



# Thrustline

The Newsletter by and for the Springfield Model Airplane Club

Website - <http://www.smacoh.org>

Volume 5

May 2005

## Officers 2005

**President**  
Jeff Traub

**Vice-President**  
Jeff Joos

**Secretary**  
Joe Ferrara

**Treasurer**  
Tom Minnich

## Board Members

**Jim Miller**  
**Neil Perkins**  
**Bill Cline**  
**Buzz Massey**

**Past President/  
Safety Officer**  
Bob McWilliams

**Field Marshal**  
Don Barns

## Assistants 2004

**Mower Maintenance**  
Steve Kianka

**Work Liaison**  
Neil Perkins

**Newsletter Editor**  
Clem Schmid  
[cjschmid@sbcglobal.net](mailto:cjschmid@sbcglobal.net)

## Chris Fry & His 35% Extra 330S

Chris covered construction, performance and safety considerations for Giant Scale RC aircraft and used his beautiful Extra 330S to emphasize key points during the lecture. He stressed strength and safety ideas that can be applied to all RC models.



## Mall Show a Success Despite Low Member Participation



**Minutes of SMAC meeting, April 5th, 2005**

Tonight's meeting was held at the Asbury United Methodist Church in North Hampton. Club President Jeff Traub called the meeting to order at 7:30 PM. There were approximately 26 members and visitors in attendance.

**Secretary's Report:** The report was read by Club Secretary Joe Ferrara. The report was then accepted as read.

**Treasurer's Report:** Club Treasurer Tom Minnich was out of town on a business trip, so there was no treasurer's report given.

**Old Business**

**Mall Show:** The annual March Mall Show is still on for 8-10 April at the Upper Valley Mall in Springfield. Those participating can set up their display aircraft the night before the show. It is requested that any display models not be removed before 6 PM on Sunday night.

**Field Maintenance:** Both current mower units have been repaired and are ready for use. Additionally, we've been able to procure a tractor, gratis. The owner has donated it to the club and given us a letter of ownership. It's an older Massey Ferguson and Steve Kianka has it. The unit has no power take-off and is in need of maintenance. We also got three reel mowers to pull behind the tractor. The mowers also require some maintenance. Following a discussion of the matter, the membership voted to grant Steve authority to spend up to \$1,000 for maintenance to put the unit into working condition. Steve said he will take care of it.

**Paint Ball Event:** There seems to be some support for having another such event and the item is still open.

**Electric Airplane Event:** The event is still open.

**New Business**

**Grass Roller:** The grass roller is rusting badly. Although, for the moment it still is usable, it's leaking so badly that it will drain itself in 2-3 days and

needs to be replaced. Additionally, the field needs to be rolled before the weather gets too dry. We will try to use the existing unit. A date was set to have a field setup party. The date is April 30th at 12 noon. The transmitter stand, pin board, and tables will be put into place. Anyone willing to help is welcome to participate.

**April Board Meeting:** The next Board meeting will be held at Jeff Traub's residence in Enon on April 19th at 7:00 PM.

**Guests:** Brian Steward from London, Ohio area was present tonight as a guest and he joined the Club as our newest member. Welcome, Brian!

**Monthly Presentation:** Tonight's guest speaker was Chris Fry and he gave a talk to the membership on giant scale aircraft. Chris also brought one of his planes along, a Carden Aircraft model. He showed us how to make a plane that large and then demonstrated all the safety features which are built into it, such as redundant control systems, stiffened push rods, large servos and fuel lines. Thanks for the show, Chris!

**50/50 Raffle:** At the conclusion of the meeting, Harry Compston was the winner of the 50/50 raffle. He won the \$12.50 cash prize along with a Micro-Stick model kit. Congratulations, Harry!

There being no further business, a motion to close the meeting was made. The meeting was closed by President Jeff Traub at 8:55 PM.

Respectfully submitted By Club Secretary  
**Joe Ferrara**

**Minutes of SMAC Board meeting, April 19th, 2005**

Tonight's meeting was held at Jeff Traub's residence in Enon and was called to order at 7:00 PM. There were 11 members in attendance.

**Secretary's Report:** Since there was no Board meeting in March, the report from February's meeting was read by Club Secretary Joe Ferrara. The report was then accepted as read.

**Treasurer's Report:** The report was read by Club Treasurer Tom Minnich. The report was then accepted as read. Tom also stated the raffle fund currently has approximately \$41.00 in it and the membership stands at 73 paid members.

### **Old Business**

**Tractor:** The Club has acquired a larger tractor and Steve Kianka is currently working on it to get it operational. He stated it needs a water pump and the item is on order. The mower unit requires some work as well. It also needs 1 tire. Total expenditures so far are approximately \$200. Steve stated he will need several more weeks to complete the repairs. Steve has been authorized to spend up to \$1,000 to get the unit working.

**Field Maintenance:** The field cleanup and setup for the year is scheduled for Saturday, April 30th at 12 noon. Anyone wishing to help out is welcome to participate.

**Mall Show:** The event was held on 8-10 April at the Upper Valley Mall in Springfield. Unfortunately, there was not a very large turnout. Only 9 Club members participated in the event and there were less than 25 planes brought out for display. Although a number of people inquired about the club and its activities, we're going to need a larger turnout if we're going to continue having the show.

