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WPA Newsletter, Volume 17, Issue 3

December, 2006
Volume 17, Issue 3

Western Pyrotechnics Association
P.O. Box 10116
Canoga Park, CA 91309
E-mail: Tom@WesternPyro.org

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Do It? Dang it! By Tom Calderwood, V.P. Publications

Thank you for taking time to read through this newsletter. It takes quite a bit of time to get this thing to gel, and I appreciate your looking through it.

I was soooooo looking forward to Do It 06. As I develop my pyro photography techniques, I've come to appreciate Do It. It's one of those rare events where you have quite a variety of different pyro devices but enough time in between each one for the smoke to clear away. For all that PhotoShop has done for us, they still can't make a Disappearing Smoke Filter! I also had a new tripod to experiment with, as well as other unique ideas. I was all signed up and ready to go!

However, I had a health issue I needed to take care of. I'm currently sporting the latest in ICD pacemakers. The installation went better than expected and I was home in a day. But a problem with an irritated nerve popped up and I wound up making more than a few trips to the ER. I promised my wife that I'd have at least a two weeks of no problems before I'd even think of going, but one week before Do It I had another "episode", so I had to bow out. Dang it!!! Oh well—there's always the next one! And I guess that's the good news, that I'll be around to make a general pest of myself for a while longer. That's the goal, huh?

(Continued Page 4)

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A Letter From Your Prez

By Russ Laurie

Hello Fellow Pyros!

By the time you are reading this newsletter, the holidays are a thing of the past, the New Year has already begun and it's getting time for WinterBlast 18 in beautiful Lake Havasu City AZ!

The WinterBlast planning is on schedule even with the changes from the ATF&E. We have had to make some modifications to the layout this year, so if things are not exactly where you remembered them, that's O.K. It is a learning curve for all of us. Some of the modifications are because of the new race track owners (who by the way were great to work with at DO IT) and some are because of the ATF&E. But no matter what, we will be making, building, shooting and learning at this year's WinterBlast.

Your Board Of Directors have been working behind the scenes to make sure that the club has the proper insurance needed to cover our events, and that our ATF&E licenses have been renewed (not an easy task!). You have a great B.O.D. and it has been my pleasure to work with them this year.

I want to thank Kelly Goebel for all his hard work and dedication this past year for working closely with the B.O.D. on setting up the new WPA web site (www.westernpyro.org) and the new list/digest. Many countless hours of e-mails, phone calls, blood, sweat and tears went into making this possible. I hope that you use the web site, subscribe to the list/digest and use it to your advantage. We finally got the bugs worked out so that

WPA members can use an on-line payment system for renewing your memberships and registering for our events. This was one of my goals for this year and it has finally come to fruition!

Now speaking of the list/digest, I have noticed all the banter about safety and newbie's needing safety training. Safety is one of the highest priorities for the WPA. We preach it and we teach it. This cannot be stressed hard enough. I think the club goes out of its way to promote all aspects of safety. There are daily safety meetings at each of our events, specialty classes that we hold especially at WinterBlast and a class where our Safety Chair teaches "How to Safely Shoot Class B Shells" just for newbie's. We can never be too safe when it comes to dealing with pyro.

By now, most of you are aware of the outcome of the court case involving FireFox and the CSPC. The judge has order both parties to work together and come up with a solution that will hopefully end this nightmare. Even though the end seems near, the defense fund still needs your help - so if possible please make a donation to this very worthy cause. The outcome of this case will affect all of us in the Pyro family.

In closing, I want to thank all the members who work long hard hours behind the scenes to make this club what it is today. Without your efforts, we not exist - so remember to be safe and "Smell Some Smoke"!

Russ Laurie
WPA President

Do It? Dang it!

(continued)

By Tom Calderwood, V.P. Publications

In the mean time, I'd like to throw my hat back into the ring to continue as your Publications V.P. I was originally elected as Vice President, but circumstances were such that I had to step in as the editor mid-term. This is one way that I feel I can contribute to the club, plus I feel that I've been able to take the newsletter to the next step (with a bit-o-shoving from Gary Berg!) Elections are held at the General Meeting and I encourage you to attend. It is the one meeting of the year where members participate and are heard.

