



# THE SLOW ROLL



CHARTERED #921  
Since DEC. 1974

**President—Frank Moskowitz**  
**Vice President—Tony Quist**  
**Treasurer—Gene Peterson**  
**Secretary—Rusty Fried**

## APRIL 2010



**Editor—Bob Purdy**  
[rcbobsvf@aol.com](mailto:rcbobsvf@aol.com)

*The Slow Roll is published by the Sun Valley Fliers  
By and for its membership to all others interested in the  
building and flying of radio control aircraft*

**IMAA Chapter 782**

**Inside this issue:** Cover Photo by Joe Balabon .... Prez report...Minutes.. B'Days & Treasurer Report  
EEXPO photos.....IMAC photos.....OEAF photos....SVF Pilots Hall of Planes.....2.4GHZ Info....Safety  
...SVF Members photos....Futaba SBUS.....Videos/websites.....CAMAC update....*Much more, enjoy!*

Seen at the OEAF, Larry Wolfe Electric B-17 from California.



# **THE PRESIDENTS CHANNEL**

**FRANK MOSKOWITZ**

*April 2010 Slow Roll Presidents Letter*



Welcome to the April 2010 Slow Roll. I hope you had a chance to visit the field during our IMAC event. **Rusty did a great job as CD.** Pictures and event results can be found in this edition of the April Slow Roll. **As usual I want to sincerely thank all the SVF members who gave up their weekend to help in this event. Be it kitchen or general help, the club owes you a big debt of gratitude. The income generated by your efforts keeps our club moving forward.**

**Sun Valley Fliers Club Elections.** Yes it's that time of year again. **Nominations for candidates to run for SVF Officer & Board of Director positions will be conducted during our April 7<sup>th</sup> meeting.** Any member can nominate another SVF member from the floor at the April meeting as long as the nominee is willing to run. **There will be four openings on the board. All of the SVF officers are going to run for re-election to their current positions; all the incumbents are going to run for re-election.** If you would like to participate in or change the way the club is run, volunteer to serve as an Officer or Board member. **The actual elections will take place at our May 5<sup>th</sup> meeting so please put this date down in you calendars so you can be there and vote.** A committee has been formed consisting of two non-board members, one board member. If you would like to be on the committee just let **Tony Quist or I know.**

You probably are aware of all the lovely weeds that have grown at the field due to all the rains we had this past month. Unfortunately we no longer have our landscaper that we used last year. I am scheduling the chain gang to come in for another cleanup but until that happens, it becomes everybody's responsibility to help keep the ground free from weeds. **Charlie Beverson spent an entire day spraying Round-Up.** Hopefully we should soon see the affects of that. Even something as simple as pulling a few weeks while you at the field will be of great help. Thanks for understanding. That's it for now. See you at the field!

Please join us for our next club meeting Wednesday April 7<sup>th</sup> at Deer Valley Restaurant. We will have many raffle prizes and the 50/50 could make you very happy \$\$\$\$. You never know what might happen, and you don't want to miss it. Meetings start at 7:00 pm. If you want to eat I suggest you arrive no later than 6:15 pm. Location is Deer Valley Airport Restaurant. (7th avenue and Deer Valley Road).

Have fun out there!

*Frank Moskowitz*

President



**SVF MEETING APRIL 7, 2010  
AT 7:PM DEER VALLEY AIRPORT**



Sun Valley Fliers Club Meeting Minutes  
Date March 3, 2010

The meeting was called to order at 7:03 pm by Vic President Tony Quist.

Guests: none

New Members: **John Mullins, Ramey Hayes Cameron Markwart Jr.** welcome to all.

Ramey has already helped at 2 events what a guy.

New Solo Pilot: Congratulation to **Steve Myers** on his big event.

Secretary's Report: **Rusty Fried**: Voted and approved as published in the Slow Roll.

Treasurer's Report: **Gene Peterson**: Voted and approved as presented. As of this meeting we have 293 members paid for 2010.

Safety Officer Report: **Joe Balabon**: Please put your AMA card on the pole at the end of each run up pad, very few people are doing this! Tony Quist said "he feels it is a learning process for the pilots". Please remember to close the gate, if a person is tailgating remind them to close the gate.

Old Business:

1. The pattern and Heli events are over and the accounting is complete.  
Pattern netted \$618.00  
Heli netted \$495.00  
Not bad for 2 partially rained out events. Many thanks to **Rusty Fried, Lou Pfeifer, Charlie Beverson, Ramey Hayes, all the SVF members who made the event a success.**
2. **Rusty** talked about the pattern event: We had 27 entrees, the SVF had 7 pilots competing. Because of the weather we had a smaller turnout. We had a rainout on Saturday however we had a full day of flying on Sunday. I want to thank **Ramey Hayes, Jack Jaspersen, Charlie Beverson and all who helped make the event a success.**

New Business:

1. Elections. There will be four openings on the board. All the officers are going to re run for their current position; all the incumbents are going to run for reelection. **People who want to run for the board are Craig Guest, Ron Long, and Lou Pfeifer. Board members who are going to run for reelection are Mike Peck, John Geyer, and Dan Jacobsen.**  
**Next meeting will be the nomination meeting.**
2. The 1/8<sup>th</sup> AF will have their fly in on March 13 & 14 at the AMA field. The E Fest is March 12, 13 & 14 at the Cardinal stadium. The Cactus Classic is March 20 & 21 at the SVF field. The field will closed March 19 for IMAC practice. Luke days March 20 & 21 @ Luke AFB.
3. The club is going to pay the AMA dues for Raymond. ????

