



The Launch Rack

The Journal of the Garden State Spacemodeling Society
National Association of Rocketry Section No. 439
New Jersey's Oldest Model Rocket Club

Winter Issue 2011

April Showers Bring May Flowers

What do you get when they come and come and come in September?

For One Thing a Very Soggy Landing Site in North Branch Park

We Were "Go For Launch" on September 24

And three, that's right, three GSSS members attended the September 24 Sport Launch at North Branch Park. Those attending assumed that members familiar with the park's proximity to the river the park is named for would be flooded. You could see that it had been as debris was still caught in the fence and the famous oak tree was decorated with straw and grass; clues that at one point water was at least six feet above our launch area. As the following photo shows the river was still very high and moving fast.



Though the recovery area was soggy and swampy in places retrieving rockets was not a problem. All in all the park folks had really cleaned up after Hurricane Irene and it looked quite normal with the exception of a few downed trees near the river and

along the little stream running to the right of the launch pad.

Arnie Klein was first on the scene and first to launch one of his *Flying Saucers* named after a friend the late **Dave Teichman**.



Yours truly, **Jack Sarhage**, arrived in time to help set up the launch equipment and take a picture of Arnie's launch. I had taken two new rockets to launch but each time I tried to get a lift-off photo I missed it. Anyway, I got in two nice flights.

James Zindle made up the third party in the GSSS contingent that made the launch. He launched his *LOC Onyx*.

We had an unexpected guess from Heavenly Hobbies. **Jose Andrade-Cora** operates an electronic hobby shop out of Spring Valley, NY. You can check it out at www.heavenlyhobbies.com. In addition to model rockets he also has available dollhouses, science experiments, photography, R/C planes, trucks and rocket-gliders as well as a nice

selection of tools to make your building easier. They carry most of the “name brand” rockets; Estes, QCR, Aerotech and Edmonds to pick a few. While at the launch Jose flew a Mercury Engineering *RDR2* with 2 E9-4 motors. I did get a photo of that launch. And his prices are not out of line.



IFO's Over North Branch Park
(or October 22 Sport Launch Happenings)

There were some very good flights at this launch and as always plenty of time to share ideas on rockets and even politics at times. The subject got around to chad staging and we got Arnie to show you how it is done as shown in the next column.

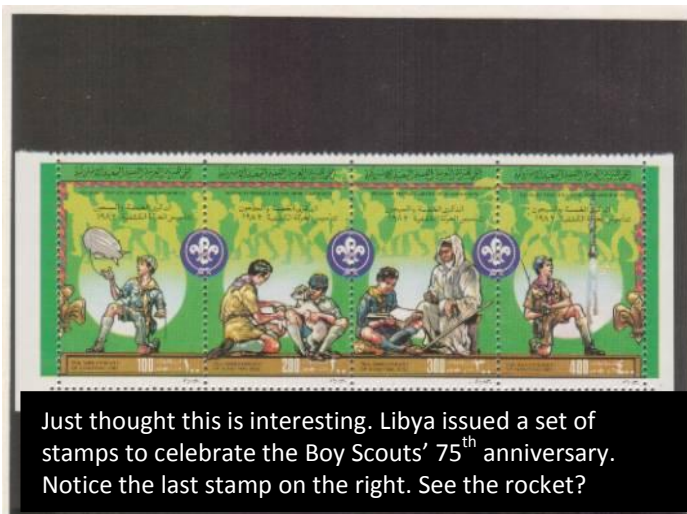
GSSS has always aimed for quality over quantity and if this launch was a barometer we succeeded.

There were several IFO's (Identified Flying Objects) over North Branch Park in the form of flying saucers in the Flying Saucer Spot Landing Event. This was the first Fun Test/Fly held in many months.

The idea was to land your flying saucer model rocket as close as possible to a predetermined mark. The winner of this event was **Jim Zindle** landing only 1.48 meters away. Results as follows:

1. **Jim Zindle** (*Snitch*) 1.48 meters.....40
2. **Fred Taverni** (*Fric-n-frac*) 3.38 meters.....24
3. **Arnie Klein** (*Disc*) 7.6 meters.....16
4. **Mickey Spain** (*Snitch*) 9.5 meters.....8

The numbers shown after each entrant are flight points a contestant would have gotten if this had been part of an NAR contest. We will be keeping track of points earned in future events to determine



Just thought this is interesting. Libya issued a set of stamps to celebrate the Boy Scouts' 75th anniversary. Notice the last stamp on the right. See the rocket?

who will be Section Champion of the Year for 2012.



