

MAY 1, 1948

tremely high nose position, and a final slight buffeting just at the stall. The break is rather slow, the ship remains stable laterally and there's full aileron control as the nose sinks down. If you pull up a little faster, enough to really get it good and stalled, the nose goes down faster, of course, and farther down, but there's still no reversal of ailerons. The main thing to remember in connection with stalls that you reach from a moderate zoom towards the last is that strong tendency of the airplane to seek its trim speed. Entering these with cruising trim you get down to 50 or slightly below as the nose goes down, so when you ease off for a recovery you are in effect giving the airplane its rein when it's going 45 or 50 m.p.h. and is trimmed for 120. It will want to dive rather steeply trying to get back to that 120 trim speed, so if you don't watch and hold the necessary back pressure on the wheel you'll get into an unnecessarily prolonged recovery dive which will obviously overshoot the 120 considerably. So keep after it once you've eased off a little to start the recovery.

But your main impression in the stalls, power on and off, flaps up and down, is that the airplane is certainly one you will be willing

to slow down to a very low approach speed if there's any occasion for it. You just know it isn't going to roll off at any point, or even pitch except in a very mild and slow fashion. In fact, in a wheel-back power-off glide, it simply porpoises, settling around 500 f.p.m. with the nose oscillating only a few degrees up and down.

Turn stalls with power are pretty much out of reach. You get heavy stick loads, the long tail tends to limit the angle of attack you can get, and the airplane is clean enough to keep flying at a good speed and give you a considerable load. Nor can you get the airplane out of its deep groove by holding a lot of bottom rudder and giving it abrupt aileron deflection to unbank.

That confidence you get in the completely docile stall characteristics and controllability at minimum speeds is good when you come down to shoot a few landings. For without doubt, this is an airplane that should be brought in on the slow side, and after the stall examination you are quite willing to do it. The rate of sink in a flaps-down approach at around 65 does not, however, seem as much less as you'd expect as compared to what it is with a full

load. But you still feel that you want to trim down properly and not carry any unnecessary speed in the approach, otherwise it is going to float past that spot you'd picked to sit down on. As mentioned, just a small amount of slip will do a lot in steepening the approach path. Cessna's position on this is that they'd rather have a slightly under flapped rather than a slightly over flapped airplane, so as to get good climb in a go-around and also avoid any complications if a person suddenly let the flaps up in either an approach or climb.

At any rate, the approach is steep enough to be within the limits of easy judgment and after your second or third landing you're slowing and trimming properly in your approaches and hitting the selected spot with mighty little effort. Any new airplane you can get in and do that with right off is a mighty easy one to fly and consequently quite appealing.

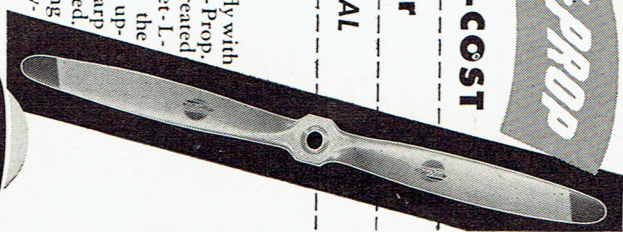
Probably the only feature of the 170 about which some question will be raised is the fuel capacity. Cessna's answer to that is "Do you want range in hours or miles?"

With a 500 mile still-air range they figure that is all about 90% of the purchasers want and that an extra tank would bring on two

undesirable factors. First, even offering extra tankage as extra equipment would tend to raise the cost of standard models and thereby

the LOW-COST Propeller FOR PERSONAL PLANES

• Save your money—fly with a McCauley Met-L-Prop. Every forged heat-treated aluminum alloy Met-L-Prop is built to last the life of the plane. Low upkeep, too—won't warp or split. CAA approved. You'll get best flying performance with low-cost Met-L-Prop.



Without Question
Met-L-Prop is Best

Now available for Stinson Voyagers, Cessna 170, Aeronca Sedan and planes powered with Continental 65 to 90 HP engines. Soon available for other planes up to 165 HP. Write today for fact-full folder.

See Your Dealer or Distributor Now
McCAULEY CORPORATION
DAYTON 7, OHIO

penalize 90% of the buyers. Secondly, they are very much opposed to building an airplane which is easily overloaded. Any extra gas would have to mean that pilots would limit either baggage or passenger weight and they figure that just enough people would overload the airplane on hot days and on small fields to injure the reputation of their product.