Door Prize Winners:

Shirt- **Howard Kennedy** Shirt- **Val Roqueni**, Shirt-**Bob Veazey**, Shirt-**Tony Quist**, Shirt-**Mike Peck**, Shirt-**Craig Guest**, Hat-**Gene Peterson**, Hat-**John Geyer**, Fuel-**Chuck Arquette**, Fuel- **Bob Wainman**, Fuel-**John Deacon**, Fuel-**John Olejniczak**

**50/50 Drawing Winner: John Deacon won \$50.00, congratulations.**

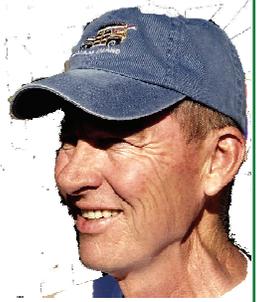
Show & Tell: None

Meeting adjourned at: 733pm.

*Rusty Fried, Secretary*

# \$ TREASURERS REPORT \$ with *Gene Peterson*

TREASURERS REPORT March 3, 2010



We have reached 300 members for the first time as at April 1st. In the past few years, we had a count over 300 going into the new year, and then as we finish the renewal process, and a few members drop for what ever reasons, we are usually in the 265-275 range for total members. This year we were way above the 300 mark when the new year came bouncing in, with the drops taken out, we were just under 300. In the first 3 months, we have signed up over 25 new members, and with a new one today, we are now at 300.

Club is growing good and hope all is well with you and your flying and having a good time with your flying experience.

Don't forget the General Membership Meeting at Deer Valley Airport Restaurant on Wed, 4/7. See you there.

Best Regards and Happy Flying  
Regards,

*Gene Peterson, Treasurer*

## APRIL SVF BirthDay Boys

First name	Last name	Member type	Dob
Thomas	Lewandowski	Regular	04/01/1946
Gustavo	Rios	Regular	04/03/1968
Bill	Heuermann	Senior	04/06/1937
Wayne	Layne	Regular	04/07/1962
Thomas	Clark III	Regular	04/09/1946
Frank	Gaff	Senior	04/11/1941
David	Linne	Senior	04/11/1941
Paul	Goldsmith	Regular	04/13/1947
John	Olejniczak	Senior	04/15/1925
Lynn	Babcock	Regular	04/15/1945
Nate	D'Anna	Regular	04/18/1951
Dan	Jacobsen	Regular	04/21/1963
Robert	Bayless	Regular	04/21/1950
Gerhard	Gallifant	Regular	04/25/1963
Ronald	Long	Regular	04/25/1964
Dean	Bird	Regular	04/29/1964



# SVF MEMBERS PAGE



Photos by SVF Members



Our recent guests. Welcome.



Jim DeVeue Katana, G43



Dick Polkinghorn "Tree got in the way"



FOR THE CESSNA???



# SVF PILOTS HALL OF PLANES



Ken Justice Carl Goldberg Decathlon 60 ARF, OS MAX 61FX, Bisson Pitts Muffler, W.S. 81", Wt. 10+ lbs, Futaba 6EX 2.4 XMTR, with Futaba 3151 digital servos.



Ken will start soon the taxi test and check out everything before taking it into the air.



Here is a view of Kens garage.....*Only kidding!* Its Kermit Weeks Fanasty of Flight Museum in Florida were they held the 1st Blue Max WWI RC Event.



Ken nephew Scotty, on the left won 1st place in Balsa USA kit class and winning the Pilots Choice Award.

*We had one SVF pilot for the Hall and we'll have Ken take all 4 frames. Thanks Ken for the photos and info.*

**Pilots forward the editor your airplane with a photo and what equipment you have in it, radio, engine, mfg., ARF or kit, WS, etc. Glow, gas, electric, gliders, turbines, scale aircraft and helicopters are welcome.**

## ON THE SAFE SIDE

### **The Need for Speed**

*By Don Nix, Safety Column Editor*

Bear with me for a couple of minutes. I've gotta work up to the title subject, after writing a little more about the importance of preflighting.

I first participated in competition modeling more than 50 years ago, in U/C Stunt, Rat Racing, and Combat, then added Free Flight a little later. I only competed for a few years, and wasn't particularly good at any of the four events. During that time, the only safety incident in which I was involved was at a Free Flight contest in Dallas, circa 1960.