### **New Business**

**Club Hats:** There are a number of SMAC hats available for sale and are just \$4.00 each, a real bargain. Anyone interested in purchasing one should contact Club President Jeff Traub.

**Electric Event:** A discussion was held at the last Board meeting about holding an electric fly-in, but the matter is still open at this time.

**Paint Ball Event:** Likewise, there was also a discussion about holding another paint ball event, but it too is still open. The possibility was raised of having it at the Club's annual picnic.

**Annual November Flea Market/Swap Meet:** Dave Snyder, who has managed the event in the past, has stated he doesn't want to continue as director, so we need to get another person willing to pick up the ball. If someone else is able to assist with this, please get in touch with one of the club officers. We have also checked into getting another location for the event, but everything else appears to have substantial additional costs (and strings) attached to it, so it appears that the best course of action is to remain where we are right now.

**Additional Field Maintenance:** We're probably going to need some more gravel for the road. Tom Minnich stated he will look into getting it.

**Next General Meeting:** The next general membership meeting will be held at the Spence Road flying field on Tuesday, May 3rd at 7:00 PM. In case of rain, it will be at the shelter in the park on Route 41 in North Hampton.

**Next Board Meeting:** To Be Announced.

There being no further business, a motion was made to close the meeting. The meeting was closed at 8:35 PM by Club President Jeff Traub.

Respectfully submitted By Club Secretary  
**Joe Ferrara**

### **Thinking Big, An Aerospace Engineer Takes on Hollywood**

Shortly after producers of "The Aviator" began gearing up to make their epic film biography of Howard Hughes, aircraft engineer and USC grad Joe Bok received his first Hollywood contract. But when Bok, who normally builds flying drones for the military, pored over it, he noticed an unusual stipulation: It called for not one, but two copies of every aircraft model to be used in the film.

"I asked, 'Why two?'" recalls Bok. "And they said, 'Because when you crash the first one, we want the second one on the runway with the propeller spinning.'"

Thus began Bok's own high-pressure epic, which started in earnest when Bok, the head of the 35-employee shop Aero Telemetry Corp., brazenly told the big-money Hollywood producers that he didn't need to build duplicates because his models wouldn't crash.

Bok's high wire act was based more on engineering intelligence than guts. He believed that radio controlled model airplanes

wouldn't crash if designed according to classical aerodynamic theory and endowed with sufficient size and weight. That's why he and a staff of six engineers decided to build models considered gargantuan in the world of radio controlled aircraft, the biggest being a 30 ft wide, 648 lbs version of Hughes' infamous XF-11 reconnaissance plane. By most measures, even Bok's "small" models were big: His version of Hughes H-1B racer sported an 18-ft wingspan and weighed in at 450 lbs, while his scale-model of the fabled "Spruce Goose" measured 26 ft from wingtip to wingtip, and weighed 375 lbs. The Spruce Goose was electric powered.

Military-grade transmitters and receivers were used, augmented by custom-designed RF sections, operating at 1.4 GHz. No models crashed and there was never a loss of control even for a split second.

#### **Aircraft Design: Why Bigger is Better**

The pioneering work of Osborne Reynolds in the 1880's is immortalized in the form of the unitless coefficient known as the "Reynolds number, (RN)" The RN defines the relationship between viscous and momentum forces.

Bok's airfoil, which has a RN of 302,000, showed good control characteristics. Had he used a smaller plane (with a RN of 58,800), drag and air-flow separation would have increased, resulting in less control and greater instability. The bottom line on RN and airfoil design is that it directly affects the wing's stalling characteristics. "A relatively low RN will result in an early stall."

**Design News**  
**April 4, 2005**

#### Calendar of Events

**3 May 2005 SMAC Club Meeting 7:00 PM**

**Location: Club Field**

**Spence Road, North Hampton, Ohio**

**17 May 2005 SMAC Board Meeting 7:00 PM**

**Location: TBA**

**7 June 2005 SMAC Club Meeting 7:00 PM**

**Location: Club Field**

**Spence Road, North Hampton, Ohio**

**21 June 2005 SMAC Board Meeting 7:00 PM**

**Location: TBA**

#### For Sale

**Hanger 9 Edge 540 ARF. 78" wingspan, flown 14 times, includes Moki 1.8 with all necessary accessories.**

**Requires 6 servo, 2 aileron, 2 elevator, 1 servo for a pull-pull system on rudder and a throttle servo. Moki 1.8 gives out of sight vertical performance. Model is capable of hovering, unfortunately I'm not! \$500.00/ Phone: 323-1768**



**The AIRBUS A380** makes its maiden flight on 27 April 2005. The flight lasted 4 hours. The takeoff weight was 421 metric tons, compared with the current maximum takeoff weight of 560 metric tons. The A380 is the largest passenger jet ever made. The A380 is designed to carry 555 passengers in three classes, but it can be expanded to 800 seats. Airbus says the A380 will produce half as much noise at takeoff as the 747. So far, Airbus has 154 firm orders for the A380, 27 of them for the freighter version. The Goodrich plant in Troy, Ohio builds the wheel and brake assemblies.