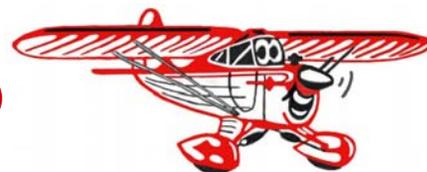


# SAM Says



SAM Says

January 2015

Volume 40 Issue 01

**HAPPY  
NEW YEAR.  
MAY YOUR  
FLYING BE  
SAFE AND  
ACCIDENT  
FREE IN  
2015**

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## THE PREZ SEZ HAPPY NEW YEAR

By the time you read this December will be in the history books and the new year will be upon us.

On December the 5th we held our annual Toys for Tots event at the field. The weather wasn't the best but not too bad. I'm sorry to say that the turnout was a bit disappointing as compared to past years events. But, many opened their pocket books and their hearts to provide a variety of new toys for the less fortunate.

For years the club's donations were taken to the Chualar Fire Station for distribution. We've always wanted the toys to be given out in our area and this year I gave some thought to how the Fire Dept. determined who the benefactors would be. In discussing this with several members Robert

Shaver suggested a church might be better equipped to deal with the needy. A simple, but bright idea. So...I took the presents into Chualar and drove around finding a small church diagonally across the street from the Fire Station. A young minister by the name of Enrique answered my knock on the door. After I explained my reason for the visit he proclaimed that God must have sent me because they were in the process of a donated food distribution program to the neediest of families in the area and some parents voiced dismay over not having any money for gifts for their children given the state of the economy and the expense of trying to provide food and shelter. With great enthusiasm he accepted the toys and knew many needy families that would look upon this simple act as a blessing. Too often we forget the true meaning of Christmas. I'm not a religious person but I do often ponder my good fortune in life as compared to so many others who have little or nothing, and what they must be going through just dealing with basic survival. And, here we are able to reach beyond basic needs and play with our expensive toys.



Shaver suggested a church might be better equipped to deal with the needy. A simple, but bright idea. So...I took the presents into Chualar and drove around finding a small church diagonally across the street from the Fire Station. A young minister by the name of Enrique answered my knock on the door. After I explained my reason for the visit he proclaimed that God must have sent me because they were in the process of a donated food distribution program to the neediest of families in the area and some parents voiced dismay over not having any money for gifts for their children given the state of the economy and the expense of trying to provide food and shelter. With great enthusiasm he accepted the toys and knew many needy families that would look upon this simple act as a blessing. Too often we forget the true meaning of Christmas. I'm not a religious person but I do often ponder my good fortune in life as compared to so many others who have little or nothing, and what they must be going through just dealing with basic survival. And, here we are able to reach beyond basic needs and play with our expensive toys.

I'm going to take a minute and share an experience I had long ago that had a profound effect on me and is etched in my memories forever.

(Continued on Page 8)

# Let's Get Radical (3)

By Crazy Ivan

## 3D Aircraft Setup

Digital servos have provided the capabilities for massive control throws via being extremely powerful and in offering many more “increments” throughout their extent of movement; meaning the control surfaces operate much smoother and smaller or finer inputs can be made. Let's talk servo increments. Old school; 40 degrees up and down elevator = 80 degrees total throw; divide by the servo increments and you'll resolve to some degree of control graininess or coarseness AKA one servo step or increment will incur a defined “minimum” possible control surface movement. New School (3D); 80+ degrees up and 80+ degrees down elevator = 160+ degrees of total movement. OK I hear you... “digital servos have a multitude more increments...” yes but in by using maximal control surface movements you “have” given back ½ or so “of what is gained”, furthermore is that your control surfaces in being so large add “much additional” graininess or coarseness to your controls in being hyper sensitive to deflections. In comparing “Old school” with standard servos to “New school” with digital servos, new school controls seem to be coarser than “Old school”, they certainly are on my Le Fish.

What to do? All that you can!