After a couple of official flights, I failed to check out the trim settings after the last landing and hand launched a big Class C model. Apparently the Up trim in the elevator had gotten slightly out of kilter. Instead of screaming straight upward, it screamed straight forward at shoulder height directly toward the score keepers' open-sided tent about 50 yards away.

Horrified, I screamed a warning and the several occupants took cover. Fortunately, the left wing hit a tent pole, spun around from whence it came and splattered into the ground. That was the closest I ever came to hurting anyone with a model airplane. The lesson was clear: always, check the model before every flight.

Fast forward to 1991 when a couple of friends dragged me kicking and screaming into Sportsman class Quickie Pylon Racing. I enjoyed moderate success for about 10 years, mostly because that class had relatively few entrants.

During a several-month RV tour of the western states, we found ourselves near Phoenix in January of this year at the same time one of the earliest Pylon Races in the US always takes place. We decided to go see some old friends and watch a little Racing. I hadn't been to a Pylon Race, even as a spectator, in several years. I was amazed at the changes made to enhance safety since the last time I saw one.

For the benefit of those who aren't familiar with the fastest event in modeling, these airplanes are in a big hurry to get to the finish line. The Quickie Sportsman class is now running 120+ mph, the Advanced approximately 170 and Q-40s are nudging the 200 mph mark. From a racehorse start, they fly in heats of four models for 10 laps around three pylons, making up a 1/4-mile circuit—2.5 miles total. Most of them fly at heights of 30-75 feet.

Until a few years ago, every heat required 19—count 'em—19 people on the course: four pilots, four callers, four lap counters/timers, four judges at Pylon 1, one judge at Pylon 2, one at Pylon 3, and one race starter/flagman. The lap counters/timers and pylon judges were all protected by heavy steel wire cages. The pilots, callers, and starter were exposed.

***A few years ago, a Pylon judge had his head leaning against the cage at Pylon 1, so he could look straight up to catch any pylon "cuts." One pilot, flying too low and too tightly, hit the cage and the spinner poked through an opening directly into the back of the judge's head, killing him.*** Not long after, in a Texas race, a very experienced Pylon flier hit one of the cages with such velocity it went through the cage wall, shredding itself in the process. Fortunately, it didn't hit anyone.

Understandably, the Racing group became concerned (as did the AMA), and decided something had to change. Rather than wait until they were forced to do so, they took action to correct the situation.

Some 10 years earlier, 1991 World Pylon Champion Dub Jett had conceived the embryo of an idea that would require only the pilots, callers, and the starter to be on the course. The 10 others would be several hundred feet away. A group of racers, mostly from Texas (including Mike Helsel, who has been racing since the earth cooled), got to work on the project. Veteran Pylon Racer Jerry Small of Dallas devised the first off-course electronic timing system.

With the help of many others from all over the country, Pylon Racing evolved to its present status: No one is on the course but the pilots, callers, and the starter. The current models are going faster than ever, and, to the best of my knowledge, there have been no serious incidents since.

For those who are inclined to take safety a little too lightly—or ignore it altogether—I urge you to adjust your thinking and your method of flying. As full-scale pilots learned over the decades, if we don't police ourselves, some entity will do it for us, usually much stricter than we like.

In conclusion, I'll have to shift subjects to mention some comments from last month's Insider.

Former Executive Council member Ed McCollough pointed out an error in my statement that AMA regulations require that all models have the owner's name and address in, or on the model. Well, not exactly.

Prompted by Ed and aided by District VIII Vice President Jim Rice and Ilona Maine at the AMA, I found that Item 6 of the Safety Code reads, "I will not fly my model aircraft unless it is identified with my name and address or AMA number inside or affixed to the outside of the model aircraft." Note the operative word is or. (This does not apply to model aircraft flown indoors.)

*continue.....*

*Continue... On the safe side*

My personal opinion is that the regulations should require all three. In the event of a fly-away, the AMA number would mean nothing to a non-modeler who might recover it.

John Goegl wrote, "I have found the key to safe flying starts with the training protocol. I have noticed that one human trait trumps all others: habit. As a flight instructor, I try to encourage good habits by beginning each session with a thorough preflight. Through repetition, these 'good' habits are picked up by the student ... and the instructor."

From Ben Lanterman: "Your comments on safety were great and on target. Like you, I normally check the control throws and direction before each flight. But with some of the small foamies I have flown for some time, I tend to get complacent. It backfired when I changed transmitters to a newer one. I checked to be sure all the control reversal switches were set the same for each airplane I switched over to the new transmitter, but I missed one."

The rest of his note tells of the results, reversed ailerons and a foamie turned into packing peanuts. Fortunately, nothing was injured but the model and Ben's ego.

## **Learning to 3-D and 3-D Well: Rolling Harrier**

*By Jeremy Chin*

### **Part 5 of 5**

The next 3-D maneuver in the series, the Rolling Harrier or Harrier Roll, relies heavily on the basic aerobatic skills you have built prior to learning to fly 3-D. If you can't fly the basic aerobatic rolling maneuvers, such as a slow roll, four-point roll, or rolling circle, you will have very little success attempting to do a Rolling Harrier or a Rolling Harrier Circle. Take the time to learn those skills first.

