

## ***Meeting Report - March 3, 2019***

<u>Item</u>	<u>Discussion</u>	<u>Action</u>
Meeting called to order	<ul style="list-style-type: none"> <li>by President Chris Brownhill at 7:45 pm</li> </ul>	
Attendance	<ul style="list-style-type: none"> <li>11 members and guests were present.</li> </ul>	
Minutes	<ul style="list-style-type: none"> <li>Acceptance of the minutes of the February 13, 2019 meeting - to be published on the BBMFC web-site - was moved by Stuart Henderson and seconded by Keith Morgan - carried</li> </ul>	
Financial report	<ul style="list-style-type: none"> <li>Treasurer Paul Emmerson presented the Treasurer's report - the Club's balance stands at \$2,882.94.</li> </ul>	
<b>Club Business</b>		
Business arising from the February minutes	<ul style="list-style-type: none"> <li>Brad LaPointe mentioned that he had not been able to find the 2019 contest schedule on the Club or MAAC websites. Doug Blackmore confirmed that they had been added to the Club's site within the past 24 hours.</li> <li>Chris reprised the proposed summer events. Following a suggestion from Len Bourel, a Musciano event was added as part of the Anniversary Event (during the Sunday Fun-Fly).</li> </ul>	
Contest permits	<ul style="list-style-type: none"> <li>Chris Brownhill reported that the event permits for the summer contests at Centennial Park had not yet been received from the City</li> </ul>	
Polish Juniors flight School	<ul style="list-style-type: none"> <li>Chris Brownhill requested funding from MAAC to help sustain the flight school formerly run by Ted Smietana but was turned down. He is pursuing help from the Aero Club of Canada. The intent is to reduce the fees paid by juniors to use the club's building room.</li> </ul>	
	<ul style="list-style-type: none"> <li>Doug Blackmore reported he had purchased three stopwatches for the Club.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Doug Blackmore aired a concern that he had encountered inappropriate comments (racial, sexist, etc.) at the flying field. He moved that the members vote to re-affirm the Club's Discrimination, Bullying, and Harassment policy. The members expressed general support for this motion. The motion was seconded by Brad LaPointe and passed. Doug pointed out that this policy is required to be reaffirmed annually. Chris Brownhill advised that such a policy is required by the City and confirmed that Doug's motion served as reaffirmation for the current year.</li> </ul>	<p>Club members are requested to leave inappropriate sentiments and comments and any related baggage at home and not bring them to or express them at Club activities. In other words, be respectful and considerate of other's feelings at all times.</p>
	<ul style="list-style-type: none"> <li>• A big thank-you to Naomi Macklem for supplying "goodies" in the spirit of the upcoming St. Patrick's Day.</li> </ul>	

**Adjournment**

	<ul style="list-style-type: none"> <li>• Meeting adjournment was moved at 8:56 pm by Stuart Henderson and seconded by Len Bourel - carried.</li> </ul>	
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**Special feature - molding ultralight cowlings and other parts**

- Keith Morgan presented his 1/2A Focke Wolf stunt machine which weighs just over 8 oz.
  - He highlighted the formed/molded balsa fuselage and wing leading edge
  - He demonstrated the molding of a cowling over a wooden mold using a garden-variety water bottle and a heat gun. He explained that a partial second molding could be glued inside to provide additional support for the mounting screws.
  - He pointed out that canopies could be similarly molded and that some plastics worked better than others.
  - He also showed some ultra-light wheels made from foam mounted on rims made from the bottoms of aluminum pop cans.



### Special feature - Musciano Building Contest

- As announced in the meeting slinger by Chris Brownhill, a building contest was held for Musciano "hollow-log" models. Six models were entered, including three Golden Hawks, an Army Racer, a Helldiver, and an F7U Cutlass. Voting by the members present, by secret ballot, was the method used to choose the winners. A second round of voting was needed to break a tie for 3<sup>rd</sup> place. Prizes were awarded in addition to the customary certificates.
- The results were as follows:

- 1<sup>st</sup> - Rob Pringle (F7U Cutlass)  
Prize: vintage Scientific Golden Hawk kit



- 2<sup>nd</sup> - Len Bourel (Golden Hawk)  
Prize: self-healing cutting board



- 3<sup>rd</sup> - Naomi Macklem (Golden Hawk)  
Prize: hobby knife



### Special feature - Musciano models and some tips

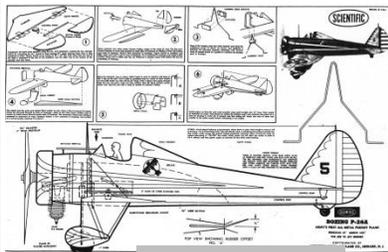
A few tips for building Musciano models from plans.