Photo on the left is of **Jim Zindle** with his First Place Award and club patch.

Hopefully, more members will participate in

upcoming events next year.

Following are a few other photos taken during the day to finish out the report.



In this photo our newest members from Scotch Plains, NJ are loading up the launch rack with their latest model. You can read more about them in the New Members section below.

Ye Ole Editor seems to be able to capture the

lift off of any model other than his own and the next photo will prove it.



He also was so interested in getting the picture he forgot to find out whose rocket this is just after ignition of the rocket motor.

The saucer model on Pad 4 is a *Snitch*. One of two used in the Flying Saucer Spot

Landing Fun-Test. Anyone know what model is on Pad 5?

Thanksgiving Weekend Launch

Thanksgiving is a time when family members gather together. GSSS is a family made up of many families and on November 26th several attended the Sport Launch.

And like all families they are made up of several generations. One family is **The Falcone Family**.



In the rear is **John Falcone III** that began coming to launches at the age of 4 or 5 with his father **John** (bent over hooking up his *Big Betty*) and the pretty young lady on the left is son **John's** wife **Jenny**. And there is another Falcone on the way. We look forward to his/her first visit to a launch.



Another GSSS member that we had not seen in awhile is our Section Advisor **Bob Zabiskie**. Shown here putting his *DCX Space Clipper* on the launch pad. Bob also brought the club's new NAR banner that we will display at launches and other activities.

The rocket in the foreground is Ye Ole Editor's *Cosmic Cobra* which he finally got to work after several attempts to get it off the ground.

Jose Andrade-Cora of Heavenly Hobbies is becoming a regular visitor with his wide assortment of model rockets and engines for sale.

A new family that has become part of the GSSS family is **The Nein Family**. **Alex** is shown here with his *Flying Cookie*.



And no launch would be the same without long time GSSS family member **Arnie Klein**.



Arnie is shown (on the right) here doing one of the things he is known for; retrieving rockets from rocket eating trees.

Hope your Thanksgiving was a much fun for you as it was for those attending our Thanksgiving Launch.

Since the next issue will be published after Christmas and the New Year we wish you Happy Holidays and the Best to you in 2012

Welcome to Our New Members

Known as *The Rose City*, Madison, NJ is also the home of our newest member **Bill Klepper**. *The Ash Swamp* may not be well know nor is *The Battle of Short Hills* both of which are connected with Scotch Plains, NJ as are these folks; members **Peter and Alexander Nein**.

Model Rocket Trivia

Ken Montanye also known as The Rocket Doctor correctly answered the trivia question in the Fall Issue. It was Kit No. K-1 *Astron Scout* in 1961.

NARAM-53 was held this past August. Can you provide the location of NARAM-1 in 1959 and the name of the Contest Director?

Countdown 5-4-3-2-1...

(A Calendar of Upcoming Events)

Note: The following dates are tentative. Watch for updates in the newsletter and our website.

- 01-28-2012 – “Challenger” Memorial Launch
- 02-25-2012 – Sport Launch
- 03-24-2012 – Fun Test 1: Predicted Duration
- 04-28-2012 – Sport Launch
- 05-26-2012 - Fun Test 2: A Streamer Duration
- 06-23-2012 – Sport Launch
- 07-28-2012 - Fun Test 3: 1/2A Parachute Duration
- 08-25-2012 – Sport Launch
- 09-22-2012 – Fun Test 4: A Helicopter Duration
- 10-27-2012 – Sport Launch
- 11-24-2012 – Fun Test 5: Open Spot Landing
- 12-22-2012 – Sport Launch

For the newer members the “Challenger” Memorial Launch is held each year to honor those astronauts that have died furthering our space program. You are invited to bring your space shuttle rockets. We will also take a moment to read the names of all (those of the United States and other countries) astronauts giving their all.

Fun Test 1: Predicted Duration is open to any single-staged model rocket. The purpose is to accurately predict the duration that the model will achieve. The contestant must predict the duration in seconds of the model rocket’s flight. It is recorded on your flight card and given to the Contest Director. The minimum duration prediction allowable is 30 seconds. **No practice flights permitted.**

Fun Test 2: A Streamer Duration is open to any single-staged model rocket using a streamer for recovery. The purpose of this even is to achieve the longest duration time using an **A Class Motor (1.26 – 2.50 Newton-Seconds)**. Streamer can be cloth, plastic film, or paper whose shape is basically rectangular. The length-to-width ratio is 5 to 1 or greater. Streamer must stay attached to the model rocket to be an official flight. **Only one flight allowed.**

More Newsletter Issues in 2012

As you can see some of the news is several months old regarding launches. Since the desire is to get information to you as quickly as possible we are going to a bi-monthly publication next year.