Earlier in the series, you learned the Upright and Inverted Harrier as well as the High Alpha Knife Edge. To simplify matters, a Rolling Harrier is simply harriers and hakes strung together end to end and flown with a particular rhythm. Additionally, varying that rhythm allows you to steer the Rolling Harrier straight, left/right, or up/down.

There are a few common mistakes that many pilots make that you should try to avoid:

Don't practice this maneuver in only one rolling direction. That will build a bias into your flying and make later maneuvers more difficult.

Always fly the maneuver with both rudder and elevator inputs for altitude and heading correction. Flying with only one or the other results in a choppy-looking maneuver that is much harder to control.

Try this maneuver on the simulator first and then transfer to real life. Flying Rolling Harriers comes from properly building muscle memory and rhythm, which can be done much more quickly on the simulator using the 'reduced time' method.

To begin the Rolling Harrier, start with the airplane in an Upright Harrier flying into the wind two to three wingspans high. With full control of the airplane, use the ailerons to roll the airplane to a High Alpha Knife Edge and hold it there. Next, roll the airplane to an Inverted Harrier and again hold it there. Follow with a roll in the same direction to High Alpha Knife Edge. Complete the sequence by rolling the same direction back to Upright Harrier. Practice this sequence of events repeatedly until you feel comfortable transitioning from one position to the next.

Next, decrease the amount of time you hold the airplane at each position and practice the sequence again. Continue practicing the sequence and reducing the hold time at each position until you can roll the airplane through each position without stopping the roll. Congratulations, you've just done a Rolling Harrier.

To build this skill, practice it in both directions and from starting points of upright and inverted harrier as well as from both orientations of High Alpha Knife Edge. Practice stringing Harrier Rolls together seamlessly until you can fly the entire length of your runway without stopping the Rolling Harrier.

For extra credit, learn to steer the Rolling Harrier by changing the timing of your rudder and elevator inputs. This aspect of the Rolling Harrier is learned most quickly on the simulator using the 'reduced time' method.

**ONE EIGHT AIR FORCE FLY IN**

**March 13-14, 2010**



**ONE EIGHTH AIRFORCE FLY IN**

**March 13-14, 2010**



# SVF's at the OEAF FLY IN March 13-14, 2010



## Picking Thermals

*An article by Peter Brocks, which is stolen here from the November 2001 Ontario-based Sam 86 Speaks, who in turn stole it from the August 2001 Bat Sheet. From the Thermalier, newsletter of the Pensacola Free Flight Team*

Picking thermals has to do with feeling the subtle changes in the environments, which, to the untrained, are not apparent. Therefore there is no simple recipe.

**Tools:** Mylar streamers, fast sampling thermistor devices, fluffies, bubble machines, piggybacking (on) birds, and other models.

**Early morning:** The air is buoyant neutral, small rises in temperature possible (as little as 2° F).

**Midday:** Strong thermals (boomers) develop that exceed the sink rate of models, rise in temperature can be a few degrees with wind calming, wait until a cooler breeze (fill) is felt and the temperature clearly drops. Do not launch right away, especially with fast, higher climbing models. Wait 10 to 20 seconds, depending on wind velocity.

**Late Afternoon:** Thermals stay closer to the ground, tend to be larger size. Smaller rises in temperature (1°+ F). Be patient; fly over dark areas.

**Strong wind:** Wait for a three- or four-second lull of lower wind velocity; launch immediately at an angle to the wind.

**No wind:** Watch streamers to see center of building hot air column. The rising air circles counterclockwise. Wait for light air movement indicating fill. Be patient as the air rises very slowly. When launching, place the model in the center of the rising air.

**Cold front:** Rising air precedes the rain and the breeze. Good air is still present even when rain starts.

**Flapping:** If wind is moderate and ground surface is warm, then flapping a shirt or running or driving under the model will release rising air.

**General Rules:** Do not launch if there is a chance that the sun might soon come out of the clouds. Do not fly if other models are launched when a conscientious decision to launch has not been made; rather watch other models behavior. Most of the time flying a little later will give better results. Concentrate and take in your environment. Q

### Jim Giffin, the District X Vice President

**Sadly, we lost a significant Leader Member in January. , passed away. He was a member of AMA's Executive Council for only a short period of time, but it was easy to see he had a passion for everything and everyone involved in modeling. His long time involvement with International Miniature Aircraft Association (IMAA) prior to joining the Executive Council (EC) leaves many friends around the country with memories of their connection with this well-traveled and seasoned modeler. He was also a retired US Army officer, so I thank him for his service to both his country and his passion! Thoughts and prayers to his family.**

It is time to start planning for 2011 and the celebration of AMA's 75th Anniversary. The HQ staff is busy planning national events and advertising, but we should all take advantage of this opportunity to toot our own horns locally. You might hang the 75th Anniversary Banner at one of your traditional events, or create a special event to celebrate, but as you do so, make an extra effort to get local media coverage.

