



## News & Views

Volume 17, No. 1 September, 2006

**Mustang Aeronautics, Inc.**

<http://www.MustangAero.com>

1470 Temple City  
Troy, MI 48084 USA



The Midget Mustang and Mustang II newsletter for Builder's, Owner's, and Dreamers.



*James Wiebe's Midget Mustang  
of Valley Center, KS*

**Oshkosh 2006  
Paul Poberezny Award Winner  
for Classic Homebuilt**

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**Oshkosh 2006  
Bronze Lindy Award Winner  
Plans Built Category**

*See Bill Scheltema's Mustang II at  
our Openhouse on September 9th!*



*Mustang II by Bill Scheltema  
of Muskegon, Michigan*

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An alternate source for answers is the e-mail builder's list at <http://groups.yahoo.com/group/mustangaero>. Information on how to subscribe to the list is on our website.

## On The Cover .....



James Wiebe's Midget Mustang and Bill Scheltema's Mustang II were both award winners at Oshkosh this year. See page 5 for more on the 2006 Airshow.

## In This Issue .....

- Mustang Aeronautics Openhouse & Fly-in
- New at Mustang Aero
  - Midget Tailcone Bulkheads
  - Fin Rear Spar
  - M-II Center Section Rear Spar
- Oshkosh Airshow 2006 *by Chris Tieman*
- Mustang Magic *by John Veale*
- Rudder Pedal Assembly Advisory
- M-II Building Tips
  - Trimming Seat Support Stiffeners

## Newsletter Notes

Thank you to those who have submitted Mustang Registration forms. Your comments have been very helpful and we appreciate your time. Keep them coming!

For those of you who have not yet submitted your Mustang Registration, please send a photo or two along with it. We might feature your aircraft in a future issue of *Mustang News & Views*.

*It is the intent of this newsletter to express the ideas of other builders. No warranty, expressed or implied, shall be given.*

# Mustang Aeronautics Fly-In & Openhouse

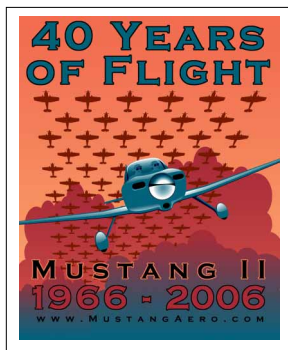


September 9, 2006  
Troy, MI



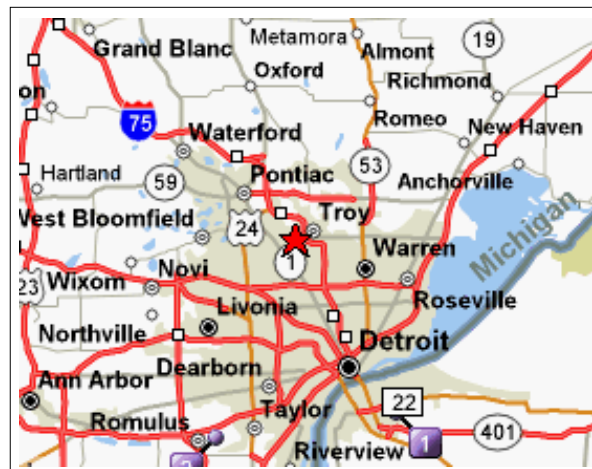
- \* BBQ Lunch
- \* Factory Tour
- \* Show Specials
- \* Flight Demos
- \* Construction Demos

Our big annual event is scheduled for Saturday, September 9th. We will be conducting tours of the factory where we will have many of our newest kit parts and quick build options on display. Designer Bob Bushby will be available to answer questions, along with our staff. We will also be providing hands on riveting demonstrations. Builders will be able to take advantage of show special prices on starter flap kits, drawings, shirts, hats, and other popular merchandise. We will be grilling burgers and hot dogs for lunch, and of course, we will be doing some flying.