Look for the January-February issue early February 2012. More details later.

USA SPACEMODELING TEAM Report:

CAPITOL CUP COMPETITION

A Combined NAR Regional and International FAI Continental Championship

By: Dr. Bob Kreutz

There are many, many ways spacemodelers become active in model rocketry, FAI international competition is just one of them. Sure, flying high tech model rockets is fun but, I have found the opportunity for cultural exchange and camaraderie, both on and off the field, to be equal to the thrill of the gold medals and podiums of world class competition. One could experience just that recently, right here at home.

On September 16th-18th I traveled down to Manassas, VA, for the 2011 Capitol Cup competition and US Team Practice. The event was hosted by NAR President Trip Barber's home section: NOVAAR. Manassas may sound familiar to you if you have ever seen or read about the annual TARC competition, which is held in the same location at Great Meadow National Park. The NOVAAR members did a superb job of running the event and called in some familiar NARAM personalities like Jon Rains and his son as RSO and Dr. Chris Kidwell for all the data reduction.



Chris Kidwell performs Data Collection and Reduction at the Range Head while our NAR President Trip Barber checks in.

The meet was a complicated one, taking place over two days and was actually two contests in one: an official NAR sanctioned Regional competition AND an FAI sanctioned Continental Completion referred to as a "Cup" (although there are only medals awarded, not actually a cup...)

Contest Director Tony Reynolds did a fantastic job avoiding what could have been a logistical nightmare, having organized the event from his home in Texas.



To be considered an official event for FAI (Federation Aeronautique Internationale: the world organization governing all aerospports) there must be contestants from 3 different countries to qualify as a

continental championship. With 2 contestants from Bulgaria and 2 from Canada, the US successfully sponsored the 2nd official Cap Cup! Our good friends Taras Tataryn and Peter Cook represented Canada while Dimitre Avramov and his son Stoil were competing for Bulgaria. Luckily they were living here in the US which made getting to Manassas for them, a little easier! On to my report...



Canadian Competitors Taras Tataryn and Peter Cook prepare an S6 Streamer Duration model for the FAI portion of the competition.

Past US Team Members Jay Marsh (South Carolina) and Ross Hironaka (California) discuss the competition with Dimitri and his son (Bulgaria). Although 3 countries were being represented, Ross clearly traveled the farthest.



The competition began on Saturday morning with a bit of overcast skies and intermittent rain. With the exception of a downpour or hurricane strength winds, an international competition continues. There were a total of 6 events which included: S1B - B Altitude, S3A - A Parachute Duration, S4A - A Boost Glide, S6A - A Streamer Duration, S8E/P - E R/C Rocket Glide with Precision Landing and S9A - A Helicopter Duration.

Steve Foster may have gotten to the range before anyone else, but not before the first periodic "water hazzard..."



Each event is flown in 3 timed "rounds" of 45 minute duration (normally 1 hour, but shortened due to the tight schedule to adhere to) with a total of 2 models permitted. This requires the flier to return at least one model if he needs or expects to fly in the third round. I assure you, a third flight is always needed. Combined

scores from the 3 rounds are tallied to determine the winner. Based on the MAX time allowed for a particular event, no time over this maximum is counted. If your parachute flight (for example) is 6 minutes long but the MAX is limited to 3 minutes then only the 3 minutes is counted and a MAX is awarded for the time in that round. If many competitors MAX, this can result in numerous ties, so the winner is determined by a fly-off round of unlimited duration. So, not only must you have good models and results, but you have to be consistently good. Many fliers consider this more of a personal challenge. The exception is in S1A Altitude, where the best flight wins, sometimes requiring only one flight if it is good enough. But never count your chickens before they're hatched!

Events were staggered so the first round would be S4A, the second S9A and the third S6A so that contestants would have time to retrieve models and prepare for their next round approx. 1.5hrs later. This staggered formation was repeated throughout the contest. First event to be flown was S4A Boost Glider. Both a NAR and FAI competition, all flights were under the MAX and the results determined by combining the scores of the rounds. Rod Schafer (USA) was the only one to put up 3 timed flights and outpaced the pack with 69-77-75=221s. He was followed by Chris Flanigan(USA) 0-77-113=190s and Dimitre Avramov(Bul) with 51-48-0=99s.