Most papers, radio, and TV stations like to support long-running and historic things. We have a great history and superb track record and we ought to be bragging about it during that banner year. Start looking out a year and see what you might be able to do and get the plans rolling. Heck in 1976 I built several airplanes with red, white, and blue color schemes and Bicentennial marking to celebrate America's birthday. I was stationed in Germany at the time and my German flying buddies loved it!

## How compatible are 2.4GHz RC systems?

### WHY ARE WE LOCKED-IN TO A BRAND?

Back in the days of FM radios operating on much lower frequencies such as 35 or 72MHz it was pretty easy to find a compatible receiver that would work with your brand-name transmitter.

Although there was a rift between Futaba and JR on the 72MHz band (different shift), on all the other bands there was almost a 100% compatibility between brands of radio equipment when FM receivers were used.

Oh how that has changed in the world of 2.4GHz.

One of the most oft-asked questions I hear is "Will this (cheaper) receiver work with my (expensive brand-name) transmitter?"

Invariably, the answer is no.

If you have a Spektrum/JR DSM(2) radio then you're stuck with using a Spektrum/JR receiver.

If you have a Futaba FASST radio then you're stuck with paying through the nose for their very expensive FASST receivers.

None of those attractively-priced Chinese brands will work.

Neither Corona, nor Assan, nor FlyDream, nor FlySky, nor FrSky, nor any other receiver will bind with your expensive brand-name radio unless it has a matching transmitter module installed.

What's more, brand-name manufacturers are keen to preserve this this state of affairs. They know that, once you've bought their radio, you're going to have to come back and pay whatever they ask when you need more receivers.

Whereas, in the days of FM radios on the MHz bands, you could rush out and buy a cheap but cheerful Corona FM receiver for a third the price of a genuine Futaba or JR unit, today you're stuck with buying "the real thing" and often that means handing over very sizable sums of money.

This situation is even worse when you realize that a few of the Chinese-branded receivers these days are actually better than some offerings by the big-name brands which cost three or four times as much.

So why aren't the Chinese making compatible receivers that can be used with JR/Spektrum and Futaba?

Well the use of spread-spectrum technology makes that task a whole lot more difficult than was the case with FM. All the brand-name manufacturers used a common standard for their FM transmitters. This standard was well documented and easy to implement.

By comparison, 2.4GHz spread-spectrum is a whole lot harder.

Reverse-engineering a spread-spectrum signal can be a difficult (but not impossible) process that requires considerable knowledge, skill and the right equipment. All of that represents a significant investment, something often not available to the kind of small manufacturers that are currently building RC their own systems in China.

What's more, Futaba (for instance) is using their own custom-made chips which means that even if/when the Futaba spread-spectrum system is reverse engineered, it's probably not going to be a case of simply throwing together a compatible receiver from "off the shelf" components.

Finally, there's the legal perspective.

There can be little doubt that if/when Chinese manufacturers start spewing out brand-name compatible 2.4GHz receivers at a fraction the price of the real thing, lawyers will be unleashed and (in the USA at least) the Digital Millennium Copyright Act (DMCA) will be scrutinized to see if there's any way the importation and use of such receivers can be banned or prosecuted.

Remember that the shift to 2.4GHz and the resultant ability to lock customers into your product is a gold-mine for RC manufacturers. That's not something they're going to give up without a fight. Let's face it, the only reason that Futaba (for instance) can demand three or four times the price you'd expect to pay for a Chinese-made receiver is because they have no competition -- only their receivers work with their radios.

If/when competition appears, and you can buy a good, reliable 8-channel FASST-compatible receiver for \$35 instead of \$140, Futaba will lose the ability to demand such high prices for its products.

In the meantime, if you're planning on buying a new native (non-modular) 2.4GHz system then be sure and factor in the price of extra receivers. It can make a huge difference to the total cost over time.

But here's a question for you...

If you could buy a proven-reliable "compatible" receiver for your JR/Spektrum, Futaba, Airtronics or other brand-name radio, would you? Or would you remain brand-loyal, even although it meant paying two, three or even four times as much?

[Have your say](#) in the RCMoelReviews Google Group

<http://www.rcmodelreviews.com/>

# CACTUS CLASSIC IMAC CONTEST MARCH 20-21, 2010



# CACTUS CLASSIC IMAC CONTEST MARCH 20-21, 2010



## **The new Futaba S.BUS**

### **WHAT'S THE REAL MOTIVE BEHIND THIS MOVE?**

It appears that Futaba has decided to change one of the oldest and most venerable of all RC system standards - the humble servo interface.

The basic electrical interface presented by the servos we use has remained virtually unchanged for decades, probably because it works just fine for almost everyone.

The only RC fliers who've really welcomed a small change are heli-fliers that demand absolute minimum latency for their tail-rotor servos. Even with their ultra-fast gyro-driven digital servos, the only change to the basic standard has been to increase the frequency that the servo data is delivered.