Step 1; get into your radio and turn your “end point adjustments” to Maximum; this is usually 140% whereas the radio comes “factory set” @ only 100%; wasted servo throw.

For whatever control surface movements that you've decided on, you want the servo to have to perform as close to its maximum throws as is possible; this will reduce the control surfaces “minimum movement increment” and produce the finest possible control feel as well as maximizing the servos' LBS of force (measured at the control surface).

Step 2; Set the high side of your dual rates at maximum (140% or whatever max. is) too.

Step 3; consider that you also may not want to be connected to the nearest hole in on the surfaces' “control horn” end of the deal; The further that you're connected out from the control surface the better the servos “leverage” is on the surface and in being connected further out from the control surface also reduces the size of the “increments”, reduces slop, and adds control surface rigidity too; there's an important give and take here! Your control surface clevis connection should be at least ½” above (or below) the control surface for .60 - .90 sized birds, it's truly relative to the hinge line itself so 5/8” is the absolute minimum distance from the hinge line, less than that invites trouble; flutter!

My point is... don't just put on a super long servo arm to then reduce the throws within your radio, its counter intuitive, you want your servo to reach its' “ultimate maximum throw” at the same instant as the control surface is at its' maximum “desired” throw whatever that may be; regards to any and all types of flying.

If your servos aren't digital, this is even more important; its leverage, gearing and geometry combined; your servo gains advantage when operating at its maximum throws!

Don't neglect your simulator this winter; at least maintain your gains!

I hope all had a Merry Christmas and I wish everybody a Happy New Year LOL.

Crazy Ivan

The Annual Christmas Dinner and Meeting was held at the Landing Zone Restaurant December 6, 2014. It was a gala affair and enjoyed by all in attendance. Following are pictures provided by Robert Shaver.



President Dennis handed out the certificates to the winners of the raffle. Included were gift certificates for the Beach House at Lovers Point and gift certificates for Tower Hobbies.



Results of the election were announced. 2015 officers are listed on Page 7.



Helen and James Klimas and crew did a very good job as usual with the food and service. We owe them a thanks for hosting us for our Christmas Dinner every year as well as the meeting times during the Winter.

## SAM 2015 Calendar

### JANUARY

- 26 Board Meeting
- 28 Membership Meeting

### FEBRUARY

- 23 Board Meeting
- 25 Membership Meeting

### MARCH

- 21 Slope Soaring - Seaside
- 23 Board Meeting
- 25 Membership Meeting

### APRIL

- 17-19 Float Fly 1 (if there is water)
- 20 Board Meeting
- 25 Rudder gate & Membership Meeting

### MAY

- 2-3 IMAC I
- 10 Mother's Day
- 15-17 Float Fly 2 (if there is water)
- 18 Board Meeting
- 23 Rudder gate & Membership Meeting
- 29-31 Castle – West Coast Giant Scale

### JUNE

- 6 Glider Contest 1
- 13 Work Day
- 22 Board Meeting
- 27 Rudder gate & Membership Meeting

### JULY

- 11 Glider Contest 2
- 18 Memorial Fun Fly
- 20 Board Meeting
- 25 Rudder gate & Membership Meeting

### AUGUST

- 1 Glider Contest
- 8 Pylon Races
- 17 Board Meeting
- 22 Rudder gate & Membership Meeting

### SEPTEMBER

- 12-13 IMAC II
- 18-20 Lake McSwain Float Fly
- 21 Board Meeting
- 26 Rudder gate & Membership Meeting

### OCTOBER

- 10 Electric Powered Event
- 16-18 Float Fly 3 (if there is water)
- 19 Board Meeting
- 24 Rudder gate & Membership Meeting

### NOVEMBER

- 14 Work Day
- 23 Board Meeting (if necessary)
- 26 Thanksgiving

### DECEMBER

- 5 Toys for Tots
- 5 Christmas Dinner

(CALENDAR SUBJECT TO CHANGE)

