



The *Seawind* Flyer

Summer 2005

Seawindinc PO Box 1041, Kimberton, PA 19442

PH: 610-917-1120

FAX: 610-933-3335

bpoirien@seawind.net

http://www.seawind.net

IT HAS ALL COME TOGETHER.

Seawind has made significant progress with the design, engineering and production of the ‘fastest, most comfortable and most versatile’ single engine airplane in the world. Our sales have increased markedly, our manufacturing facility is becoming more and more efficient, and our delivery projections remain on target. We want to, once again, thank you all for standing by us, encouraging our efforts and ‘staying the course’ with Seawind!!

AIRCRAFT SALES.

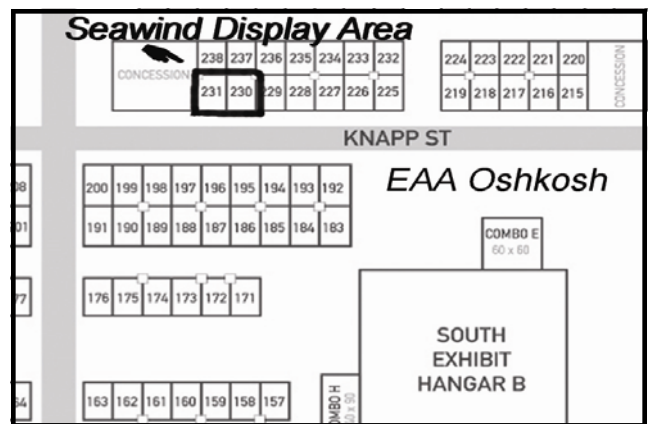
Our aircraft sales have increased to the point where we are selling one per week. Sun n’ Fun sales were the best ever with five contracts sold. After securing the funding we communicated the revised delivery schedule to all of the Seawind contract holders. All but three accepted the new schedule. We have added many orders since then so that, at this time, our total aircraft sales stand at thirty. All of 2006 production positions have been sold and the next delivery date available is March 27, 2007.

We are holding our special pre-production pricing of \$294,700 until just after EAA Oshkosh (August 2, 2005) or our sale of the fiftieth airplane, whichever occurs first. We will continue to offer the ‘no-risk’ deposit program as the production demonstrators will not be available for conducting demos until late this year. As a reminder, the offer consists of a \$9,000 deposit on a certified Seawind 300C. The deposit is placed into a protected escrow account (similar to a money market) and gains interest. The deposit and a signed contract place the customer on the Estimated Delivery Date Schedule (EDD). Once the production Seawind 300C demonstrators are ready for service, we will schedule demo flights with each customer taking advantage of this program. Following the production demo, if the customer decides for any reason to cancel the contract, the deposit plus interest, minus the \$300 demonstration fee will be refunded. Only customers on the EDD schedule will be considered for earlier deliveries if customers ahead of them on the EDD decide to delay delivery. If you want a Seawind 300C, let us know now!! We are very confident you will be pleased and continue with the program.

EAA OSHKOSH JULY 25 – 31, WHITMAN REGIONAL AIRPORT, WI.

This is the largest show in the world. If you have never attended, you should. It’s more than a show, it’s a happening. Oshkosh is our next aviation show and should be the last without the benefit of the production demonstrators. We will have on display our proof of concept airplane (N46SW), our Seawind 300 C mockup with simulated avionics package, certified dimensions for the cockpit and outboard motor. We will also have our full show display and Seawind apparel available for purchase. We expect to sign several contracts at the show and, as stated earlier, we will be raising the base price of the aircraft right afterward. We look forward to visiting with all of you in Oshkosh.

Bill Poirier



The Seawind Location at Oshkosh 2005

WHAT'S NEW?

We have been focusing in on the final decisions for completion and flight-testing. Every refinement has been carefully reviewed to make sure it will not diminish the performance that was achieved with the experimental kit Seawind. For example, prior to improving the blending of the non-structural keel “V” cuff, the refined shape was duplicated on the N46SW concept aircraft. There was no measurable change in performance. We had previously found that minor changes could result in major differences on the water. For that reason, we approach even minor adjustments cautiously.

