

WASHINGTON AEROSPACE

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Washington Aerospace Officers

- President—Kent Newman
- Treasurer—Christopher Scott
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- Ops Mgr—Andrew MacMillen

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FROM THE PRESIDENT.....

BY KENT NEWMAN

Well, it's a summer without Monroe and Puget Sound is missing the roar of hobby rockets and the smell of AP on the first Sunday of every month. The search for a replacement field has been on-going but has yet to result in a viable alternative to the Department of Corrections property. A conversation with the Washington State National Guard and the U. S Army at Ft. Lewis sounded promising but, unfortunately with trauma of 9/11 still present in altered government policy, military land is off-limits to any additional civilian recreational use. That may and, even likely, will change some day but it will be awhile.

If you are driving with the family, on the way to work or looking specifically for a new place to put rockets up into the air and see property that might be a good candidate for a new launch site, please forward it to one of the Washington Aerospace Officers. It may not pan out but with enough possible options, one site will certainly be a success. You gotta swing the bat to get a hit!

LDRS

The annual Tripoli national launch was held at Texas starting on July 11th. A mini-BALLS EX launch will follow the normal 4 day event creating quite a venue for those willing to endure the heat of Texas in mid-July. Several NW folks will be attendance and a follow-up article will be published to report on the activities of that great event..

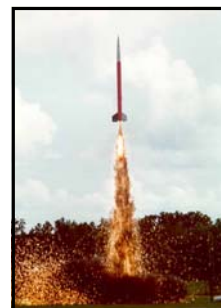
AMW

AMW, aka Animal Motor Works, will have certified motors available at LDRS. Animal Motor Works' offerings will be some of the great effects motors previously available from Kosdon East and generally only seen at experimental launches. With the advent of

Frank Kosdon forming a relationship with Aerotech, Paul Robinson decided to take the necessary steps to offer his motors for sale to the general public. Green Gorilla, Red Rhino, Skidmark Squirrel, etc. are some of the effects motors that AMW will offer. Re-loads will be able to be used in the complete array of Kosdon TRM motors. Paul is also producing his own hardware which can be easily distinguished by its gray anodized color. Expect AMW motors to begin to be seen in growing circulation following its debut at LDRS.

Black Rock

A back-to-back venue that offers a world class hobby rocket experience and is much closer for NW fliers than Texas is Black Rock, NV. September 21st and 22nd is the annual BALLS experimental launch limited to experimental motors only. The 23rd through the 25th of September will be the dates of the first annual XPRS Tripoli launch. This launch will focus on large and complex projects powered by commercial motors. If you want to see hobby rocketry at its best and have not witnessed the beauty of the Black Rock desolation, be sure to put these dates on your calendar!



A DPS "Yellowjacket" takes to the sky at an unknown experimental launch.

Voices From Monroe

Remembrances from one of the North-West's most popular flying sites ...

(photographs from Jack Anderson or Kent Newman)

First, the final official Monroe launch report

This launch report will be a bit different than usual as April 7th was the final launch at the Monroe site.

While the weather was less than wonderful it was good enough for a lots of flights. The final totals were:

1/2A 1

A 7

B 18

C 33

D 23

E 17

F 17

G 27

H 22

I 15

J 7

Total = 187

We did really go out well! That was the most J flights since I starting keeping records two years ago. Likewise it is the highest number of I flights and the 3rd highest number of H flights.

Well done all !

Rather than provide info on the flights and certifications I thought that this would be a good opportunity for folks to share their own Monroe stories. Steve Bloom and others have already started. I'll post my own thoughts in a bit. Why don't you all contribute your own stories? Just

send them to NorthwestRocketry so we can all see them.

It has been fun!

And as the astronomer Jack Horkheimer says much better than I, "Keep looking up".

Kimberly Harms

Now on to the voices from Monroe ...

As anyone who has read the last issue of this newsletter knows the Monroe Spaceport had it's last launch on April 7, 2002. Here are some thoughts and remembrances from the fliers that flew there ...

Seems like it wasn't all that long ago - albeit April `00 - that I surfed across some now unknown Web site that mentioned high power rocketry. Being an ABAR (Almost BAR - I flew kites, balsa/rubber planes, Frisbees, virtually anything airborne *except* rockets) and a full time web geek, it didn't take me long to find NAR, then NWR. "Hey, something sorta maybe in my backyard".