**PLEASE NOTE:** There have been a couple of incidents happen at the field lately that need to be addressed. First, crashed airplanes have been left at the field. According to our lease agreement with the County of Monterey we must keep the grounds clean. This means that ALL litter must be picked up. As you have noticed there are no garbage cans at the flying site. We have no disposal service at the field making it incumbent on each member to take home his/her trash. The property west of the entry road is not part of our lease. The owners of that parcel have been nice enough to allow us to keep that area cleared off so we have a clear path for approach and landing when the wind is out of the East. The pile of trees is not a trash heap, but rather the results of a river channel cleaning project that is not yet complete. Please don't mistake that as a place where your trash can be left. Also don't pitch your trash over the river bank. That is an absolute no-no! All different types of trash from small appliances to airplanes were found over the bank behind the container. Thanks to the members who retrieved this stuff and took it upon themselves (Continued on Page 6)

**PLEASE NOTE:** The following is an excerpt from a Navy Postgraduate School publication entitled *“Safety & Usage Procedures for Lithium Polymer Batteries.”* The section on Quality Control Procedures was published last month. This month I am publishing the section entitled *Inventory Control and History, Transportation Procedures and Emergency Procedures* (sections 4, 5 and 6) As you will see some of this information applies to the NPS only, but does apply to our everyday use. Refer to past 3 months newsletter for the sections on Lithium Polymer (LiPo) Information, Quality Control Procedures and Maintenance and Charging. Next month I will publish half of the Appendix with the other half to follow in February. Thanks once again to Kevin Jones for providing this valuable information. *The Editor*

## ***Safety & Usage Procedures for Lithium Polymer Batteries***

### **4. Inventory Control & History**

All new batteries will be designated with a unique identifier (lab-specific) and dated with the time of original purchase. The “battery owner” shall keep a log of the pack’s history which will, at a minimum, track the date of each cycle with additional entries for each “event” the pack has experienced. Logged events will include crashes, repairs, and charge anomalies (e.g. difficulty balancing, large cell imbalance at start of charge). Owners may wish to track additional data such as start/end voltage of a particular use, time used, mAhr replaced when charged and individual cell internal resistance (reported by some LiPo chargers). Tracking of such data may help users determine if the particular battery is suitable for the application, and will help identify when a pack is aging and will need to be replaced.

Batteries will be managed according to the requirements of this Procedure, and in coordination with department HM representative and the NPS HMC&M program manager (Code 00K).

### **5. Transportation Procedures**

Transportation of LiPo batteries shall be conducted in accordance with the following requirements:

1. Batteries shall be transported in sealed, hard cases to prevent physical damage or exposure to moisture.
2. Batteries shall not be charged while being transported.
3. More than one battery may be transported in a given case, however, damaged or suspect batteries shall be transported in isolation, and only after a fifteen minute minimum observation period to ensure that ignition is unlikely.
4. Do not expose battery packs to direct sunlight (heat) for extended periods.
5. When transporting or temporarily storing in a vehicle, temperatures should be greater than 20 degrees F but no more than 150 degrees F.
6. Storing Lipo batteries at temperatures greater than 170 degrees F for extended periods of time (more than 2 hours) may cause damage to battery and possible fire.
7. Ensure batteries are protected from damage and possible short circuits during transport; do not place non-battery items, such as tools, in the battery container.

### **6. Emergency Procedures**

This section will outline emergency procedures for LiPo use. MSDS/SDS sheets for specific batteries shall be maintained at the storage and usage locations, readily visible and accessible for emergency response personnel.

#### **6.1 Fire Control**

An ABC fire extinguisher shall be kept on hand wherever LiPo batteries are being charged, stored, or utilized. For field operations the fire extinguisher shall be kept near the batteries during charging, and on the flight line during flights. (Continued on Page 6)

## ***Safety & Usage Procedures for Lithium Polymer Batteries***

(Continued from Page 5)

As an alternate, water has been approved by NSW Crane's battery safety technical review team for NOS-SA, as being shown to be effective for extinguishing and cooling Lithium battery fires. MSDS warnings against water are directed to bulk or significant quantities of Lithium, but it is not expected that you will get a Lithium/water reaction on these types of batteries.

