

EAA Chapter 245 Meeting
June 15, 1984

The meeting (at the Carp hangar/club house) was opened shortly after 8 PM by President Eric Taada with the announcement that Bill Landry, who has been with our chapter since forever, and involved very heavily in all our undertakings as both an executive and ordinary member, is retiring after 31 years with the National Research Council. Bill's interest in homebuilding goes back to the days of Keith Hopkinson whom he knew and corresponded with. As everyone who claims to be an EAAer knows, the first homebuilt registered in Canada was built by Keith Hopkinson. CF-RAC is now in the National Aeronautical Museum. Bill incidentally has produced a catalogue of all homebuilt aircraft in Canada. He is retiring to London Ont., an area where, it was noted, he can attend five EAA meetings a month! To wish him good luck and in recognition of his service to the chapter, Bill was made an honorary life member and presented with a gold-plated key to the club.

Our guest speaker was Murray Morgan, who has been a test pilot with the National Aeronautical Establishment for seven years. His presentation (see notes following) was on the test flying of the sleek new homebuilt amphibian, the Seawind.

Tony Taylor, who has bought Carp's flying operation previously owned by Gary Field, was also at the meeting and had on display his ultralight Falcon, one of the latest and most sophisticated ultralight designs. He has acquired the dealership for the Falcon, which sells for between \$12,000 and \$13,000. Delivery of four new ones from New Mexico was expected in July (they have now arrived). Tony's primary interest however is in reactivating the flying school and with this in mind he is completing renovations on the building and surroundings. New fuel tanks have been installed and fuel is now available (80/87 and 100) - a very welcome convenience for itinerants and those based at Carp who have recently had to fly or locate themselves elsewhere. The new operation is called "Mylight Aircraft Inc." Staffing is now underway and we understand that a manager, engineer and CFI have now been hired.

Notes on Talk by
Murray Morgan

Murray, a professional test pilot with the National Aeronautical Establishment (NAE) and a graduate of the Empire Test Pilot School in England, has been involved with the flight testing of the Seawind amphibian homebuilt, designed and built by the Creelmans, for the last two and a half years. Incidentally the Seawind has no connection with the NAE. Murray's interest in the project is strictly for the fun of it - a busman's holiday!

Pictures of the airplane have appeared recently in Canadian aviation magazines and Canadian General Aviation News. It is a sleek and unusual design, with the engine cantilevered forward from the top of the vertical stabilizer. It had been hoped to have it on display at Carp for the meeting but unfortunately this was not possible.

As with any new design there were and are a lot of problems to resolve. There were some initial ground handling problems, - mainly nose wheel shimmy. During the fourth high speed run the vibration unlatched the canopy and it flew off. The first flight was August 23rd, 1982 (easy for Murray to remember - it was his birthday!). About 8 lbs pressure was needed to keep the wings level but because of the fibre glass construction aileron tabs were easily installed to improve aerodynamic balance. The aircraft proved to have good static stability but no manoeuvring stability - the restoring force bled off to zero. It was very easy to overstress the aircraft. The Creelmans were very meticulous in correcting the problem - the tail plane was redesigned and a conventional stick versus a side stick was installed (Murray felt the latter was not a nice configuration for cross-country - can't change hands).

Work has been done on performance figures to establish the flight envelope. No spins have been done - they could be flat and difficult to recover from, and he didn't want to risk the prototype! Stalls were done in every conceivable configuration and Murray saw nothing that would indicate it would go into a spin inadvertently. The stalls however left a lot to be desired - at high speed (72 mph) the loss in height was 700 to 800 feet.

A series of nose wheel collapses was the next major set-back. Murray was embarrassed three of four times on a main Ottawa runway with nose wheel failure! The nose wheel retraction mechanism was eventually replaced with an hydraulic system.

The aircraft has proved to be a good land plane - it climbs at 950 fpm and cruises at 166 to 169 mph.

A major task was to reduce the landing speed. The flaps were changed as was the airfoil section. The clean wing stall was reduced to 66 mph (55 mph with flaps) with lots of warning. The aileron system was also changed and it is now a rather pleasant aircraft to fly, although it has taken 2½ years to achieve. It is reliable with good handling qualities and good performance. It's still a little heavy however and work is being done with Dupont to reduce the weight. The engine has a lot of structure supporting it which of course adds to the weight. It is estimated that an overall reduction of some 600 lbs could be made comfortably, including up to 200 lbs for the wings. Three fibre glass consultants are working on this.

Water testing has so far been very limited. It was found that the step was too far forward which caused porpoising at about 66 mph. Murray is not a waterpilot however and further testing is being deferred to someone more experienced.

The market potential for the Seawind would seem excellent. There were more homebuilts constructed in the US last year than production aircraft, and the estimated cost of \$30,000 and 2000 hours for construction compares very favourable with the roughly \$100,000 needed for a production amphibian. With a fuel capacity of 40 gals (Imp) and a 9 gph consumption it should have a range around 600 miles plus reserve. The Creelmans are testing the plane to formal standards and hope to meet FAI 23 requirements.