But now Futaba claims it has created a new method that (to use their words) "*is nothing short of revolutionary*". Yes, it is revolutionary, but I'm picking that the reason for this change involves more about what's best for Futaba rather than what's best for the customer.

#### **One Cable To Rule Them All**

#### **LOOK, IT'S JUST LIKE A COMPUTER LAN**

The concept behind the S.BUS, as Futaba have labeled their new technology, is to do-away with a multitude of individual connections between your servos and your receiver.

By using technology that is somewhat similar to a computer LAN, servos can effectively all be wired in parallel so that instead of running multiple extensions into your wings (for instance) in order to control ailerons, flaps and even air brakes, a single extension can control the different servos that perform these functions.

Likewise, if you have several servos in the tail of your model, the S.BUS would allow just a single extension to deliver the power and signals to those servos.

Sounds like a grand plan, doesn't it?

More information about the S.Bus can be found on page 14 of <http://downloads.hobbico.com/catalogs/futz2010-futaba-catalog.pdf> downloadable from the Hobbico website.

Now call me a skeptic but I'm not so sure this is a great concept for anyone, except Futaba's accountants.

Clearly, with the advent of 2.4GHz, Futaba has realized the huge financial benefits that come from locking customers into the Futaba brand. Those who have purchased the very good Futaba FASST 2.4GHz radios will have found that the only receivers that will work with their radios, are Futaba's own very expensive ones.

As the Chinese have shown us, the cost-price of an 8-channel receiver is probably around the US\$10 mark, and Futaba's receivers would cost very little more than this to manufacture.

So how does Futaba get away with charging \$140 for their 8-channel FASST receiver?

Simple -- they are the only company (right now) that makes FASST-compatible receivers so they know customers will just have to pay whatever is asked of them in order to get one.

So, could it be that this attempt by Futaba to move away from the industry standard 3-wire servo interface to a bus-based system of their own proprietary design just another attempt to tie customers down and reduce competition from other manufacturers?

In a year or so, will Futaba only sell S.BUS-style receivers and thus force their customers to purchase only genuine Futaba servos?

Call me an old cynic, but I would not be surprised if this was the case.

But hang on, surely this S.BUS is simply a great idea and something that's long overdue in an era of computerized radios and digital servos? Well let's look at the pro's and con's of Futaba's S.BUS, based on the information that's available...

#### **Why not S.BUS?**

#### **IS IT REALLY BETTER?**

In theory, running a single cable instead of multiple extensions sounds like a good idea but there are some drawbacks...

Firstly, the bus-cable must be heavy enough to support the current demands of all the servos that will be attached to it. This means that instead of using three extensions, each capable of delivering 5A, a much heavier extension with 15A capability must be used.

## *Continue..... The new Futaba S.BUS*

This extra current-carrying capability is even more important where the S.BUS cable connects to the receiver, since a large model (such as a 40% gaser) may have as many as 10 hi-torque servos and their combined current-draw could easily exceed 20A or 30A. Connectors capable of this kind of power are neither light nor small (yet, according to the pictures in the Hobbico catalog, standard servo connectors are used which typically are not rated for more than 5 amps). Not good, not good at all.

Secondly, although the implication of S.Bus is that there is reduced complexity, this isn't really the improvement you might think.

Although the number of extensions is reduced, there is a need for multiple "hubs" to be used to provide the fan-out to the servos.

Also, in order to use a servo in a particular role, it must be programmed with the required channel number. This means customers will need to purchase the "Channel Setting Tool".

It appears that, at least initially, Futaba plans to offer smart hubs that they call an "S.BUS decoder". This (it would appear) will allow the use of existing non-S.BUS servos in conjunction with an S.BUS receiver. However, Don't expect this little box to be on the market very long. It's clearly a tool designed to make the transition to the new S.BUS receivers a little less painful but, once you're hooked, it makes no economic sense for Futaba to keep selling this device -- instead, customers will be forced to buy S.BUS servos (only available from Futaba of course).

### **The Start of a Trend?**

#### **THE END OF INDUSTRY STANDARDS?**

This is a risky move on the part of Futaba but one that could enable them to maintain a vise-like grip on the wallets of their customers.

However, those who can cast their minds back a few years will recall that IBM (who used to be "the" standard for personal computers, once tried exactly the same tactic of moving away from the industry standard ISA bus and locking customers into their "new and better" Microchannel Architecture (MCA) bus.

What should have been a clever way for IBM to lock out the clone-makers ended up backfiring badly, as the market said "we don't need MCA, we're happy with ISA -- and virtually stopped buying IBM PCs in favour the clones which offered more choice and better pricing.

Unless JR/Spektrum, Airtronics, Hitec and others also decide to develop their own proprietary servo buses, Futaba risks simply driving customers away through this extension of its current "lock-in" tactics with FASST.

However, if the other "brand-name" players see this as an opportunity to try and go one-better (as has been the case with the whole 2.4GHz market) then incompatibility will reign and prices will skyrocket, as each brand extorts even greater profits from their captive customer-base.