In the event of a LiPo battery ignition the following procedures shall be followed:

### **6.1.1 Battery Ignition While Charging**

The primary risk associated with Lithium Polymer technology is battery ignition while charging. This can result from improper charging, or charging a physically damaged battery pack. In the event of a battery ignition during charging, the following procedure shall be followed:

1. The battery shall be allowed to burn to completion.
2. If there is any danger to surrounding structures or property, contact emergency services immediately.
3. The burn shall be monitored and the fire extinguisher used to ensure that surrounding materials do not catch fire.
4. The fire extinguisher shall not be discharged at the battery charger unless necessary to prevent the spread of fire.
5. After the ignition has subsided, continue to monitor the battery for at least fifteen minutes.
6. After fifteen minutes disconnect the charger, and carefully move the battery to a safe location.
7. Leave the battery in a safe location for at least 24 hours prior to disposing of battery remains.

### **6.1.2 Storage**

LiPo batteries have not demonstrated significant tendency to ignite while in storage provided that a damaged pack is not stored until it has been given sufficient time to ensure stability (15 minute observation period). None the less, to be prepared for the possibility of a battery igniting in storage, the following procedure shall be followed:

1. The battery shall be allowed to burn to completion within the cabinet.
2. If there is any danger to surrounding structures or property, contact emergency services immediately.
3. The burn shall be monitored and the fire extinguisher used to ensure that surrounding materials do not catch fire.
4. After the ignition has subsided, continue to monitor the battery for at least fifteen minutes.
5. After fifteen minutes carefully move the battery to a safe location.
6. Leave the battery in a safe location for at least 24 hours prior to disposing of battery remains.

### **PLEASE NOTE:**

Continued From Page 4)

to give it proper disposal. Nothing will cause us to lose our lease quicker than environmental irresponsibility. Can't stress strongly enough the importance of keeping the flying site clean. Let's make it a New Year's Resolution to keep the place spic and span?

Second, there have been incidents with the gate being left unlocked. Don't forget it is your responsibility to **LOCK THE GATE BEHIND YOU WHEN YOU ARE THE LAST TO LEAVE**. Unfortunately there are to many ways already for unwanted guest to gain access to the field. Let's not make it any easier for them.

Thank you for your help.

## Calendar of Events

### January 2015

- 1 Happy New Year
- 26 Board Meeting
- 28 Membership Meeting at the Landing Zone  
(Come early and have dinner)

### February 2015

- 23 Board Meeting
- 25 Membership Meeting at the Landing Zone

### March 2015

- 21 Slope Soaring - Seaside
- 23 Board Meeting
- 25 Membership Meeting at the Landing Zone

### April 2015

- 17-19 Float Fly 1 (if there is water)
- 27 Board Meeting
- 29 RudderGate and Membership Meeting

### May 2015

- 2-3 IMAC I Contest
- 10 Mother's Day
- 15-17 Float Fly 2 (if there is water)
- 21 Board Meeting
- 23 RudderGate and Membership Meeting

## Club Contact Information

### 2015 SAM Officers

Dennis Stanley, President  
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Jim St John, Vice President  
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### 2013 SAM Board of Governors:

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To send any submissions to the newsletter editor:

**[newsletter@salinasareamodelers.org](mailto:newsletter@salinasareamodelers.org)**

This includes pictures. The email above is checked regularly, so any submission will not go unnoticed.

Submissions for the newsletter of any kind (this includes opinions) are welcome and will be used on a space available basis. The newsletter editor retains editorial rights to any submission solely for the purpose of correcting spelling, grammar, etc., but not to alter the intent.