I would also like to thank our volunteers. You folks rock! Our club depends on volunteers at it's events. From safeties, security, seminars, vending, setup, tear down and cleanup, we need YOU at every turn. The few members who elect not to volunteer do so on the backs of those who do—and for some, it's a back breaking job. To continue, we need YOU! So come early for setup, stick around for cleanup (and don't forget the burn pile!), and sign up to be safety for an hour or two.

I look forward to seeing y'all at the General Meeting at the next Winter Blast. Many issues are discussed and voted on, including the officers. I'm asking for your support, and hope to see you there! — Tom

Secretary's Musings

By Rita Oesterle

Registration is in full swing for Winterblast 2007. I have already received 149 membership renewals and 99 members have signed up for the event. I want to thank all of you who have been so prompt with returning the forms or have done it online. There are fewer errors this year and for that I am very grateful.

For those who have not done so already, remember that the early bird discount ends at midnight December 31, 2007. The forms must be in the post office box or the online ones dated before that time also.

DO IT 2006 was fun. The stands have been repaired and repainted. The entire area looks cleaner since the track has been reopened. Check out the registration room. We have a new wall decoration in there also.

Some members wanted to buy it but it will have to stay where it is. The 2007 membership cards will be in your on-site registration packet. If you do not make this great event, I will mail your card to you afterwards. (For those of you who did not put your membership number on your forms, did you see that the member number is on the mailing label? It would save me time if you put the # on your form)

One of you sent in your form with only the waiver signed. I had to fill out the entire front side of your form. Hope I got everything correct for you. See most of you in February and the rest of you will be missing 4 big nights of fireworks.

Rita Oesterle
WPA Secretary/event registration chair

The Treasurer Speaks

By Ann Huffman

Well WPA members, another year has gone by. Sure hope everyone had a great time at Do It despite the unusual rain and wind storm we had. Hope to see more of you out next year. Seems we had a few more of you volunteer for clean up. I can not stress enough just how important set up and clean up is. It takes a lot of time and work to put this on for all of us. Again, please try and take at least an hour or so and help. We all understand for some this is not a option as you have planes to catch and roads to hit. If you cannot stay then PLEASE give that extra \$\$\$ so we can hire people to help us out. Also Volunteers - WPA WANTS YOU!! Please sign up to help out. This is a club and we all need to work together as a Club. I want to thank all of the ones who are always there for volunteering, set up and clean up. You know who you are and so does everyone else. Without you, this event would not happen. Let's see those new faces out there this year. You don't know what you are missing. As you can tell by the calendar, it is that time of year again to renew your dues

and sign up for Winterblast. From what I am hearing if you think last year was great, this year is even going to be better. Remember you can renew on line or mail us a check. Rita and myself are standing by. Also don't forget the General Meeting. This is the only Meeting we have each year that all the members get the opportunity to attend, ask questions and voice your opinion. Let's make it a full house. We have room for everyone. With that said Hope to see all of you at Winterblast this year. Have a safe trip out and lets all take PRIDE in OUR CLUB by stepping up and helping out in anyway you can.

Ann Huffman
WPA Treasurer

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“Upcoming Election”

by Pete Wood, WPA V.P.

To all members,

While WWB 18 is just around the corner, and will be here before we know it, I want to take this time to announce my desire to run for a full, 2 year term as your Vice President.

The past ten months have certainly been a learning experience for me with new responsibilities and challenges. When my existing talents couldn't address certain areas of my responsibilities, (Rita! How do I use Excel?) I've had the help and support of all the other board members, including a very LARGE helping hand from past VP, Don Oesterle, whom I want to take this time to thank publicly. Thanks Don for all your help!! Many thanks to all the other Board members as well, for your patience, guidance and understanding throughout the past months.