POWER PLANT

The power plant on the certified Seawind will be the Continental IO-550-N 310 HP 6-cylinder engine. The IO-550 gives 10 HP more than the IO-540 Lycoming engine used on the kit version. The IO-550 is the same weight and all dimensions are within ¼" of the IO-540. However, 10 HP was not the only reason for the change. Another reason was the extended warranty available to the owner by Continental. The most important reason for the decision to change was the optional FADEC (Full Authority Digital Engine Control), which has been certified by Continental/Aerospace. It provides 5% (15.5 HP) more power on take off. That is a total of 25.5 HP more than the IO-540 on take off. FADEC has also been proven to reduce fuel consumption by as much as 15%. The optional FADEC can use a single-lever control (throttle only) or two-lever control (throttle & RPM). The mixture control is gone. We will test to see which is the most appropriate for the Seawind. Recent news releases have predicted that the FADEC system will allow operations using 94 octane auto gas. The Seawind will also be using the Hartzell Scimitar 3-blade propeller. The Scimitar propeller is estimated to provide a 3% improvement (9 HP) in performance. All of the above improvements increase the cruise power an estimated 19 HP and the take off by 25.5 HP. These were the reasons we selected the Continental engine. This engine/prop combination is currently being used on the Cirrus SR 22 and the Lancair Columbia.

AVIONICS

We will be setting up our own avionics shop this summer. We are settling on the avionics packages. From the pilot/owner perspective, it is great to see the constant rapid advances in navigational technology. From the aircraft manufacturer's point of view, it is somewhat unsettling because advances are occurring almost daily. We had selected Apollo, only to have it sold out to Garmin, the industry leader.

The Seawind is a versatile aircraft. Our customers range from high-speed, IFR, cross-country, all weather pilots, to low-speed utilitarian, water and bush pilots. Consequently, we need to offer basic VFR, IFR and deluxe glass cockpit.

The VFR Package will be Garmin, equipment:

- ~ Audio panel with marker beacon and 6 place intercom.
- ~ GPS/COM GNC 250 XL with display
- ~ Transponder GTX 320A

The IFR Package will be Garmin equipment:

- ~ Audio panel with marker beacon and 6 place intercom
- ~ Moving map screen MX 20
- ~ GPS/COM, NAV, Glide slope GNS 430
- ~ Transponder - GTX 327

Optional – The WAAS CNX 80 in lieu of the GNS 430 can be ordered. You can order the GTX-330 Mode S Transponder, as well.

Of course other avionics equipment can be provided, but we will not have the buying power to save you money.

The autopilot will be S-Tec 50, for both the VFR and the IFR configuration. The autopilot will have a yaw damper and it has tracking, navigation and altitude hold.



Glass Cockpit

We hope to announce in late July at Oshkosh which glass cockpit configuration we will be using .

We have had discussions with four companies. Because of the versatility, speed and operating conditions of the Seawind, we have to make sure the equipment will perform properly throughout its operating envelope.

INTERIOR

I hate to keep repeating myself, but again, because of the versatility of the Seawind, we selected the interior finishes to be compatible with the operating environment. Vinyl seats are practical for water operations but are hot and uncomfortable for long-distance travel. Olefin fabrics were selected for the seats and other upholstery surfaces. Olefin is stain and water-resistant and will breathe for comfort. It will not mildew.

Bill Poirier has had a number of requests for leather seats. We do not recommend leather or wool materials because of mildew. If you intend to use the Seawind primarily as a fast land plane, then you need not be concerned with mildew. Therefore, it has been decided to offer a leather and/or leather-like interior to those who want it. We will continue to caution customers relative to the decision to outfit their Seawind with leather. The price for leather has not been determined yet, but it will be competitive.

DELUXE INTERIOR

Along with the discussion to offer leather, we decided to offer a deluxe interior package, which will be available to all customers regardless of upholstery selection. We are evaluating what items should be offered in the package.

Dick Silva

MEANWHILE BACK AT THE FACTORY

With all of the fund raising behind us we were able to get down to the fun part, building airplanes. We are expanding the work force at a measured pace and have made good progress in May and June.

WING AND STABILIZER TESTING

These are the two components that provide the up and down force to keep you flying. They get the most attention in design and testing. Most people do not know how much attention.

After rigorous material property tests (2 years), bond joint tests (1 year) and conformity documentation, we then build in a disbond (defect) every twelve inches, and induce impact damage at critical locations. This impact damage is equivalent to dropping a 2 pound tool from 4.5 feet. The test parts are then conditioned at 140°F and 85% relative humidity for 40 days. All the static load tests will then be performed at 150° F. *This is equivalent to parking your Seawind submerged in water in Death Valley and then taking off and instantly doing a high-speed pull up at full gross. Sure!*

LANDING GEAR TESTS

The official tests have been successfully completed. The landing gear is sixteen pounds heavier than originally estimated. We have started reducing the weight and retesting to make sure that they still have the required strength. So far we have taken seven pounds back off of the main gear. We are working on other pieces to accomplish the reduction of the remaining nine pounds. The new landing gear is very stout and forgiving. It will be worth a small weight increase when you are landing on turf or gravel.