This, of course, means they are designing more for the pilot of bad judgment than good, but at the same time the record is not good on this score among many of the post-war normal category airplanes which can be overloaded with gas. On the other hand, pilots have to use the same kind of judgment in flying out of small fields and soft fields and in old airplanes which finally lose a good part of the performance they started out with. Naturally any one person's view on range is dependent largely on what kind of cross country flying he does: long range

or medium range or short range. For the long range pilot, at least, desirable range is not so much miles but hours. After an average 3 hour flight (almost regardless of speed) you'd like another couple hours' gas to handle occasional weather jams, for range is a considerable part of the answer to weather problems. On the other hand, it has been said by Franklin T. Kurt of Grumman, and not entirely facetiously, that the ideal gas range is always one hour more than you have. And there's also some truth in that. At any rate, the 170 has 500 miles range, and doubtless Cessna is right in concluding that the large majority of purchasers will find that quite enough. You can't satisfy everybody in any business, and the main thing is to be sure you satisfy a majority. The 170 is certainly going to have no trouble doing that for it is a smooth, steady, good performing airplane that fits right into any pilot's hand.



Passed With Flying Colors

By
JAMES WARNER BELLAH

THE first time I met him was at an airrome in England during the last months of the first World War. He was a slender young man with a nice smile and pleasant grace; he had infinite courtesy and a diffidence of manner that sat him not too awkwardly. Six or eight Canadian lieutenants were stationed there, and like myself, they preferred coffee to the eternal tea that flowed so freely. But cream was hard to come by on a subaltern's pay, so we would sometimes get a cupful from the mess by taking the cook up for a 20-minute flight in the back seat of a De Havilland 9.

On one occasion we obtained a whole bottle of cream at four a.m. from the diffident young man's doorstep by the simple process of stealing it outright. He was a captain, and we reasoned that his pay could stand the loss.

He had been in the British Navy and had seen plenty of action. After long and legitimate spells on the sick list, he had been transferred to ground duty in the Royal Flying Corps. He never talked of his Navy experiences. We learn-

ed, however, that during the battle of Jutland he had climbed out of a turret and stood there calmly taking pictures until he was dragged back in.

The young captain didn't seem pleased with his lot, for prestige both socially and in a military sense was based on one's ability in the air. And that ability was hard to come by. Crashes were frequent, and we used to have collective funerals on Wednesdays and Saturdays for mistaken ability. Ahead of us lay France and the privilege of buying what was to be left of our lives across the sights of a Vickers gun synchronized with the propeller.

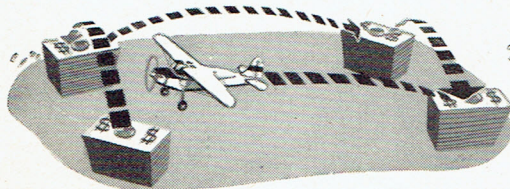
France actually came to us once or twice, when the Hun made night bombing raids. Country club though the place was in some ways, it had elements of realism.

There was a rumor that the young captain was begging for permission to learn to fly, and that his politically powerful father was refusing firmly because another of his sons, an army officer, was already risking his hide in France. But the captain must have been per-

TO LADIES WITH Traveling Husbands

Here's How Yours Can Cover More Territory—Make More Money—Yet Spend More Time at Home!