While no one is born knowing how to be a Board member, a sense of desire to see the club continue forward and prosper have helped me to see my position much clearer and how to work alongside the other Board members, in order to work towards maintaining a healthy future for the club and fireworks!! We have the responsibility to do this, not only for us (the WPA), but also for fireworks in its entirety.

I have enjoyed the past ten months and accept the challenges that lie ahead in the coming years. I have more to learn, but accept that working in my position is best served by experience, desire and dedication, and will continue to be a work in progress.

If you feel that I am up to the challenges facing us in the immediate future, then I would appreciate your vote at the upcoming election at WWB 18, in Lake Havasu City, AZ, this coming February, 2007.


Thank you for your support!

Pete Wood
WPA VP 2006

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WWB Auction

By Kief Adler

Winterblast 18 will see the return of the club's auction to Saturday afternoon so that more of you can be in attendance. This is not only a great, fun event, but it is also a wonderful way for your club to make money while the members have a chance to pick up many unique and unusual items. Kief Adler, Matt Sutcliffe and Jill Salverson will be your hosts once again, and they will be happy to help you empty your wallets to the club's advantage. Plan on joining the fun with your pyro buds.

If you have anything that you think might be an appropriate item for the auction, pyro related or not, please contact our auction king, Kief Adler, at 818-383-7755 or kief@sbcglobal.net.

- Kief

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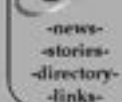
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El Diablo

by Jack Schroll

In the year 2000 the Olympic games were held in Sidney, Australia. As is the tradition, the closing ceremonies included a large fireworks display. This year had a particular interest to me. One of the display operators was a good friend of mine, Tom Mattrocce. I did not attend the event but I did get to see a video of the closing ceremonies. The fireworks display was everything one would expect for such a grand event. However, the finale included something a little out of the ordinary. When the display was choreographed, it included a low pass by an F111A jet from the Australian Air Force. During the fly-by the pilot turned on the afterburners and created streaks of fire in the night sky. It was a brilliant display of light, fire and sound.

In 2002 I attended the Burning Man Festival. I had attended every year since 1996. While I participated in several small ways, I left the Festival with the feeling that I needed to give something back for all the years I had attended and enjoyed Burning Man. It was in the Winter of 2002 that the concept of a ground based jet engine breathing fire into the night sky struck me. I remembered watching the jet aircraft from the Olympic display and wondered if I could create a similar effect from the ground.

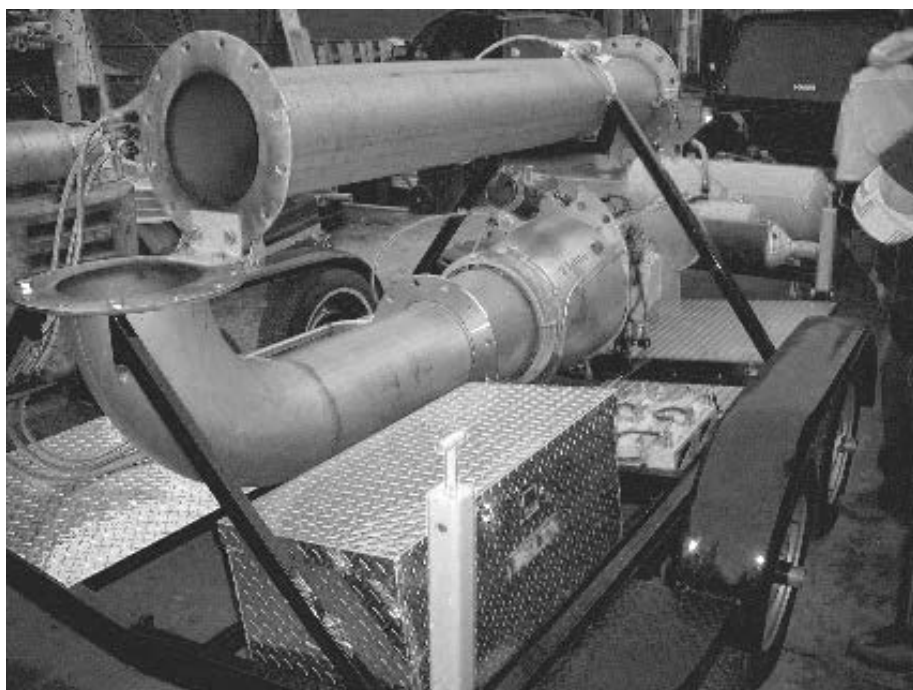
I began doing my research. I had many problems to overcome and I had no experience with gas turbine engines. I spoke with jet engine mechanics, UC professors with backgrounds in air flow research, fellow pyrotechnicians, jet dragster teams and I even spoke with the crew that builds Craig Breedloves' land speed cars that race at Black Rock Desert. I was told everything from the idea was absurd to it was a simple matter to build such a device.