I showed up for the May `00 launch having spent way too much time surfing further into the depths of the morass of rocketry. Hung out with my jaw on the ground. Starting asking silly questions, oh wait, I asked `em so they weren't/aren't silly. Left the launch badly hooked. The jones got me, and I'd bought my first kits several days later, a DC Gemini and an ARV Condor. (In case anybody hasn't figured it out yet, I don't do simple or ordinary very well.) Skipped June, launched in July, decided on my L1 kit several eons-known-as-online-days later, bought casings with my new NAR num-

"(I) left the launch badly hooked."

Andrew MacMillen

ber etched, epoxy, found out about Apogee 10mm motors, Rocksim...

Lotsa support & advice (thanx Bruce & Don!) thru to Sept. when I certed on my Yank Mystic Buzz. The fear of not having an H180, and trusting that I built strong enough to handle an H220. The total rush! Followed by the winter wind down, except for the endless hours surfing, day dreaming, planning, buying, getting hooked on the dream of nitrous...

Picking my L2 kit, electronics, competitions, building rockets with my daughter, her first flight, my retro Mars or Bust, helping Kimberley tally flight cards on the Kingston ferry, my first LCO stint, more adrenaline, and dopamine for my L2 cert in on my one year cert anniversary, with a J420R in my BSD Thor.

Highlights:
Staying out of the swamp.
Keeping on keeping on thru the trials & tribulations known as hybrids.
My first successful hybrid flight.
My first Hypertek flight, and the last hybrid flight at Monroe. The support, the camaraderie, *the lack of politics*.

Low points:
Greg's camera, & anywhere from 75-300` on a Ratt H70, repeatedly ;-}

Andrew MacMillen

I was sad to see the Monroe field fade into the history of local rocketry. Prior to moving to Washington state I had been back into rocketry but had been stalled at mid power due to lack of any guidance or local flying field. Walking into Ursula's store re-kindled my interest and my level 1 and level 2 followed almost immediately. Having people to talk to and actual real rockets to look over made the process simple. Here are some of my most memorable experiences from Monroe.

My level 1 definitely. must have smoked half a pack of cigarettes just

waiting for Steve Bloom to finally push the button. When the Endeavor took off it went strait and true, the I heard someone say, " well that's the easy part, wait for the chute." No problem, the chute deployed a little early and the main deployed on schedule. Grinned ear to ear for the next hour or so.

Dave Woodard's flight towards my new car, purchased the day before, was also a heart stopping moment. Missed the front bumper by about an inch, buried itself in the mud, and then ejected. No scratch, no foul.

Also to wrap up I also get the dubious honor of having the last flight into the swamp!

Many other memories also, but I would like to point out that having a field in western Washington was critical to bring many people, me included, into the sport of High Powered Rocketry. The loss of the Monroe field will be devastating only if we fail to find a suitable place to launch. I'll keep looking because there is another dad out there some where who is heading down to All Hobbies to buy a Estes rocket for his kid and has no Idea that he is about to lose several thousand dollars and countless weekends punching holes in the sky!

Scott Bowers

NAR# 79504 Level 2

There could not have been a better day for the last launch at Monroe. No wind, some sun and two thirds of V.A.R.O.O.M. certified level 1. This site will be missed. Except for the swamp that is.

Brett L. Phillips

Just wanted to say a special thanks to Jim Pommert, for saving me from my own procrastination. He let me borrow a slick little tower so I could launch my

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Scott Bowers

Voices from Monroe — Continued

new lugless 29 mm. And to Dave Davis for helping me assemble my first reload of the year, just to make sure I didn't forget anything this time. I had a great time Sunday. I was very nice to see people I hadn't seen since last year, kind of sad though with this being the last Monroe launch. Along those same lines I want to say thanks to the Monroe staff for maintaining such a high standard in both professionalism and safety at a launch.

See y'all at Brothers

John S

Steve Bloom's last day at Monroe

Hello all,
Mike Pearson posted a flight report to rmr, and I added my .02 to it as well.

It's kind of a Monroe fairwell launch report so I thought I'd put it here too.

"Mike Pearson " wrote:

>

> Well, today was the last day for launches at the "Monroe Spaceport".

>

> I got in two flights...

I was yelling, "turn, turn! TURN!" to no avail. I'm glad you got it back.

That monster has a great glide.

(in response to Mike's description of his DC Thunder glide to never-never land)

I also got in two flights (well, almost).

My buddy Doug brought his boys out to their first high power launch. When I could wrench myself away from range duty I took them all back to the truck and loaded up their rockets with some monstrous C motors and I put an F20 in my Allen Bloom Skunkworks Cheap Rocket Thunderbolt. Thomas had a great flight from the Twister on a B6-4 with close recovery of both halves. Jason had a longer walk to recover the Super Shot after it's C6-7 flight and Danny was rewarded with a spectacular flight to about 1800 feet from an Athena on a C6-7. That little bird landed only 50 feet away.