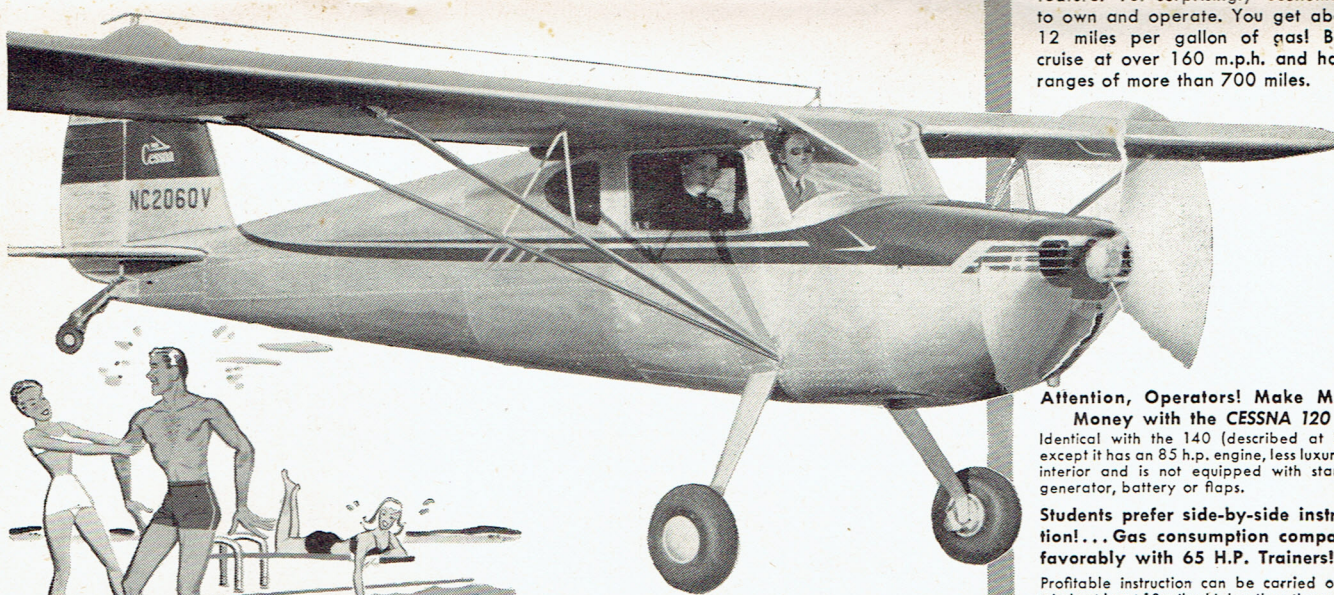
1. Man, how that man of yours can get around in a Cessna 140! Its 450-mile range and over 125 m.p.h. top speed shrink territories... free him from sleeper hops, railroad schedules—or hours of bucking traffic on crowded highways!



3. Home for dinner...after four big sales in four widely separated cities! He'll *really* "bring home the bacon" with a Cessna! For Cessna offers practical, all-metal-structure, cross-country airplanes... with comfortable seats and luxurious quiet cabins... at light training plane prices!



2. He can go where the money is... more often! And do it in perfect comfort! The 140's full-range flaps permit low-speed, super-safe landings. And Cessna's Patented Safety Landing Gear smooths out the roughest runways.

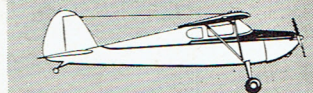


4. P.S. Think of the Fun You'll Have! Cessna's range and speed put dozens of wonderful week-end and vacation spots within easy reach. And flying a Cessna is *not* expensive... service and depreciation are low and you get over 20 miles per gallon of gas.

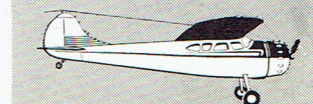
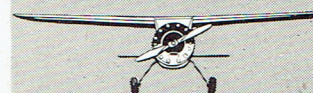
NEW C-90 CONTINENTAL ENGINE
in the Cessna 140 develops more horsepower at less RPMs—provides faster take-off and climb, substantially greater cruising speed, far quieter operation.



ONLY CESSNA OFFERS
A Complete Line of
Personal Planes



CESSNA 170: The low-cost, 4-place "family car of the air." Easy to fly, economical to operate—plenty of room for the whole family plus luggage, 145 h.p. Continental Engine, over 120 m.p.h. cruising speed—over 500-mile range. Ideal for business, too.



CESSNA 195-190: Practical 4-5 place personal or company airliners. metal—airline-type engines—Hartson Standard Constant Speed Propellers—every safety and comfort feature. Yet surprisingly economical to own and operate. You get about 12 miles per gallon of gas! Cruise at over 160 m.p.h. and have ranges of more than 700 miles.

Attention, Operators! Make More Money with the CESSNA 120. Identical with the 140 (described at left) except it has an 85 h.p. engine, less luxurious interior and is not equipped with starter generator, battery or flaps.

Students prefer side-by-side instruction!... Gas consumption comparatively favorably with 65 H.P. Trainers!

Profitable instruction can be carried on in winds at least 10 miles higher than those ground most light planes! More hours in air! Lower maintenance! High re-sale value!

MAIL THIS COUPON NOW...

Cessna Aircraft Company, Dept. AF,
Wichita, Kansas

Please send free literature giving complete description of the Cessna 120, 140 ☐; Cessna 170 ☐; Cessna 190, 195 ☐. Additional material for model builders ☐

Name

Street No.

City

County State