- The plans are more assembly instructions than plans. Typically only the fuselage profile is shown full-size. The wing and horizontal stabilizer shapes need to be enlarged from a reduced-size plan view. The scale factor can be determined either using the length of the fuselage or the quoted wingspan (if given) to calculate the expansion factor. Many of the models have an 18" wingspan. Another clue is checking the chord of the main (airfoiled) portion of the wing which may be based on a 3" balsa sheet. It is best to check as many of these clues as possible to make sure.
- To get a consistent airfoil on the wing (if the wing is airfoiled) and the maximum thickness is 3/16" or 1/4", I use a few pieces of music wire or brass tube about 3-4" long and of varying diameters (e.g. 1/16", 3/32", 1/8"). I'll draw the high point line spanwise about 30-35% of the chord back from the leading edge. For a 3" wing (or airfoiled portion of the wing), I'll also draw two lines roughly 1/2" ahead of and behind this line. For the aft portion of the wing, I'll position a 1/16" wire against the trailing edge of the sheet and sand a bevel between the top of the wire and the nearest line marked on the wing moving from the trailing edge forward to keep the wire in contact with the sheet. I use a rasp and finish up with a sanding block, in my case a piece of aluminum angle a bit over 1" on each side, one side covered, using double-sided tape, with 80-100 grit and the other side with 120-150 grit paper. You might use a 1/16" or 3/32" wire or tube for the upper side of the leading edge and a 1/32" or 1/16" wire for the underside of the leading edge. Once the bevels are in place, round off the angles left and the leading edge. If the leading and/or trailing edges are elliptical, use a French curve or spline and guesstimate a highpoint curve (or measure and mark a few points and then join the dots). Some of the Musciano designs have flat plate wings (usually 1/8") and some have thicker sheet with a simple bevel on top from about the midpoint of the wing to the trailing edge.
- The cowl can be made in one of several ways, depending on its shape:
  - If "conical" (the top and bottom of the cowl are straight lines in profile), you can make the cowl out of .016" aluminum or plastic and curve it around a form (a block carved to shape while tacked on to the fuselage). The bottom edges can be overlapped and held with very small (00-72 or 00-90) model railroad machine screws. Make sure the back of the cowl slides neatly over the firewall, the front matches any spinner you want to use, and the length is appropriate for the engine you are using. This is what I did for the Cutlass.
  - If the cowl is conical only on top, then you will only be able to "close" and bolt a short length at the rear of the cowl underside - the remainder of the underside will have to be left open but the edges can be cut to match the profile on the plan when viewed from the side. This is how the Golden Hawk cowl is done although it is made from plastic sheet - aluminium will hold its

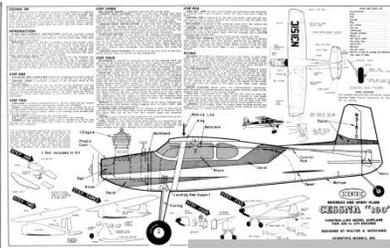
shape better although you can experiment with heating the plastic to encourage it to hold its shape.

- For some of the cowls with more complex shapes, such as those on the Thunderbird or Combatmaster, Keith's demonstration of forming plastic cowls may come in handy unless you have a vac-forming rig. Or you could use fibreglass.
- The fuselages are usually about 1 1/8" side-to-side and can be made with three 3/8" planks cut to profile with the centre cut out of the middle plank. Tack glue the planks together and sand the outside to shape. Then separate the planks and carve out some of the inside of the side planks if you are concerned about weight. It is probably best to leave a wall thickness all round of at least 3/32" to 1/8". The kits were made with a single block and a hollow routed out from the bottom - this was later covered with a 1/16" bottom sheet.
- The landing gears are usually trapped in a groove on the front of the firewall by the mounted engine.

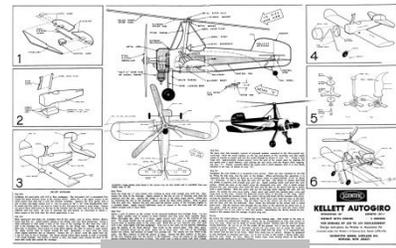
Some more "legal" hollow-log Musciano designs (these are thumbnail versions of the "plans").



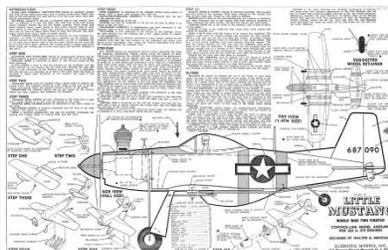
P-26 "Peashooter"



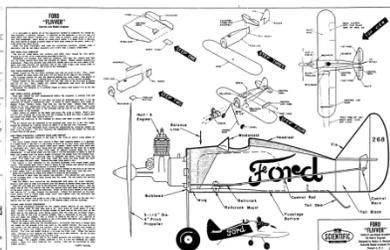
Cessna 180



Kellett Autogyro



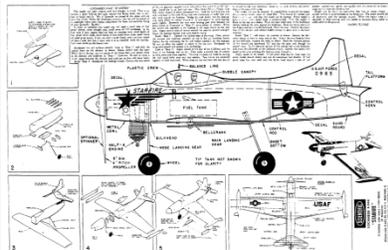
P-51 Mustang



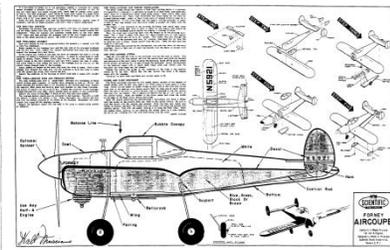
Ford Flivver



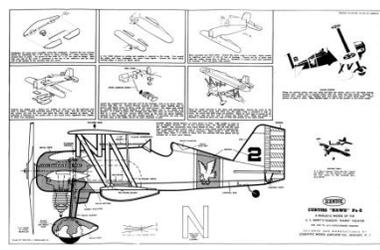
P-47 Thunderbolt



F-94 Starfire



Forney Aircoupe



P6-E Hawk