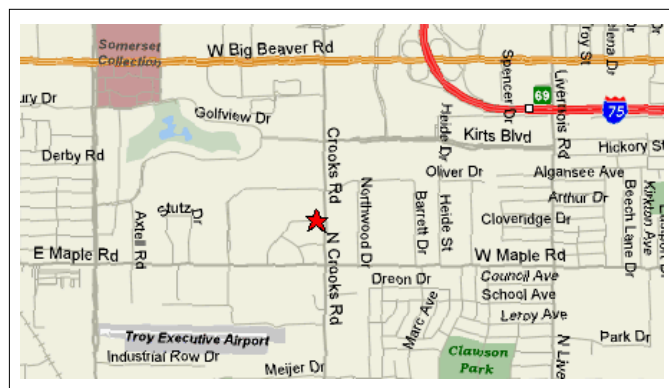
## Come and Join the Continuing Celebration!

Lunch will be served under our show tent on the factory grounds this year. A shuttle will be running to and from the factory and the Troy Airport until 5:00 pm. Maps will be made available at both the factory and the airport registration table. This year is a special one for the Mustang II as we continue the celebration of its 40th Anniversary. We will be having door prizes and our limited edition Anniversary T-shirts will be available for purchase. Mustang pilots that fly their planes in will be treated to lunch and a T-shirt or a commemorative poster. We encourage all who can make it to come! Our annual openhouse is a great place for those who dream about owning a Mustang to become builders, those who are building Mustangs to see their dreams in person, and those who are flying Mustangs to show off their aircraft.



*Troy, Michigan is located just north of Detroit*

For those flying in early, rides will be available from the Oakland Troy airport. We can pick you up and drop you off at your local hotel Friday, Saturday, or Sunday. Call to make arrangements. For visitors flying in commercial to Detroit Metro airport, a rental car will probably be the easiest way to get to Troy. It is about 25 miles and expressway most of the way. The simplest route is I-94 east to I-75 north. Exit at Big Beaver Rd (16 mile Rd). Go west 1/2 mile to Crooks Rd. Head south 3/4 mile to Temple City Drive. Turn right, and the factory is the second building on the right.



*Troy, Michigan*

The Oakland-Troy Airport is located on Industrial Row approximately one mile southwest of our facility. Again, maps to the airport will be made available at the factory. Hope to see you there!



## New at Mustang Aero

As our ongoing effort to improve the Mustang kits continues, we have been adding many CNC cut and drilled parts. We have also been working on match drilling some of the components as well as expanding on our quick build options. It has been a slow but steady process, but we are making progress! When ordering replacement parts in the future, please specify if pre-drilled parts are desired or not as our rivet patterns will not match builder-drilled parts in older kits.

### CNC Cut and Pre-punched Instrument Panels

As promised, we are now producing CNC cut and pre-punched instrument panels in addition to the M-II tailcone bulkhead top members.

### CNC Cut and Pre-punched M-II Bulkhead Side and Bottom Members

As we run out of inventory on some of our older hand-cut parts, we have been programming our CNC machine to cut and pre-punch more of the components. This provides a cleaner looking part and eliminates a lot of the lay-out work for the builders.



### Pre-Punched and Formed M-II Floor Supports

In the past, the Mustang II Forward Floor Supports (Part No. 240.380) were supplied with the kits as a material only item. We are now CNC cutting and forming these parts with our standard kits.

### CNC Cut Mustang II Control Stick Supports



While constructing our quick build center sections, we have been making adjustments to some of the factory-made parts. What eliminates work for our production purposes must also eliminate work for the builder. Perfecting the control stick supports is one of the improvements we have made.

### CNC Cut and Drilled Station 81.75 Bulkheads

Another improvement that we made to the center section was



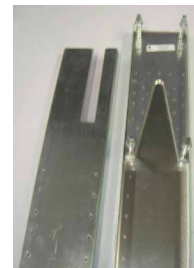
to move the location of the center lightening hole in the station 81.75 bulkhead so that it is off-set to the right, eliminating bulkhead interference with the flap handle. The bulkheads are now pre-punched for both the station 20.0 rib attach rivets and the center section skin rivets.

