## **CIELO E MARE - SKY AND SEA**

# Italian Canadian Historical Center - 1026 Baseline Rd.

28 May 2017

### Radio Controlled Model Aircraft Exhibit Description

#### By Robert Brun del Re

The Remote Control aircraft hobby today is as popular as ever. It's actually growing fast, with the availability of affordable radio devices and the introduction of computers and drones. At his exhibit, Rob Brun del Re will display a variety of RC aircraft including small fighters made of building foam, a large Macchi-339 jet and a very large scale sailplane, all of which fly under radio control. A brief presentation will explain the main elements of a radio control system and the electric-powered aircraft they control. The presentation will be interspersed with anecdotes and historical stories to illustrate the rich aviation history of Italy and Italians.

Come and learn about this fascinating hobby. Who knows, you might get hooked too!

### By Paul Penna

Paul will present a flying scale model of the famous British fighter of the Second World War, the Supermarine Spitfire Mk V. This model has a wing span of 32 inches and its propeller is powered by an electric brushless motor and a rechargeable battery. The model has retractable landing gear and is controlled in flight by a 6-channel radio control system.

Paul will present a unique kit of parts for a radio controlled, flying scale model of the Italian fighter of the Second World War, the Macchi C. 202 Folgore.

This kit was produced by a local Ottawa flying model enthusiast who used Computer Aided Design, first to make scaled drawings of this aircraft, and then to design the model in segments, so that each segment



could be cut from a solid block of Styrofoam by a computer controlled cutter.

For example, in order to construct the fuselage of the model from this kit, the builder must glue the individual segments of the fuselage together, one after the other and then sand the final assembly to remove any discontinuities between segments to produce the final smooth fuselage of the Folgore.

Paul's colleague at Sky and Sea, Rob Brun del Re, has completed the construction of one of these kits and has installed an electric motor and battery to drive its propeller as well as a 4-channel radio control system. He painted his model to match the colours and markings of an actual Folgore that served in North Africa in World War Two. So, visitors to the show will be able to see the "kit of Styrofoam parts" that went into the construction of this model at Paul's table, and the finished model at Rob's table. In this way, the visitors can learn how the model was constructed by comparing the two examples. Above is a photo of Rob's completed Folgore.

Paul will also present a mock-up of the airborne portion of a complete radio control system comprised of a 6-channel receiver, a battery, an electronic speed control used to control a brushless motor driving the propeller, the brushless motor itself and servos which are used to move the aerodynamic control surfaces of the model (i.e., ailerons, rudder, elevator).

Paul will display a radio controlled "Ultra-Micro" indoor flying model that weighs less than 10 grams.