US Team Manager John Langford launches his S8E/P model in the Precision Landing - E powered R/C Rocket Glider event. Quite a sight when one of these ships takes flight!

Saturday afternoon began with S8E/P where R/C Rocket Gliders are launched on E impulse and piloted skyward. They then fly the thermals for 6 minutes and must land at a predetermined spot. The farther the distance from that spot and points drop off dramatically, hence the "Precision" part of S8E/P.

An S8E/P model approaches for a precision landing



Some landings qualified as precision, some not so precise and the final event places were filled with American fliers: Scott Baird, Kevin Johnson, John Langford, Ryan Woebkenberg and Dimitre

Avramov(Bul).

That evening, Team Manager John Langford hosted a dinner at his company: Aurora AeroSpace and the vittles were well enjoyed, hot and tasty. We were honored with a visit from Alexander Mituriev, a guest from numerous former Russian Spacemodeling Teams, who released a presentation on building S1 Altitude Models and imparted his advice not to fear "pushing the envelope" when participating in the WSMC because its the "little details" that matter when you compete against the best in the world!



Saturday Night Dinner at Aurora AeroSpace hosted by USA Team Manager John Langford. Discussing either rockets or desserts are (from L to R): Alexander Mituriev(Rus), Ole Ed Pearson (US FAI Rep), Jay Marsh, Ross Hironaka, John Marsh Jr. and yours truly: Dr. Bob Kreutz.

Uh-oh, "Da Boyz" is back in town! There is always a little "get together" in one of the hotel rooms to wind down after an FAI competition. Here our gang celebrates Russian style... [left to right] Alexander Mituriev (Russia), Dave O'Bryan, Ole Ed Pearson (US FAI Rep), Jay Marsh, Ross Hironaka, John Marsh Jr. and yours truly: Dr. Bob Kreutz.



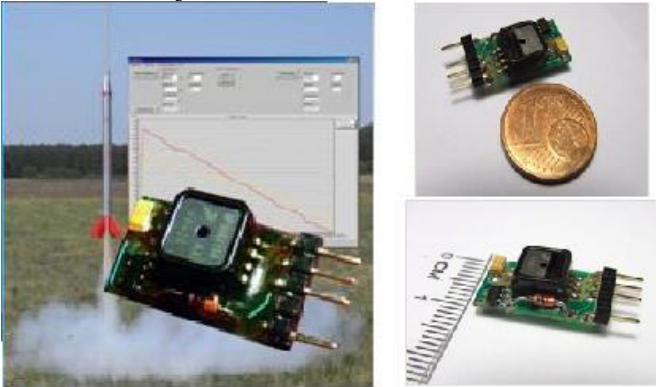
Sunday's weather was a reprieve, sunny and a little bit blustery, my kind of weather for S1 and very much like what you usually face at the WSMC. The morning was reserved for S3A Parachute Duration and S1B Altitude, with a US Team Practice in the afternoon. S3A was similarly plagued with a lack of Maxes resulting in Chris Flanigan(USA)85-217-300=602 on the hi podium, Peter Cook(Can)77-199-300=576 and Jr Team member Brendan O'Bryan(USA)111-161-300=572, a close 3rd!

2012 USA Junior Team member Cassie Steele gets off an S5 Scale Altitude test flight with her boilerplate Bumper-WAC two stage scale model.



S1B had 8 competitors with Matt Steele(USA) taking top honors with a second flight of 350m, his first flight managed 272m which would have only gained 3rd place. Good thing he was ready with a second flight! Trip Barber landed 2nd with 300m and Steve Krystal grabbed 3rd with 283m. My flights were just disastrous. Having missed the first S1B Altitude round by about 2 minutes, due to a fluctuating altimeter problem, (which was soon fixed) I was ready and up

first in the round 2. The flight looked good initially, straight “up” as is what is required, only to have the booster CATO just before