### Pre-Punched M-II Wing Walk Stiffeners

In the past, the wing walk stiffeners had been supplied in our kits as one length of formed channel that had to be trimmed by the builder. These stiffeners are now supplied as finished parts. They are not only pre-punched but the end tabs are formed by the factory as well. See page 8 for building tips on the seat support stiffeners.

### Match-Drilled Center Section Rear Spars

The Mustang II Center Section Rear Spar, Doubler, and Rib Angles are now being match-drilled. The builders need only to clecoe the parts together to begin working on it. The reinforcements are also match-drilled to the spar ends with the standard version, and the pivot tube slot is cut in both the spar and the doubler for the folding wing version.



### Match-Drilled Fin Rear Spars

The fin rear spar, reinforcement, and flange doubler are now being supplied as match-drilled parts with our standard Midget Mustang and Mustang II kits. This will save the builder the time it takes to lay out the rivet pattern and locate all of the parts together, making the assembly much quicker and easier.

### Pre-Punched Midget Mustang Tailcone Bulkheads



The Midget Mustang Tailcone Bulkheads for Station 99.35 and Station 128.0 are now CNC cut, providing a better quality part. The belly and side skin rivet holes are also being pre-punched in the bulkhead flanges for the builder's convenience.

*See all of our newest kit parts at our Openhouse!*





# 2006 Oshkosh Airshow

by Chris Tieman

We had about 10 Mustangs at the show. They were a bit spread out this year as the Dayton to Oshkosh racers were in a new location (where the Mustangs used to be). We were kept busy at the booth showing off many of our new CNC cut and drilled kit parts. We had the new fully drilled M-II center section rear spar, fin spar, fuselage bulkheads and some other parts in the display crate. Some of the new Midget Mustang tailcone bulkheads were also on display.



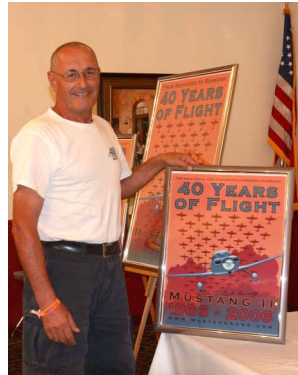
*Scheltema's Folding Wing Mustang II on Display*

Bill Scheltema won a Bronze Lindy for his plans built Mustang II and James Wiebe won the Paul Poberezny award for Classic Homebuilt for his Midget Mustang. Congratulations to both! I think we are starting a streak since James Fleeman won a Bronze Lindy last year for his Mustang II.

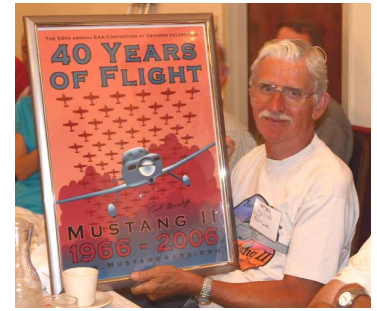
We had a really good turn out at the dinner on Wednesday where Bob Bushby was presented with a large framed Mustang II 40th anniversary poster in appreciation of such a wonderful design.



*Bob Bushby at the Mustang Dinner*



*Ron Simard*



*Phil Funk*

*Oshkosh Mustang Dinner at Robbins Restaurant*

Betty Funk and Ron Simard won the door prizes and both received Bob Bushby autographed 40th anniversary framed posters. Betty and Phil Funk are regrettably selling their award winning Mustang II, if they can find a good home for it. Anyone interested in owning a real piece of art should contact them. Ron Simard doesn't have a Mustang but his neighbor in Panama, Sam Wilcox, does. Last year Sam flew the Mustang II that he purchased here in the United States down to Panama with Ron who was flying his Glassair III.