My T-bolt was launched after the model



Recovery from the Monroe swamp

rockets and we all watched eagerly. Fiss POP! Huh, musta blew the igniter. Earlier one of the kids asked me if they ever blew up. I told him yes, every once in a while they did but it wasn't very loud. Sort of a pop noise and the bottom

of the rocket may have some damage. Well guess what happened to that F20? The nozzle and propellant chunk blew out the back end.

My next flight was also the last flight at the Monroe Spaceport. I was given the honor of putting the last bird into the sky. Our (Eric and I) first high power rocket was my level 1 bird, a LOC IV. That rocket was retired ceremoniously in Wagoner Oklahoma, after two hard landings at the Argonia LDRS. Our second high power rocket is still with us, Eric's Minie Magg. It's been through some hard times as well but is still going strong. We flew it on a J570 from the lakebed just last year at LDRS. So, in "put a bigger motor in it fashion", I loaded it up with a J420 red-

Voices from Monroe — Continued

line for the sign off flight. On a red flame nearly as long as the rocket, it blasted off the rail. The chute came just a bit early but otherwise it was a fine flight.

My (Steve Bloom's) fond memories of Monroe?

At our first visit, Eric and I had a Comanche III loaded up with the full stack. We had never seen so much grassland with a launcher out in the middle of it and we were really excited to see it go high. We saw it land way out there and anxiously walked that way, hoping to find it. When we found that rocket, my 12 year old and I high-5'd and had smiles on our faces I can still feel and see today. We walked back to the flightline with our shoes three feet off the ground.

Just after apogee, Bruce said "a chute would be good right about now". It was then I suddenly realized I had forget to put the BP in the well of the H242 that had just put Eric's Minie Magg up on its maiden voyage. Only I knew it was on a kamakzi dive to the soil below with no chance of a safe recovery. That sinking feeling in my gut as we walked over to the wreckage was sickening.

Rebuilt, longer, stronger and with a fresh paint job, Eric's Minie Magg stood on the pad with a J350 under it. I paced like a caged tiger as the other rockets before it took off, leaving only my level II bird out on the range. Was

the chute on good enough? Will the motor blow up? Is the nose cone fastened? Is there BP in the well? Will my igniter work? Is the delay the right one? Will the delay perform? YES! What a rush! To see that big fat rocket get so small, and then have a little red dot appear next to it. Wow.

After a crash at LDRS, I had rebuilt my Gemini DC 4X and was sure I had figured it out. With a K550 in the center tube, Kimberly walked out to the pad with me for support. I ran through my checklist and she gave me an encouraging nod. My heart stopped when the 5 foot flame appeared under that thing and it roared off the pad. The chutes stayed in! Oh my gosh look how fast it's going! Gawd it's high! Look! a drogue! The main deployed! Poink, it stuck nose first in the soft soil, just like it's little brothers. A cheer rose up from the crowd, definitely a highlight of the attending boy scout troop.

Silver Comets with F39's, Broadsword Clones on G55's, Eric's FatBoy on a G55 and mine on a G64, a flounder, an Estes Black Brant II modified by the Skunkworks to hold a G125 for a mach flight to a mile (and recovered) and several rockets in the swamp, all of which I got back.

One chapter closed, but the book is still wide open.

Steve Bloom
Seattle Area Rocket Guy

One chapter closed, but the book is still wide open.

Steve Bloom
Seattle Area Rocket Guy



Monroe flight line

Tacoma Boy Scout Launch

The launch Saturday at 60 acres park was a dreary overcast day, but spirits were high among the 25 members of Cub Scout Pack 3 from Tacoma. They were here to test the results of their rocket-building skills! The scouts sent their newly built rockets skyward nearly 145 times!



Members of Cub Scout Pack 3 watch a rocket soar skyward

The scouts had a great time and I'm sure that Cub Scout Pack 3 will be looking forward to next year's launch. Thanks go to Steve Thatcher, Matt and Keri Beland, Jim Pommert, Dave Davis, Robert(AKA the rocket girls and dad), Greg Deputy, Tom VanEtten, Ross at Magnum, and Dick Haskins. And a special thank you goes to Scott Bowers for setting up this event year after year. By helping youngsters to see how our hobby works, Scott ensures that model rocketry will have a future filled with new fliers.

The majority of the rockets were Estes Mach 12's that were provided by Steve Thatcher. These rockets are unique in the Estes line because their fins can be assembled in a variety of ways. And the scouts, aided by Jim Pommert and Scott Bowers in the building session, definitely tried every fin configuration possible!