Or, it might just be that savvy modelers will turn away from those who seek to impose expensive new proprietary technologies on them and instead, do what IBM's customers did in the late 1980s -- stick with the status quo in order to save a lot of money and preserve their freedom of choice.

What do you think?

Will you jump on Futaba's S.BUS, or in doing so, are you simply going to be spending more money and being forever locked in to their branded products?

Please tell me!

<http://www.rcmodelreviews.com/>

## **VIDEOS and Websites Links**

Click on to view video, website

**Need to know more about electric flight. Go there.**

<http://www.wattflyer.com/forums/showthread.php?t=18521>

**Interesting e-magazine**

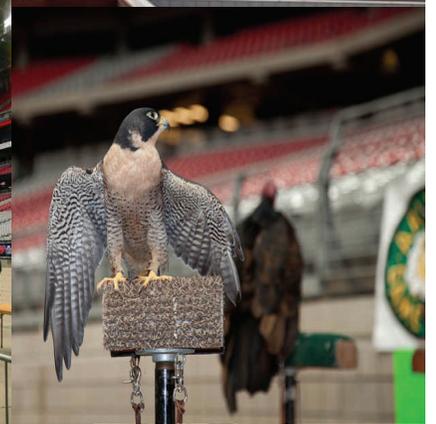
<http://www.electricflyermagazine.com/index.html>

**SVF Website Buy & Sell items**

<http://sunvalleyfliers.com/classifieds/classifieds.htm>

**Have a good WEBSITE / VIDEO that you would like other SVF members to see. Let me know and we'll put it in. Please make the VIDEOS MAX at 10 minutes.**

# ELECTRIC FLIGHT EXPO March 12-14, 2010





## AEROMODELING ACTIVITIES

### 2010 CAMAC CALENDAR OF EVENTS Rev D (3-27-10)



<u>EVENT</u>	<u>LOCATION</u>	<u>HOSTED BY</u>	<u>DATES</u>
SUPERSTITION CHALLENGE IMAC CONTEST	SUPERSTITION FIELD	EVA	JAN 16,17
WINTERFEST P500 PYLON RACE P500	SPEED WORLD	SWRCF	JAN 16,17
S.W. REGIONALS: FF, FAI FF, RC Oldtimers	ELOY	SWRMA	JAN 16,17,18
ARIZONA ELECTRIC FESTIVAL	SUPERSTITION AIR PARK	AMA	JAN 28,29,30,31
S.W. REGIONALS: Control Line	TUCSON C. COLUMBUS PARK	CACLC	JAN 30,31
WARBIRD RACE	TUCSON MODELPLEX PARK	TIMPA	FEB 6
MESA IMAC	SUPERSTITION AIR PARK	AMA	FEB 6,7
DESERT JET STORM	SPEED WORLD	SWRCF	FEB 12,13,14
9 <sup>th</sup> ANNUAL AIRSHOW	YUMA	YA	FEB 20
SOUTHWEST CLASSIC SOARING CONTEST	SCHNEPH FARMS	CASL	FEB 20,21
PRESIDENTS CUP (free flight)	ELOY	PMAC	FEB 21
YUMA FUN FLY	YUMA	YA	FEB 21
SOUTHWICK MEMORIAL CL STUNT Contest	AVONDALE FESTIVAL FIELDS	CACLC	FEB 20,21
SVF PATTERN CHAMPIONSHIPS	CAVE BUTTES	SVF	FEB 20,21
WATTS UP ALL ELECTRIC FLY-IN	TUCSON (TRCC)	TRCC	FEB 20,21
PHOENIX HELICOPTER FLY-IN	CAVE BUTTES PARK	SVF	FEB 26,27,28
PHOENIX QUARTER MIDGET PYLON RACE	SPEED WORLD	SWRCF	FEB 27,28
TUCSON JET RALLY	TUCSON MODELPLEX PARK	TIMPA	MAR 5,6,7
MARCH MADNESS COMBAT	ESTABAN PARK	CACLC	MAR 5,6,7
4 <sup>th</sup> ANNUAL YUMA PATTERN CONTEST	YUMA	YA	MAR 6,7
1/8 AIR FORCE SCALE FLY-IN	SUPERSTITION AIR PARK	1/8 AF	MAR 13,14
VINTAGE STUNT CHAMPIONSHIP (Control Line)	TUCSON C. COLUMBUS PARK	CACLC	MAR 16,17,18,19,20
SPRING BREAK (free flight)	ELOY	PMAC	MAR 20
CACTUS CLASSIC IMAC CONTEST	CAVE BUTTES	SVF	MAR 20,21
CABIN FEVER	TUCSON C. COLUMBUS PARK	CACLC	MAR 26,27,28
SPRING WARBIRD PYLON RACE	SPEED WORLD	SWRCF	MAR 27
WINGS OVER THE DESERT WARBIRD FLY-IN	TUCSON (TRCC)	TRCC	APRIL 10,11
I-10 CHALLENGE (free flight)	ELOY	PMAC	APRIL 18
IMAC	TUCSON MODELPLEX PARK	TIMPA	APRIL 24,25
FUN FLY CONTEST & SWAP MEET	SUPERSTITION AIR PARK	AMA	MAY 2
HOT STUFF (free flight)	ELOY	PMAC	MAY 15
BEAT THE HEAT FUN FLY	FLAGSTAFF (on Leupp Rd.)	FF	JULY 23,24,25
SOARING IN THE PINES GLIDER FLY	FLAGSTAFF (on Mountaineer Rd)	FF	AUG 29
FALL KICK-OFF	ELOY	PMAC	SEPT 19
MARSCHINKE MEMORIAL	TUCSON C. COLUMBUS PARK	CACLC	SEPT 25,26
FALL ELECTRIC AIRCRAFT RENDEZVOUS	MUSTANG FIELD	ARCS & KFERC	OCT 1,2,3
1/2A MULTIENGINE PROFILE SCALE	TUCSON C. COLUMBUS PARK	CACLC	OCT 9,10
SUN VALLEY FLIERS JET FUN FLY	CAVE BUTTES	SVF	OCT 15,16,17
FALL WARBIRD PYLON RACE	SPEED WORLD	SWRCF	OCT 16
GHOST RIDERS (free flight)	ELOY	PMAC	OCT 23
1/8 AIR FORCE SCALE FLY-IN	ADOBE MOUNTAIN PARK	1/8 AF	OCT 23, 24
CARRIER PLUS XIII	AVONDALE FRIENDSHIP PARK	CACLC	OCT 30,31
AMA FALL AUCTION	SUPERSTITION AIR PARK	AMA	NOV 6 (8:00 AM)
ELECTRIC TURKEY FUN FLY	CAVE BUTTES PARK	SVF	NOV 13
TURKEY SHOOT (free flight)	ELOY	PMAC	NOV 14
22 <sup>ST</sup> ANNUAL ARIZONA JET RALLY	SUPERSTITION AIR PARK	AMA	NOV 19,20,21
TUCSON WINTER SCALE CLASSIC	TUCSON (TRCC)	TRCC	NOV 27,28
WARBIRD RACE	TUCSON MODELPLEX PARK	TIMPA	DEC 4
WINGS OVER ARIZONA	SUPERSTITION AIR PARK	AMA	DEC 4,5
ARIZONA FREE FLIGHT CHAMPIONSHIPS	ELOY	PMAC	DEC 4,5