I designed it on paper and I felt the concept was sound. It was in January of 2003

that I submitted the idea to the Burning Man organization. I had no desire to build such a device and have no place to use it. After several months I was told that I could indeed bring it to the Playa. In retrospect, I suspect they were all hoping that I would never finish the project.

I started gathering parts in April of 2003. I found the engine on eBay. It was a small centrifugal gas turbine. Small by today's standards. It produces about 1000 horsepower. It was the left hand engine from a French fighter/trainer called the Fuga Magista. It was in Des Moines and I flew out to see what I was getting myself into. As soon as I saw the engine I knew it was right for the project. I bought it and had it shipped to my shop. Next I needed a platform to mount this on. I found an old two axle boat trailer that was being sold by a storage yard for lack of payment. I spent the better part of three months gathering parts. By early July 03, I was ready to begin building the most powerful flame effects device the Playa had ever seen.

I had many hurdles and setbacks. I had no experience with gas turbines and less experience with afterburners.



El Diablo

(continued)

by Jack Schroll

Almost like a miracle, a friend of mine who was a key part of the project knew someone who did turbine research for NASA. He gave us the key information we needed to build a flame holder for the afterburner. To me it seemed so simple, inject flammable liquid into a jetstream with temperatures near 1000 degrees C and ignite it. Until we designed and built a flame holder, we couldn't keep the AB lit. We installed the flame holder and it was at that moment El Diablo came to life. This was much to the dismay of the Livermore, CA fire dept. When they arrived we had already shut down the test. They said they were looking for a ruptured gas main. Our tests showed that the sound level of this device is 147 db at 50 feet at 80% of full thrust. . The flames shot over 75 feet into the air. We had a working unit.

Time was growing short. Burning Man was only



three weeks away and we still had to finish the fuel delivery system. We needed to push nearly 50 gallons per minute of fuel into the afterburner. Unable to find a suitable pump, we decided to use compressed Nitrogen and an accumulator tank to force the fuel into the AB. This allowed us to easily control the pressure and we had no explosive mixture in the holding tank when it was empty. With one week left before the Festival the construction was finished. Now it was time to take it apart and make it look nice. We dismantled El Diablo and all of its components were sent out for powder coating. When the parts came back we worked almost around the clock to assemble it and do the final wiring and plumbing. We finished at 4:00 a.m. in the morning. I went home and slept for a few hours. I left for the Playa at 10:00 a.m. that morning.

I was a little unhappy when I was placed on the Playa. In retrospect, I understand that they wanted me far away in the event this "thing" blew up. I ran it several times that year and it functioned perfectly each time.

When I left the Festival I was already working on enhancements. The idea worked and worked well. I developed ways to color the flame. I have added more afterburner nozzles and we can now inject metal particles into the flame for added glittering effects.

The name El Diablo was given to it by my daughter. It is loud and scary and it breathes fire. To operate it the person at the controls must wear a fire proximity suit or the time of running is limited to bursts of three or four seconds. The heat is too extreme for much more than that. El Diablo has been to the Fire Arts Festival put on by the Crucible in Oakland, CA. It has been to the Winterblast and has done several private shows. It has appeared at SF Decompression twice and I have more plans for the future of El Diablo.