I would certainly welcome a larger variety of pictures for the newsletter. Presently only one person is submitting pictures for consideration. Please take pictures of your airplanes or snap views at the various events we host at the field or at remote sites. The larger the variety the more people I can represent in the newsletter. Many people have cell phones that take pictures of a quality that is very acceptable for the newsletter. I know it's easy to forget you have the silly thing in your pocket as I am guilty of not pulling mine out of my pocket to take pictures. You can either email them to my address above or to the newsletter address which is also above, but please contribute when possible. Thank you, Bob McGregor, Editor

## THE PREZ SEZ

(Continued from Page 1)

While serving in the Army during the Vietnam era I was stationed in Korea working in an electronics lab. The duty was pretty good much like going to a regular job. We lived in somewhat modern barracks (hot water, warm beds, etc.) We had Korean Houseboys that did our basic house keeping for which we had monies taken from our pay. And, we could pay extra to individuals to take care of more personal items like shining boots, taking and picking up our laundry, keeping our personal lockers in good order, etc. My Houseboy was a young man who spoke good English with an education beyond high school who had walked 200 miles from his home to get this job. Education and skill meant very little in those days in this country. Most jobs of value are bought making it difficult to find good employment without the ability to bribe or buy your way into a position.

I was taking a couple of college classes on post, one an English and the other an algebra class. My Houseboy took an interest in my studies and helped me many times with my homework. After the Japanese occupied South Korea during the 2nd world war they burned all the Korean school books forcing the indigenous people to learn only with Japanese materials. After the country was liberated by us (Americans) the USA provided them with old school books all in English. So, Korean school kids went through school learning English and most subject matter from our American school study materials.

To make a long story short. I was married with no children when Uncle Sam came calling. Christmases were spent with my wife's family and kids for which there were presents under the tree that covered half of the living room floor. I was away for one Christmas but received many pictures of the families celebration. My Houseboy saw the one pictures of all the gifts around the tree in this somewhat middle class home and said to me "I think that God blessed America a little too much." So, there are times when I feel a little frustrated, or depressed over one thing or another, and I can conjure up this memory of being blessed a little too much and it suddenly brings things back into perspective.

The evening of the Toys for Tots brought 29 of us to together at the Landing Zone Restaurant at the Salinas Airport for our annual club Christmas Dinner. As is usual, Helen and James (the owners) put on a great buffet style traditional Christmas feast. I don't think anyone went home hungry this evening.

There were a number of members that didn't come out that morning to the Toys event but instead brought their gifts to the party. This made an additional contribution to the program and a second trip to the Chualar Church. Enrique was again very thankful for these gifts and seemed a bit taken by our generosity.

As is the tradition at the Christmas party a brief club meeting was conducted to announce the club election results (No surprises, really?) and a little discussion about the years highlights and a motion was made and passed to re-instate the gift exchange program. Some rules were discussed that would provide for the gifts to be new (no more white elephant) and with a 20 dollar limit.

We then proceeded with the Christmas raffle. Everyone that attended the party received one ticket. I then handed out 5 additional tickets to individuals that contributed to the club in the second half of the year. Four 50 dollar gift certificates, two from Tower Hobbies and two dinner gift cards from the Beach House in Pacific Grove, were won by deserving and lucky guests as were picked by our able bodied drawmaster Tristan Williams. It seemed as though a good time was had by all.

Here is wishing you and yours a Happy New Year, and may all your landings be walk-a-ways.

The Prez



Left - Dennis Stanley's jet taking to the skies once again. Dennis has a new engine which seems to be running great.



Right - Mike Martin readying his helicopter for another day of shear terror! Just kidding, Mike. You do a great job of flying that beast.



Above - Wow! For some reason they don't look all that friendly. Don't think I want those claws sunk into me.



Right - Maybe we can find more time and young people that would like to be introduced to our hobby/sport. Keep you eyes and ears open.

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