We gave out smaller anniversary posters to everyone that flew their Mustang into Oshkosh. If anyone didn't get a copy that had their Mustang there, please give us a call. We will be giving out more of them at our Openhouse on September 9th.

It was a 12 hour drive home from Oshkosh for our truck, but I made it in just under 2 hours nonstop in the Midget. It was nice to have a 20 knot tailwind over Lake Michigan so I could zip right across. At 9,500 feet I was able to make it home burning only about 10 gallons of gas. It was really comfortable until I descended below 4000 feet going into Troy. Wow is it hot here! Unlike in Oshkosh, I can now escape into the air-conditioning so I guess I can't complain too much. A special thanks to Darren Golez for the great pictures of James Wiebe's Midget Mustang and the dinner pictures. We are going to make him our official photographer from now on. I hope everyone made it home safely.



# Mustang Magic

by John Veale C-GAIF

The word is ‘magic’. After twenty five years of flying the Mustang II, I still look out over the wings and think of the hours spent studying blueprints, laying out and cutting parts from sheets of aluminium, filing and polishing their edges, and bending them up into fascinating shapes. These shapes became parts and the numbers continued to grow until finally, some thousands of hours later, they were riveted together and became a brand new aircraft. The process may have been fun, but the ‘magic’ was just beginning.

That first year I took a trip from my home airport of Regina, Saskatchewan, to the neighbouring province of Alberta and the EAA Canada Western Convention. My daughter Kristi, only twelve then, shared the flight with me and we were thrilled to receive not only the Best Homebuilt Award, but also the Grand Champion of Show Award. Wow...a heady experience.

The year was 1981 and Oshkosh came next. It was a thrill to park along side many beautiful Midget & Mustang II aircraft. There were conversations with Paul Cox, Larry Kinder and Kent Paser, to name only a few and of course the Mustang’s designer, Bob Bushby.

Now twenty-five years later, a thousand plus hours have been entered into the logbook. I’ve flown the Canadian Prairies, the North Central States, the Canadian Rockies, and over the past eleven years since retirement, the magnificent south coastal regions of British Columbia. Flying the coast is certainly different than flying the Canadian Prairies. The trees are taller, the land is definitely not flat and there is salt water everywhere! One of my greatest discoveries a year or two ago, however, was that God generously created a few hard packed beaches just for aviators.

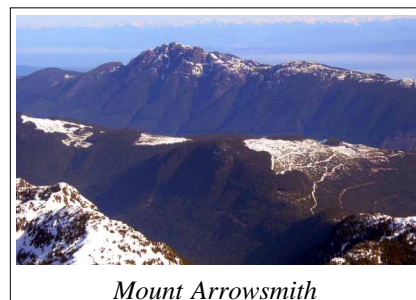
I’d had conversations with friend John Owen, an RV-4 builder and flyer, who had made a number of landings on the beach at Vargas Island, just up-coast from Tofino on the West Side of Vancouver Island. It took major effort on his part to convince me, but in time, I decided I just had to make the beach a sunny-day destination as well. I had been watching the tide-charts. It appeared that April 10<sup>th</sup> 2004 would be a good low-tide day, it’s lowest around eleven-thirty in the morning. The day was severe clear and the temperature forecast to climb to about 18 degrees. What more could I ask for?

With lunch packed, the aircraft fueled and flight plan filed, I lifted off Nanaimo’s runway 34 with my intended course direct to Uclulet and then the shoreline to Tofino, some 85 statute miles to the west.

Flying over the Nanaimo lakes at around 4000 feet I could look northward to the Strait of Georgia with the low hills of Lasqueti Island running NW/SE, and behind it I could see the higher mountains of the larger Texada Island. Below was the meandering Nanaimo River and to the SW were the mountains that wall in the north slopes of the beautiful Cowichan Valley. The engine hummed contentedly. The morning sun flooded the cockpit with a warm glow and welcome temperatures. Life was offering it’s best.

