about it?"

"I'll try it for a month," Seiler said.

The month has stretched almost to 10 years and should have a lot of elastic in it yet, now that new excitements and new problems are coming up.

Seiler is a bit shy about off-schedule operations. He, like most of the old-timers with thousands of hours under their belts, doesn't "pop off" about thrilling experiences. Once he said:

"We never operated nights—except once—"

Aircraft Training

Swallow Airplane Co. Inc.

Dept. F, Training Division

917 E. Lincoln St., Wichita, Kan.

U. S. Government Approved Aircraft and Engine Mechanic School

4 New Authentic Scale WAR PLANES

Now Offered by CLEVELAND,
Designers of "America's
FIRST LINE
of Models"

America's New "Terror of the Skies" SKYROCKET

Big 31½" model of America's new twin motor 450 mile per hour fighter. Beautiful fast flights with both motors pulling. Yellow and blue. Complete Kit SP-73, only \$3.00



The Famous British SPITFIRE

Beautiful 27½" model of England's popular interceptor fighter. Large wing area makes this an excellent flyer. Speedy. All silver (with suggestions for green and brown camouflage). Complete Kit SP-74, only \$2.50

This realistic Cleveland model of the "Pride of the R.A.F." is the pride of any builder.

Germany's Fighting Plane

MESSER-SCHMITT

Block 24½" model of the Nazi mass production fighter. Capable of good fast flights, and a sight to see with its black top and white belly (or dark green top with white belly) that makes it look like the shark it is supposed to represent. Complete Kit SP-74, only \$2.50



The Amazing Cannon- Plane



AIRACOBRA

Striking 26½" model of the plane that is fast coming to the front as England's standard pursuit interceptor. Gleaming all silver, and due to its long projecting nose a perfect high speed flyer. Complete Kit SP-76, only \$2.50

Build the Popular Record-Breaking Gas Model Cleveland Playboy, Sr.

A real gas champion—with it Bill Schwab of Cleveland broke the record twice in a week. Others winning contests regularly. Class C. Span 99" span. Kit GP-5017 (complete except power unit) only \$3.99

PLAYBOY JR. First of the Playboy Gas Model family—an instant hit. Class B. Span 49". Kit GP-5006 (complete except power unit) only \$2.50

BABY PLAYBOY. Ace performer. May be flown either gas or rubber. Class A. Span 33". Kit GP-5008 (complete except power unit) only \$1.99

ORDERING INSTRUCTIONS: If your dealer can't supply you, order direct by check or Money Order—cash at our risk. Shipments outside U. S. add 10% (Rest in U. S. funds). For P. P. Special Delivery in U. S. add 25c. (Ohio residents: add 2% sales tax).

Send 5c for New Airplane Catalog of entire Cleveland line—"America's FIRST LINE of Flying Models"—scale, gas, glider, indoor, outdoor, etc., from 25c up. Also Race Car Catalog, 5c; Trip Catalog, 5c; Railroad Catalog, 5c. Send for the ones you want.

CLEVELAND MODEL & SUPPLY CO., INC.
4308A24 LORAIN AVE., CLEVELAND, OHIO, U. S. A.

But he's looking forward, too, to abandoning 125 m.p.h. and taking on 234 m.p.h.—and seeing more of his family in Glendale.

"Going twice as fast over a line twice as long," he says, "is really something."

END

Hero from Winona

(Continued from page 38)

of flying. A number of years ago he played the banjo with a dance orchestra traveling the middle west. He also played the cello and piano. Now he will spend hours during an evening playing the piano as relaxation.

He is a hard man to interview, as newspapermen who have visited Winona recently have discovered. Amiable, but rather reticent, he is inclined to brush off questions. He never dramatizes himself. Besides, it would be difficult to find a busier man. The reporter asks a question and Conrad starts to answer. Before he is half through, a student is hovering about with a drawing. A secretary is waiting to have a letter signed. An inspector has just landed, a breathless small boy reports. Or there is a telephone call—they won't talk to anyone else. One of the mechanics is waiting to see him. And so on.