Dave Davis provided the ground support systems with one of the BO-MARC low-power launch racks. With help from scout parents rockets were prepped, loaded with engines, and launched in short order. Dave kindly allowed each scout to press the launch button to send their bird skyward. Once launched, recovery was aided by light winds that allowed most rockets to stay within the 60 acres park field. In fact the winds were so light that Scott Bowers managed to sneak a couple F of engines in during the launch and he even recovered them with little trouble!



A Cub Scout rocket heads skyward

Fire In the Sky 2002

The second annual Fire in the Sky launch started Saturday morning under a partly cloudy sky with warm temperatures. Western Washington was well represented by a large entourage of fliers. Scott Bowers, Matt and Keri Beland, Bill and Sandy Clugston, and Andrew MacMillen had all arrived Friday afternoon with their families to set up tents and ready their rockets for Saturday's launch. The launch had several nice amenities brought in by Scott Binder, who was hosting the event. One of these amenities, Northwest Concessions, provided such necessities as coffee, ice cold slushies, and hot dogs. Also onsite was Ursula of All Hobbies and her AP Therapy Van – no launch would be complete without her!

Bill Clugston was one of the early launches, on Saturday, with his BSD Horizon E (electronics) on an I-284W. It looked great going up, but not so great coming down as the bird was stricken with electronics problems. Fortunately the damage was minor and the Horizon will fly again. Several of the Seattle area fliers came to the launch seeking their Level 1 or 2 certifications. Dave Woodward was successful in his Level 2 attempt with his Horizon while Keri Beland's search for her Level 1 certification took a much different turn. Keri's BSD Diablo, the Purple Cow, unfortunately suffered a tangled chute on its first flight disqualifying her first certification attempt. Not to be deterred, Keri tried again and had a perfect flight, but lost her rocket in the tall alfalfa grass in the area. Keri told me not to count her out, she'll be back to try again for her level one certification. Quick hint Keri, there are no alfalfa fields at Black Rock!

Meanwhile the hybrid rocket crew, composed of Andrew MacMillen and Bill Clugston were having their problems with a balky Hypertek system and misfiring igniters. The Hypertek system

was simply not receiving enough juice from Bill's lawn tractor battery. A starter battery pack on loan from Kent Newman would change things for the Sunday portion of the launch. Bill's modified LOC Graduator suffered from nitrous leaks and misfires, but finally managed a successful launch to nearly 1,800 feet. The nitrous guys finished the day feeling much happier.

Saturday night featured live entertainment from Randy Bishop and his country western band "Trespasser" and some spectacular night launches. Scott Binder

launched a slick-looking rocket with electro-luminescent panels on J-90 that actually went through the low clouds and disappeared! When it finally re-appeared on chute it was seen, with panels flashing, well down range.

What was really amazing, early next morning the rocket was safely recovered!



Keri Beland's Level 1 attempt
Photos by Craig Christenson

Sunday morning brought day two of Fire in the Sky with some great projects showing their stuff. Andrew MacMillen launched his Hypertek hybrid Thunderbolt with one of the new two flight I engines. It was a great flight with none of the GSE glitches that plagued the hybrid launches the day before. And just to prove the engine is really a two flight engine, Andrew quickly recycled the Thunderbolt for second flight on the same engine. It was flawless! Andrew wasn't fin-

Fire In the Sky 2002 — Continued

ished either Sunday afternoon his K powered BSD Thor ripped off a awesome flight.. Later Sunday afternoon it was Kent Newman's turn to put on a show. Kent prepped his scale Doorknob sounding rocket for an attention getting flight on a K engine with two G airstarts. The flight was flawless, but a failed drogue deployment caused a high-speed deployment of the main chute causing significant damage to the Doorknob. Hopefully Kent can repair the damage and the doorknob will fly again. Sunday also brought another nice touch from Scott Binder. He called in a neighbor's helicopter to help spot rockets hidden in the grass lending another meaning to the term "helicopter recovery."

Monday was the wind-up for the 2002 Fire in the Sky event. Bill Clugston got off another flawless flight with his hybrid Graduator, but unfortunately he failed to leave enough nitrous for Andrew and his hybrid attempt only struggled to about 25 feet before it flamed

out and fell back to the ground. The most memorable Monday flight had to be Craig Christenson's two-stage BSD Intrepid. It staged flawlessly and soared to over 7,000 feet. In fact it was several minutes before anyone re-gained sight of the rocket and that was only because of the main chute ejection charge going off! It was time for the folks from western Washington to head home across the mountains, but everyone agreed that Scott Binder ran a great launch. I'm sure that fliers from the Seattle area are already planning to attend Fire in the Sky 2003.