International altitude events must be flown with an electronic altimeter manufactured by the Polish firm: Adrel - see: [http://www.adrel.com.pl/en.html]

staging! What I got back after the fireball was not pretty, the side of the booster and upper half of the stuffer tube just completely burnt out. On to round 3 and my last chance at registering an altitude. Once again, it came down the end of the round and with what I believed seconds to go, I got my second flight off. Again, she was straight up, only this time I had a no-sep when the sustainer (2nd stage) ignited. This produced the same result as my first flight! A burnt up stuffer tube as the sustainer motor fired inside it and then eventually a big burn through the booster body wall. Ok, this wouldn't have been so bad if it wasn't for the sustainer ejection charge which succeeded in burning through my 25lb Kevlar shock cord, hurling the portion of the model with my altimeter in it sky high and down range. Well, the second stage was destroyed by the separation and I left an \$85 Polish Adrel Altimeter somewhere in the woods. I guess you would kind of describe it as a no sep – sep and that's a disqualification no matter which end of the rocket you look at! That got me on the board – but in dead last place.



Preparing for the Awards Ceremony at the Range Head. National Flags are flown and the Anthems played. It sure was nice to see the ole Stars and Stripes and hear the Star Spangled Banner!

Without delay, the round ended and we gathered for the Awards Ceremony with all the results checked and tabulated by Chris Kidwell using the NAR's Contest Manager Software.

With contestants able to declare if they wanted to fly in the NAR Regional contest (depending upon if you were flying for club contest points or flying as an independent) or the international FAI contest or even both, awards were granted for participation in each

contest. {FAI contestants would have to be registered and hold a valid FAI license obtained through the AMA, which is the organization representing aeromodeling competitors in our national Aeroclub, the NAA. It is the NAA that represents the USA in the world aerospace organization, the FAI. Got it? Believe me, it is not as complicated as it sounds and it is easy to get hooked and involved in a different style of model rocketry!} What does all this mean? Lots and Lots of medals!!!



Ahhh, the Rewards!!! Table at the range head with competition medals which is common at all FAI competitions. Everyone got one, I think, well, except me... ;-D

~~~~ MEET CHAMPIONS ~~~~~  
 Junior Division: EMMA KRYSTAL  
 Senior Division: TRIP BARBER  
 ~~~ OVERALL MEET CHAMPION ~~~  
 CHRIS FLANIGAN



In addition to the medals for each of the simultaneous contests, overall Meet Champions were selected. For the Junior competitors, Emma Krystal stood as Meet Champ and our own Trip Barber, President of the NAR garnered Senior Meet Champion. But the one individual that stood above the rest and collected the most points by flying nearly every event (sans S8E/P) in both contests was Chris Flanigan. What a way to end the weekend – it had to take at least an hour or two just to say our good-byes and make sure we had everyone's email address. Despite my horrific showing, a quick jaunt to Dulles Airport to get Ross on his flight back to California and the 5 hour drive back to New Jersey, I would do it all again in an instant! But, Hey! I still had a real good time and an experience I won't soon forget. I was asked later in the day by my Russian acquaintance, Alexander Mituriev : “Dr. Bob, how can you be so happy after what just happened in S1?” I could only reassure him and responded: “I always have a good time when I'm surrounded by the best of friends!” With that we parted, at least until next time at the Great Lakes Cup!!!



Want more about US-FAI international spacemodeling? Check out: [http://www.nar.org/internats/] ... or even the old site: [http://www.spacemodeling.org/new/]

Election Results

First of all a **BIG THANK YOU** to all of you that cared to send in your vote! It is members like you that keep our Section active and growing.

The following elected officers will serve for the next two years. We trust that they will lead us in such ways that will help the section continue to grow both in membership, activities and outreach.

President – **Arnold Klein**
Vice- Presidents – **Dr. Bob Kreutz**
Steve Pantuck
Secretary/Treasurer – **Jack Sarhage**

There were a total of **13** ballots received or **37%** of the membership.

CONGRATULATIONS!!!

Don't Forget to Renew

If your membership card expires on December 31, 2011 it is time to renew for the year 2012. Membership dues are the following:

Senior (over 21 and over).....**\$10.00**
Leader (ages 16-20)..... **7.00**
Junior (15 and under)..... **5.00**

Note: If a family membership remember to deduct \$2.00 for each additional member.

Please make your checks payable to:
Jack Sarhage

Sending them to: GSSS-HQ,
c/o Jack Sarhage, 24 Canterbury Court,
Piscataway, NJ 08854

This will be the only notice to renew you will receive. If we do not get your renewal by January 31, 2012 you will be dropped from the roster.

Garden State Spacemodeling Society

c/o Jack Sarhage
24 Canterbury Court
Piscataway, NJ 08854

The Launch Rack
Winter Issue 2011
Time to Renew Your Membership