FUSELAGE TESTING

The fuselage and vertical tail test article will be installed in the temperature humidity chamber for forty days starting in July. The structural test fixture is assembled and waiting for the conditional fuselage. We will be testing the fuselage and vertical fin to withstand very high loads as follows;

~ 7,900 lbs upward on the nose.

~ 18g forward, 9g up and 3g holding engine down and 4.5g sideways on the engine mount.

~ 26g forward on seat belt restraints.

The Seawind fuselage is very strong to withstand the 7,900 pound water loads and other water loads virtually everywhere. As a result the Seawind can land on almost any surface with the gear up with little or no damage.

PRODUCTION FLIGHT TEST AIRCRAFT (FTA)

The first FTA's are well under way with over 60% of the fiberglass parts made. Assembly of the wings and fuselage is progressing.

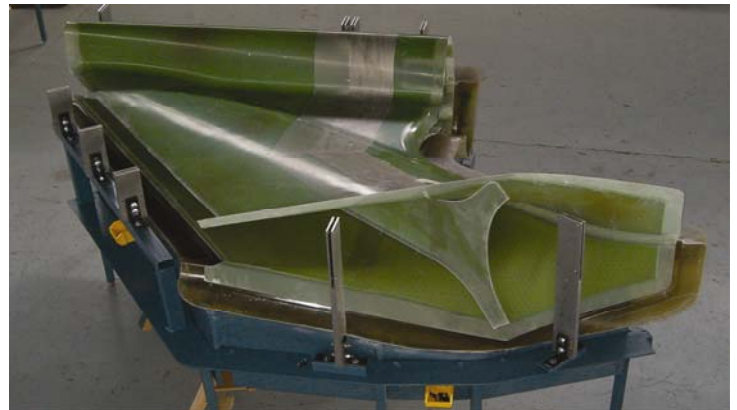
TOOLING

The tooling is progressing well, with six of the nine major fixtures in service. Five of the ten minor assembly fixtures are also in service. The fixtures were first verified with the structural test articles. They are being finalized while assembling the two FTA's.

The last significant fixtures are the canopy and cowling. After that, we have a myriad of drill templates and system attachment fixtures to complete. These will be developed and finalized with the first two FTA's. All subsequent Seawinds will be identical.



The hull is ready for the vertical tail and scheduled to be tested



The vertical tail being assembled in the new jig.



Two wings in the process of production.

BUILDING IMPROVEMENTS

Phase 1 of the building improvement project has been started. There will be some disruption to our progress but we need the new facilities to set up an efficient production line. In order to preserve capital, we could not start the work sooner. Phase 2 of the building improvements will take place this fall before the legendary Canadian winter arrives.

Dick Silva

(Continued on page 4)

PORTS OF CALL. We intended to offer information on great locations to visit with your Seawind. There are two magazines; **Aviator's Guide** and **Pilot Getaways** that do a better job than we can of covering destinations that you can visit with your airplane. We also recommend purchasing the **Water Landing Directory** published by the Seaplane pilot's Association. It provides information for each state on any restricted water body. We will publish those special places our readers would like to share with the Seawind community. Please send us your favorite locations, by providing the GPS location, the identifier, type of landing area and any other amenities or attractions that can help others make decisions about visiting. We will include locations in our future newsletters.

MOVING TO EMAIL FLYER.

This is the first effort to send an email newsletter.

Please let us know if you've had difficulty with reception. If you are receiving this newsletter by 'snail-mail' and want to convert to the electronic format, email your contact information to bpoirier@seawind.net and we'll send the next newsletter to you by email. No fear, we will continue to send the 'snail mail' version to those who prefer that method.

SEAWIND MODELS FOR SALE.

We have authorized a company to produce a radio control, 1/8" scale model of the Seawind 300C.

Prices and details will be available in the Fall Flyer. The model will be on display at Oshkosh.

It will make a great Christmas present to that future pilot in your family.



Seawind inc

**P.O. Box 1041
Kimberton, PA 19442**