COMMANDER IN CHIEF

The curtain rises on the 114B.

BY RICHARD L. COLLINS

Some of the big traditional players have scaled back their airplane manufacturing efforts, and others have bowed out, at least temporarily. But entrepreneurship, that marvelous virtue on which personal aviation was built, is alive and well: The latest to join up is

Commander Aircraft Company, led by Randall Greene. Started last year, Commander acquired the 112/114 line of singles from Gulfstream Aerospace and set out in three directions.

The first was to make right some problems that had developed in the 1,154 airplanes that were built when the line belonged to Rockwell International. A complete service facility has been established at Wiley Post Airport in Oklahoma City, where Commander owners can take their airplanes for a wing modification plus whatever other upgrading they desire.

The second project will take longer but is both exciting and encouraging. The 114, last built as an "A" model, will be aerodynamically tweaked, and the inside and outside will be refined to the point where the airplane will earn a "B" designation. Then it will be put into production in a new plant on the Kenosha, Wisconsin, airport.

The performance increase will be important; the one item always faulted on the 114 was its cruising speed. Everyone thought that, with a 260-horsepower Lycoming engine, it should do better than 149 knots. The plan is for the 114B to cruise at 164 knots, and if engineering horsepower will make it so, Commander will easily make that goal. David R. Ellis, who held the top advanced design position at Cessna, who did extensive flying qualities research at Princeton University, and who is now an associate professor of aerospace engineering at Kansas University, heads the effort.

A new propeller should provide substantially improved cruise efficiency. A

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new cowling plus new cooling and induction systems will reduce drag and increase the maximum altitude for 75-percent power from 5,500 to 7,000 feet. Work on the exhaust system will increase efficiency, and inboard leading edge devices will probably be added to keep the airflow attached in that area. These things, and others developed during an extensive flight test program, should make Commander's speed goal a reality. There will be a weight bonus, too: The new prop and cowling will be lighter than the old.

Commander is into more than performance and has interior plans for the big-cabin airplane that will set it apart. Seats will be shaped and styled like those on Concorde, leather with fabric inserts and all. The sound level will be addressed with inflatable door seals, and the interior will be tuned for sound deadening after flight tests with directional microphones. A new instrument panel will be developed. Electrics will be overhead, two-inch engine instruments in a vertical stack will be used in the panel, and there will be space for a dual flight panel. Commander is also looking at a new control system that would free up panel space in front of the pilot. All these changes won't come in a day but will be part of an evolutionary enhancement of the airplane.

What price all this glory? Currently, $129,500 is the basic IFR-equipped price. Add a Stormscope, DME, loran, and flight director if you wish; radar and TKS ice protection will be available later. Do all that and the price will be higher than the $150,000 to $170,000 that Greene thinks will be average.

But wait. You can't buy one, and that was Commander's third part of the project. If you live in the United States, Canada, or Mexico, the 114s will be for lease only, under what is called a finance lease. Sign up for the airplane for a term of seven to 15 years, make the lease payment every month, and at the end of the lease term you can buy the airplane for a pre-agreed residual value price—which is why they call it a finance lease. The difference between this and a straight finance deal is that the title to the airplane remains with Commander. You will be able to sell your

equity at any time in the lease, with the next person taking up the payments but with ownership still residing with Commander.

Why this? It gives Commander better control over the airplane and enables all the aircraft to be put into one insurance pool with $5 million liability each. Commander feels that will provide insulation against product liability as well as saving the customer money on both hull and liability insurance. The lease will require attendance at a thorough three-day school; thereafter an annual check at a Commander dealer will satisfy the lease's proficiency requirement.

A power-by-the-hour plan will be made so attractive that few will be likely to turn it down. Send an extra $9 per hour in with your lease payment and you get a 100-percent warranty to TBO (if it occurs within 10 years) and a new engine at TBO. Such an arrangement would result in no difference in value between an airplane with a high- or low-time engine because the overhaul is always paid up.

How much would a monthly lease payment be? That would depend on all the variables and options and on interest rates at the time a deal is made, but on a well-equipped airplane it should run under two grand.

How is all this going to happen? The plant in Kenosha is slated for completion in June or July, and the first airplane is scheduled to roll off the line in November. That is a very ambitious plan, helped by the fact that the tooling for the 13,000 parts in the airplane is both in hand and excellent. The original 112 was actually built on hard tooling—that is, the tooling was in place and ready when the airplane was developed.

The labor market in Kenosha should be outstanding. When Greene was looking for support in his program to build

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airplanes, Chrysler, which owns Gulfstream Aerospace, had just closed a plant in Kenosha and was not popular there, offered a good deal if Commander would locate in Kenosha. Chrysler Capital provided a long-term loan and revolving credit to finance production.

Commander plans to build 20 114Bs per month and to develop other aircraft, including a turbocharged version and a military trainer. There is no current plan to revive the 200-hp 112.

The new ones won't be here right away, but a look at a late model 114A is a good way to visualize a 114B.

On a walkaround, the size of the airplane is impressive. It stands tall. And if you want to stand tall in the rain and not get wet, there's plenty of room under the cruciform tail.

The cabin is large, with the rear seats being as comfortable as in any airplane. The front ones are fine, too; they just don't have the commanding panoramic view of the slightly higher rear ones. There's a door on each side, so getting in and out are easy, and a large baggage compartment aft takes care of gear.

The six-cylinder Lycoming sounds good on the ground, and a new exhaust system might enhance that sound. Taxiing is conventional. On takeoff, a check pilot will likely remind you to not be bashful with the rudder pedals. The 114 does ask for a little footwork when the nosewheel is lifted and on a crosswind landing, but the control power is there.

The climb rate is superb, and even in a 114A the noise level is altogether acceptable. A substantial reduction will leave the cabin quite quiet. In turbulence, the folks in the rear will thank you for installing the optional yaw damper.

The landing is especially satisfying because that long trailing beam gear almost seems to suggest that if you get it close, it'll smooth out the rest.

The 114 came to be because Rockwell International wanted to take a crack at an all-new design in the personal airplane business. The project, initially the 112, was started in Albany, Georgia, and was subsequently moved to Bethany, Oklahoma, where production ceased. Now the peak of the geographic triangle will be added in Kenosha, Wisconsin. A lot of people thought very highly of the design when it was first introduced and are pulling strongly for the third location to be the charm and for brand-new Commanders to be available for a long time to come. □