Conrad's wife, the former Betty Biesanz, is the daughter of Charles Biesanz who was the first man in Winona to fly. In the post-war years he flew with Dick Grace. Mrs. Conrad, however, doesn't do much flying. She is too busy taking care of the four little Conrads—Judy, Betsy, Jane and Molly, aged 8 to 3. All the children have flown and Judy and Betsy, the two eldest, have quite a few hours as passengers.

As a family, the Conrads are so air-minded that it didn't occur to them to buy a car until last summer. Conrad's "boys" take a great deal of personal interest in Max's work and he in theirs. Take a certain red-headed boy, now coming up for his instructor's rating.

"I was out of a job," he says, "when I was sent to Conrad. I told him I wanted to learn how to be an airplane mechanic. He took me up in an airplane. 'What do you want to be a mechanic for?' he said. 'You can be a flyer.'

"Well," adds the red-head with a smile, "now I have my commercial. And I didn't have a cent."

It is perhaps significant that everyone in Winona, from the smallest boy hanging about the shops to almost complete strangers, calls Conrad "Max."

His system of training is different in two ways: first, he trains his own instructors. Second, he sees that every boy who is taking a commercial course goes on at least one trip cross-country by air, to the east or west coast. Many of them have gone many times and consequently are at home in different types of airplanes and in all flying conditions.

"Unless students take long cross-country trips," he says, "they have no real picture of weather.

"On such trips the boys see for themselves how weather can be good in one place and, a little farther on, very bad.

They will learn not to take chances with it. I have made so many mistakes and taken so many chances myself through sheer ignorance that I want to see that my students don't make the same errors."

The airlines, he says, season their pilots no matter how experienced they are in other fields, by making them co-pilots for a period. So, with his students, he tries to teach them how to travel competently by air from one place to another. For after all, he points out, the purpose of flying is "to get from one place to another."

On these trips the boys, usually three or four of them, fly in half-hour stretches, charting their course, studying the weather and getting acquainted with various air traffic control systems.

"They learn a lot more in one trip about navigation and meteorology than in dozens of classes," Conrad points out.

Conrad considers Gene Newman, now airport manager at Green Bay, an outstanding instructor developed by the school. Newman had 36 hours in the air when he qualified for his private license last June. In two months, he had earned his commercial license with a high rating, an instructor's rating and had been appointed manager of the airport.

Right now in Winona, the Junior Chamber of Commerce and other organizations are calling the attention of the Carnegie Foundation of New York to what the Winona Republican-Herald calls "the heroism of Max Conrad and Calvin Volkel (a mechanic at the airport) during the rescue of stranded duck hunters."

It was quite a feat. As one of Max's students, now an instructor, says: "It takes a swell flyer to take a plane that lands at 32 up in a 50-mile wind."

On the morning after Armistice Day, while relatives and friends of the hunters lost and trapped by the storm in the bog-lands along the Mississippi, gathered in worried groups or formed searching parties which were usually unable to find the hunters, Conrad was out at the airport getting ready for his first flight. He started about 9 a.m. and flew steadily until about six the same night, returning to the airport in his 50 h.p. Cub 10 or 12 times during the day to refuel. The wind varied from 30 to 50 m.p.h.

"I was sort of like a dog," Conrad says, "because I had to communicate with the rescue parties in boats without talking to them. I would locate a party of hunters and fly over them again and again to indicate to the rescue boats just where they were to be found."

At the airport they packed five-gallon gasoline cans full of sandwiches, whiskey, paper, matches and cigarettes and Conrad dropped them near the parties of hunters, many of whom had built shelters to protect themselves from the wind. Sometimes, when boats were not available, Conrad would cut his motor and come down within 10 feet of the ground and shout instructions to the stranded men.

"Follow me," he would shout through the noise of the wind, "I'll lead you out." Back and forth he went, marking the path to the hunters until they reached safe territory.