With the assistance of Chris Spurrell I have been able to produce several colors in the flame. The engine is fueled with JP8, a military jet fuel. In the afterburner we have several choices. Most of the time I use a mix of 25% JP8 and 75% gasoline. This produces a very hot and bright flame. I use

El Diablo (continued)

by Jack Schroll

methanol when I wish a colored flame. We have also mixed the methanol and hydrocarbon fuels in the AB holding tank. This produces a flame that has multiple colors. The unit has a small (2 gallon) tank that holds a concentrated mix of methanol and various salts that can be injected during the run. I can achieve a flame height of nearly 100 feet. It varies depending on the wind, altitude, fuel and engine speed. We have created a flame that is nearly 70' high, red on the top 20%, orange/yellow in the center and green at the base. I suspect this can be done due to the difference in specific gravity of the various fuels and the temps at which the fuels burn. Methanol burns with far less heat than the hydrocarbon fuels. Last year we added

a particle injector. We can inject Titanium or iron particles into the jet stream. We do this post engine and before the afterburner. After trying various sizes of Ti, we found one that works well. The particles will rise to almost 120' above the ground.

I intend to bring it to WWB again this year. We are working on a liquid propane accumulator, but that won't be ready in February. We have put corvus oil in the intermix chamber and it produces huge clouds of smoke. We can also color the smoke with various dyes. I hope to run it each night of WWB. Stop by and say hello when you hear the turbine spool up.

Soluble Glutinous Rice Starch (SGRS)

© Steve Majdali

Someone asked how to make this material.

This process works by heating starch in water where the short starch grains attach to each other to form long starch grains with much greater adhesive power. Care must be taken not to overheat the starch paste as the long grains will begin to break down and convert to sugars with little, if any, binding power.

I have had success taking glutinous rice starch (or any rice starch or flour), mixing it with cold distilled water, putting it in a sauce pan and heating gently on a stove top. The material should be whisked frequently while heating and the pot removed from the stove just before the boiling point. A slight color change is sometimes noticed when the starch becomes paste (the look of it goes from opaque to semi-translucent). The material can be used immediately when cooled.

For an instant variety; spread the paste in a thin layer on a non-stick cooking sheet (this is important when making a *very strong binder*) and dry at low heat (try 150°-200° F) in an oven. When completely dry, break the horn-like flakes to a smaller size by hand, then grind to a powder in a coffee or grain mill for later use. The dry

powder may be reconstituted by adding water and mixing to the desired consistency.

A sample of the paste should be tested with tincture of iodine as specified by Dr. Shimizu (F.A.S.T., p.157, end of the second paragraph). This test suggests adding the smallest possible drop of iodine tincture to a sample of the paste. If iodine turns the paste a reddish-purple color, success! If iodine turns the paste indigo blue it either isn't cooked enough (cook it longer) or it's cooked too long (ruined) and begun to form sugars.

This is not the only method, but one I've used in the past with success. If you require a copy of

Dr. Shimizu's excellent book, it's available from Pyrotechnica Publications or Prometheus Publications.



The Shell Kicker, or How Bad Flash Became Great Whistle Burst

by Chris Spurrell

For about the last five years the shell building classes at WPA events have all used a teaspoon per shell of the same strange looking benzoate whistle mix. After it was first introduced some very experienced shell builders quizzed me about what must be a secret formula, and would I share it? And share I did. It wasn't mysterious secret, it was an experiment with flash powder that failed completely but the experiment didn't stop there.

I'm a big proponent of not mixing that good old 70/30 flash powder until it's inside of the sealed up salute. ("Unmixed Flash" Best of AFN V) And I wanted to see if 1% airfloat charcoal would add a free flowing characteristic to potassium perchlorate and maybe even improve its ignition characteristics. Heck I even added 0.5% of fumed silica to help it flow that much better. Here's the complete failure part. The darn stuff clumped like crazy. So I had all this $KClO_4$ that was "contaminated" and the solubility is such that re-crystallization isn't an attractive option. Sure, there are some whistle or star formulas that might have worked but I imagined that the silica might interfere with the comp holding together.