The lower mountains across the southern part of Vancouver Island top out for the most part in the four to five thousand foot range. Now at 4500 feet, they were showing the signs of a recent spring snowfall. In the far distant haze to the south-west was the Strait of Juan de Fuca, a beautiful coastline of forest, stone and sand beaches and the challenging Juan de Fuca and West Coast Trail systems. Visitors from all over the world come to see the coast this way. I preferred the Mustang view as I tracked across the island toward one of the hard-packed sandy beaches on the SW shore of Vargas Island, just up-coast from the Pacific Rim National Park and a few miles from Tofino.

To our right was Mount Arrowsmith, a massive rocky buttress topping out at 5957 feet above sea level. At it’s north end was the highway gateway to the Alberni Valley and the mill town of Port Alberni. Ahead were the Broken Group Islands in Barkley Sound at the mouth of the Alberni Inlet. This beautiful collection of small islands is all part of the Pacific Rim National Park and a favorite destination of ocean kayakers enjoying the protected waters and abundant sea life.



*Mount Arrowsmith*



*Broken Group Islands*

*(continued on next page)*



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As I rounded the headland on the western shore of Barkley Sound, I closed in on the town of Uclulet and the beginning of miles of coastline created, I'm sure, for the sole purpose of taking your breath away. The contrasts of pacific-blue and rainforest-green unfolding below were just waiting to be captured by the camera or one's memory. I descended to a thousand feet as we coasted along above Florencia Bay with its beautiful expanse of beach, and then the rocky headland separating it from Wichaninnish Beach. Soon I reached Breaker's Beach and then a slight transition in the shoreline where Long Beach takes its place.

It was a little early for low tide on Vargas Island, so a touchdown at Tofino airport seemed appropriate. It was 'snack time' anyway so I took taxiway Golf and parked the Mustang. I got out and stretched my legs for a few minutes and then sat leaning against the wheel pant of my Mustang to enjoy a snack, prepared earlier by my wife Pat. (Nobody makes better snacks)

After a half-hour wait and with anticipation for a beach landing running high, I lifted off runway 25 and tracked on up the coastline toward my destination, about ten minutes away. Very quickly under my wing was Wichaninnish Inn where Pat and I spent our 40<sup>th</sup> Wedding Anniversary in August of 2000. The circular building was the Pointe Restaurant, a most beautiful dining room and the setting for more than a few meals in recent years. The Inn is set on a point of land between Chesterman and Middle Beaches

Shortly Ahou Bay on Vargas Island came into view. I over-flew the beach from both ends before deciding to make my approach over the trees from the SE. Here I remember the advice of pilots experienced at landing on this particular ocean beach. "DON'T head for the dry sand, but rather choose the darker sand closer to the low tide line. You will find the surface hard and firm." Once over the 100-foot tall cedars I sideslipped quickly to ten or so feet off the beach. From there I realized the beach was much longer than it appeared from a high altitude. I flew the length of the beach looking for obstructions, and finding none I completed another circuit in preparation for landing.



*Landing on Vargas Island*

My approach was the same, and bleeding off the final ten feet I touched down, keeping the power on as I felt for any increased drag on the sand. There was none so I brought the power back. Now the grin began to form. After rolling to a stop the grin became wider and wider! The life of a Mustang II pilot, I decided once again, is just the greatest.



*John Veale's Mustang II on Vargas Island beach*



I wandered the beach for awhile looking for sand dollars, seashells and other items of interest that may have washed ashore. The seascape and landforms were incredible and it was time for photos to mark the occasion. As you too have discovered, you can never take too many pictures of your airplane, especially when sitting on a west-coast beach!