Latest updates of this CAMAC Calendar and other Arizona aeromodeling activities may be found at: [www.flycamac.co](http://www.flycamac.co)

See flying site location descriptions and host club contact information below on next page or at: [www.flycamac.co](http://www.flycamac.co)

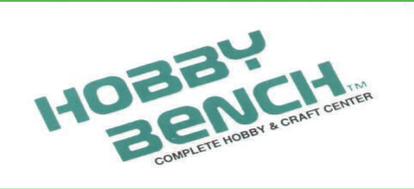
See next page for further information on host club contacts and websites.

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# **FRANK'S** *Hobby House*

12008 N. 32 ST.  M, T, F. 10-6  
Th 10-7  
PHOENIX, AZ. 85028 SAT. 10-5  
602-992-3495 Closed Wed & Sunday  
FAX 602-788-3440

  
8058 N. 19th Ave. 602-995-1755 Phoenix  
M-F 9:30-8PM, SAT 9:30-6PM 11-5PM  
4240 West Bell Rd. 602-547-1828 Glendale  
M-F 9:30-9PM, SAT 9:30-6PM, SUN 11-5PM

**Next month Issue**  
***YEP! It's a NEW YEAR and its up to you members AGAIN. Its your newsletter. Send it in!***  
If you got something going let me know. Be the SR field reporter, great job and good benefits, like free fresh air. Maybe we can throw in some Hot coffee. We'll give you a Hat and gloves too! See you then. **SUMMER IS COMING!**  
Would you like to be notified when the **SLOW ROLL** new issue is available? Give Gene your e-mail address.

**This Month Issue**  
Three events took place in March and we have photos. Safe ,2.4ghz, Futaba articles and the updated CAMAC calendar. Only one P.H.O.P. this issue. Lets see some more! Have a good Easter, Passover.  
Send those articles and photos in!  
*Remember to ZOOM the PDF page to see more.*



# THE SLOW ROLL

**Club Officers 2009-2010**  
Frank Moskowitz, President

Tony Quist, Vice President

Gene Peterson, Treasurer

Rusty Fried, Secretary

Walt Freese,  
Website Supervisor

**Please check your  
Membership list for  
Phone numbers.**



## Board of Directors

- Charlie Beverson '08-10
- Bruce Bretschneider'08-10
- Dan Jacobsen '08-10
- John Geyer '08-10
- Mike Peck '09-11
- Howard Kennedy '09-11
- Ron Thomas '09-11
- Greg Frohreich '09-11
- Eric Stevens '09-11



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