Just about that time I get an email. The fellow doing the WPA shell building class (who knew I'd be making whistle rockets) asks me if I can make some benzoate whistle mix to use in the shell building class as the "kicker". (Of course the main burst charge is meal coated rice hulls.)

So now I have a home for this contaminated perchlorate. I ball milled the charcoal/silica contaminated perchlorate with 1% ferric oxide ending up with a grey/maroon colored very fine (but clumpy) powder. Likewise the potassium benzoate was milled separately with 1% Fe_2O_3 to a nice pale pink. And since I was making whistle rockets I figured I'd make it up with 4% petroleum jelly dissolved in enough camp stove fuel to make the whole mess look like dark brown pancake batter (I also like to mix the whistle very wet with solvent for safety (ibid)). Once the solvent had flashed off – not hard in the Arizona desert – the ugly whistle mix was ready.

Off it went to the shell building class. The experienced folks frowned at the weird color, but the price was right and they used it freely. And even though I had worried that the silica

would interfere with the integrity of the hard pressed whistle, it didn't. Those rockets flew just fine.

At that point in my pyro education I hadn't built a shell so I can't tell you quite how the experienced shell builders judged the whistle to be better than other whistle. But they were adamant about getting this formula, even to the point of repeated emails just to be sure I hadn't left out anything.

But that started the trend. As I think on the chemistry, charcoal is noted for its good ignition characteristics and spark production. And the formation of hot molten slag is mentioned in several prime compositions. I imagine the inclusion of the charcoal and fumed silica causes an instant of intense sparks and molten silica inside the shell to better get all those stars lit.

If you attend a WPA event look for me in the Manufacturing area. I'm sure I'll have a little extra of the secret formula weird colored whistle around somewhere.

— Chris

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Winter Blast 18: Fire In The Sky!

by Kief Adler

I know that we told you that last year was the Winterblast not to be missed, but this one is shaping up to be even more spectacular! Mark your calendars for **Feb. 15-18, 2007** and ask for the time off NOW.

We start manufacturing as early as set up is complete, so come early and help with set up this year and you'll be able to get building ASAP. If the price of gas is still holding you back Lynden can help get you a ride with someone: call him at 916-686-5054 or e-mail Slacker One at skyking@elkgrove.net, or contact your area Vice President and we'll find a way to help get you there.

Steve Wilson is being joined at the hip (who needs NipTuck?) with Kurt Medlin for another great seminar schedule, including Shell Building 101, Sky Rocket 101 and a shot at a manned space flight, if there's time. If there's a seminar that you would like to see, or if there is one that you feel you can put together, please contact Steve or Kurt. By the way, kudos to Kurt for being elected PGI's very own publications VP this year.

Speaking of the PGI, look for the Board's of the PGI and the Fireworks Foundation to be in great representation this year. Let's all do our best to welcome them by chaining them to rocks in the desert and having Richard Cole bombard them with salutes! JUST KIDDING!

Aaron Mayfield wowed us all with his closing show at Winterblast 17 so it was only fair that he should return to do our main show at Winterblast 18! Look for shells that you've never seen before and effects that will go on and on... can't let too much more out of the bag as I've been sworn to secrecy, but you do NOT want to miss Saturday's show!