Andrew MacMillen's BSD Thor with a Ratt K240

Month	Meeting Topic	Presenter
August	Painting	Mike Watkins
September	Level 3 Rocket Building	Kimberly Harms
October	Hybrids — Lessons Learned	Bill Clugston & Andrew MacMillen

Club Meetings

7:00 p.m. First Saturday night
Where: Peace Lutheran Church
214 East Pioneer

Quick Notes

Apogee Components Saturn V

For those rocketeers that haven't heard the Saturn V is back bigger than ever. Tim Van Milligan, owner of Apogee Components, sent me an offer that I couldn't refuse (a bunch of money off on the Saturn V plus goodies!), so I bought one of the new Saturn V kits. The first thing I noticed was no manual! The entire manual is on CD-ROM! The quality of the kit is amazing. Look for a construction article in future newsletters.

Animal Motor Works and Cesaroni Technologies

Good news on the motor front. Animal Motor Works (formerly of Kosdon East) has started producing a line of high-power special effects motors. The Green Gorilla and White Wolf reloads were certified in July and are ready for use now. I saw several of the Green Gorillas at Hellfire 8 and they are an awesome motor. Go to <http://www.animalmotorworks.com/> for details.

Cesaroni Technologies has been working to expand their Pro38 line of solid rocket motors. They do require a new case system, but the Pro38 has advantages, such as, adjustable ejection delay and easy cleanup. They also light faster than any motor that I've seen ! In addition to the 38mm 62.5 gram grain reloads Cesaroni is now producing motors in 75mm and 98mm sizes. Go to <http://www.Pro38.com> for details.

Congratulations to the Community Space Program folks

The Community Space Program had a great LDRS with several spectacular flights with their Community series rockets. I'm looking forward to seeing their projects at the Black Rock XPRS launch.

Club Meetings

The first Saturday of every month!

Where: Peace Lutheran Church
214 East Pioneer
Puyallup, WA 98372

Time: 7:00 p.m.



**NAR Section 578
Super
Discounts**

All club members get the following discounts at the All Hobbies store

20%
Special Discount on single item purchases of over \$300 (except as noted).

10%
On rocket kits
Aerotech, Custom, Estes, Loc, PML, Quest, and the Launch Pad

10%
Parachutes
Loc, PML, Topflight

5%
Aerotech &
Dr. Rocket Motor (red cases) hardware & parts

No Discount
All Red Sticker Items

ALL HOBBIES STORE
1430 E. Main
Puyallup, WA 98372
253-841-0089

<http://allhobbies.net/>

Regional Launch Schedule

Notes:

- 1) BEMRC launches (Boeing) are model rockets only. "C" impulse maximum.
- 2) "EX" motors are not allowed at certified motor launches; and certified motors are not allowed at "EX" launches except when flown with an "EX" motor.

August 2nd-4th (Fri-Sun)	Black Rock, NV (AeroPac)
August 10th (Sat)	Dayton, WA (BMR)
August 16th-18th (Fri-Sun)	HellFire Bonneville Salt Flats, UT (UROC)
August 24th-25th (Sat-Sun)	Lowden, WA (WHiP & SPARC)
Sept 14th-15th (Sat-Sun)	Lowden, WA (WHiP)
Sept 20th	BALLS 2002, Black Rock, NV (AHPA)
Sept 21st	Sheridan, OR (Oregon Rocketry)
Sept 21st (Sat)	Rolling Thunder, Dayton, WA (BMR)
Sept 27th-29th (Fri-Sat)	XPRS, Black Rock, Nevada (AeroPac)
October 5th	Boise, ID (Tripoli Idaho)
October 12th	Rocktoberfest, Dayton, WA (BMR)
October 19th (Sat-Sun)	Brothers, OR (Oregon Rocketry)
<u>Launch Contacts:</u>	
Washington Aerospace (WA)	Kent Newman 360-893-1148
Tripoli Puget Sound (TRAPS)	Christopher Scott 253-858-7256
Wahington High Power (WHiP)	Scott Binder 509-525-4461
Blue Mountain Rocketeers (BMR)	Tim Quigg 509-382-4176
Boeing Emp Model Rocket Club (BEMRC)	Bruce Johnson 425-742-2252
Seattle NAR (SEANAR)	Don Qualls 206-784-1667
Spokane Area Rocket Club (SPARC)	Bret Conant 509-299-7122
Oregon Rocketry Enthusiast's Org (OREO)	John Lyngdal 503-649-7371
Tripoli – Oregon	Gary Fillible 503-843-3137
Tripoli – Portland	Dennis Winningstad 503-297-3685