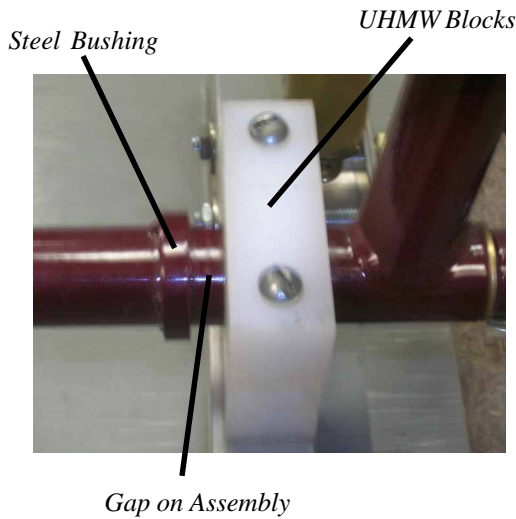
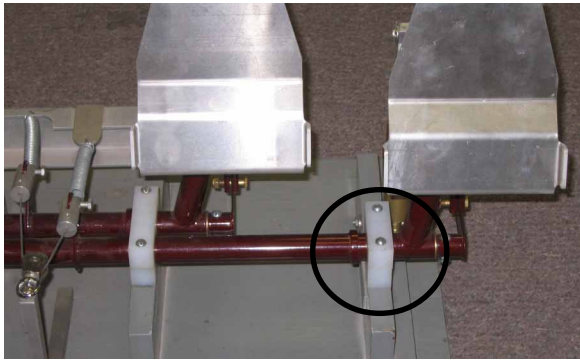
With the eventual incoming tide, I decided it was time to go. With the pre-flight checks completed I advanced throttle and soon we were off the beach and climbing toward Tofino. It had been an incredible day and all made possible on the home-crafted wings of the Mustang II. The new dream created that day was to take my wife Pat to the beach for one of her awesome picnics. Happily, that dream has been realized many times since.

Still building your Mustang? Keep riveting because you will find the end result is pure magic! If you ever find your way to Vancouver Island, and the tides are right, do consider a flight to the western shores and the beach on Vargas Island. It is an amazing experience.



## Rudder Pedal Assembly Advisory

It has recently come to our attention that some of the rudder pedal assemblies shipped from Mustang Aero in the last few months have eluded our quality control department. The steel bushings that are welded to the rudder pedal shafts were not properly located. These bushings are intended as a “stop” for the UHMW blocks. In these parts, a large gap (>.190”) between the bushing and the blocks is created upon assembly.



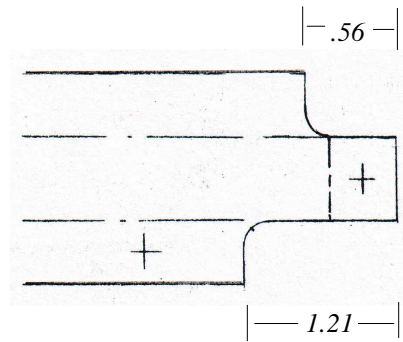
Those who have received the problem parts should contact Mustang Aeronautics for replacements. We can provide wider UHMW blocks to correct the problem. We apologize for any inconvenience this has caused and we will properly reprimand the quality control department for the error.



## Building Tips

### Trimming Mustang II Seat Support Stiffeners

Drawing No. 220.006 shows all of the flanges on the seat support stiffeners to be trimmed back 1.21” from the ends. This provides enough material to bend the end tabs and it also allows clearance for the station 20.0 3/4” rib angles (Part No. 220.325) that are attached to the top of the station 20.0 ribs. However, the rib angle clearance is only necessary on the top side of the stiffener at the outboard end. By extending the flanges on the bottom side of the stiffener as well as both flanges at the inboard end, the seat support stiffeners can be strengthened.



Part No. 220.334 Right Seat Support Stiffener



The opposite end of the stiffener attaches to the seat support rib. There are no flanges to interfere with the flanges on the stiffeners and therefore, only .56” needs to be trimmed from the flanges to provide clearance for the end tab to be bent.