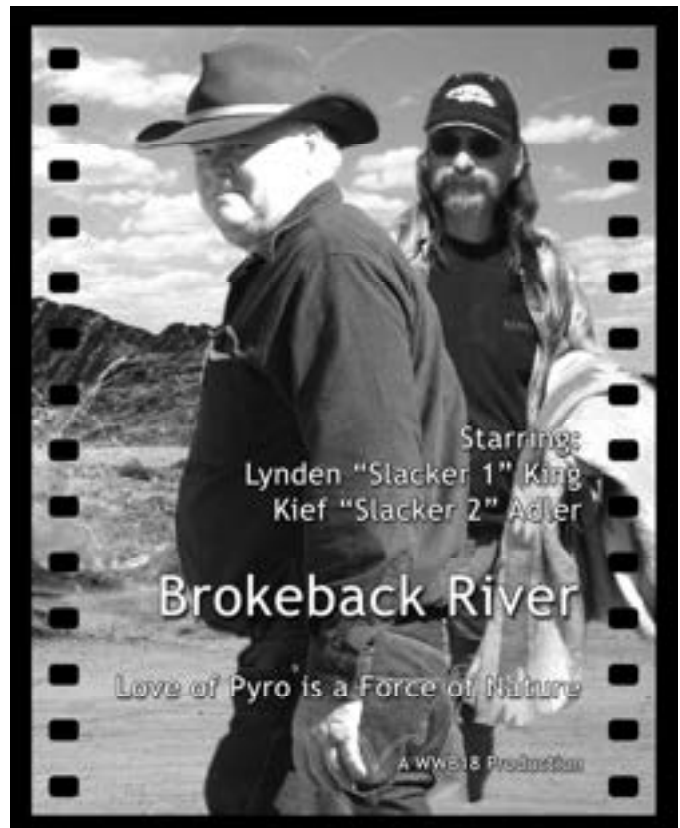
And don't think that Saturday is the only night for something BIG this year as I have shows and demos planned for every night, including a Thursday night kick-off show that will rock the river! If you don't usually make it out on Thursday, you might want to call in sick this year. Also look for shows from our friends at

Fireworks America, Pyro Spectaculars and Premier Pyrotechnics. Dave Glass and Chuck Danielson will be back on Sunday night and what would Winterblast be without Bill Zuber's walls of fire?!

Once again, we are offering the use of the club's ATF license to purchase "B" product this year, so get on the web site, find a vendor and get your orders in soon. B product is available by presale only so pre-order if you are planning to shoot it. Randy Baranack will be giving his famous "learn to shoot class B" classes for you newbies.

YOU MUST BE A MEMBER TO ATTEND so mail in your membership renewals and Winter Blast forms now. Fees are up this year, but don't wait until it's too expensive to go: take advantage of early bird pricing and pay BEFORE Dec. 31.

We are always looking for interested pyros, groups of pyros and companies to put on their own shows and demos for our entertainment. Interested parties should contact Kief at 818-383-7755 or kief@sbcglobal.net as he is our resident Demo Chairman once again. If there is any interest in having a member's shell building showcase contact Kief for this also so we can put it in the schedule.



Winter Blast 18: Fire In The Sky!

(Continued)
by Kief Adler

The Trade Show will be at the Aquatics Center in town, as usual, while class "C" vending and chemical sales will be at the tent at Sara Park. All seminars will be at Sara Park this year, too. And don't forget those ever popular Afterglows at the end of each day at the host hotel, the Ramada Inn! Complimentary beer and soft drinks, plus some great snacks will be available. Russ Laurie, our esteemed president, will be leading the karaoke contest this year so start rehearsing.

Hotel prices will be the same as last year. You must use the hotel reservation form to receive the pricing shown on the form. This form should be mailed or faxed directly to the Lake Havasu Tourism Bureau. Do not send this form to the WPA! There are six hotels to choose from this year, including our first ever condo offering. You are sure to find something to your liking.

Remember that this is a volunteer organization, please plan on volunteering for something at this years Winter Blast. We always need help with safety and security and cleanup (daily). This club would not work if it wasn't for all the help from volunteers. You can contact Kief, Lynden or the appropriate chair person if there is anything you want to volunteer for directly. Otherwise, you will be asked at registration to participate somewhere. Those who truly don't give a damn will be asked to donate a twenty to both eliminate their guilt, and to prevent dirty looks from those wonderful folks in registration! Thank you!

And don't forget the auction! If the third time was the charm, then what the hell is the fourth one? Matt Sutcliffe is back from his year off and Kief Adler will be back to entertain and annoy you with lies and worthless stories while Jill Salverson, the WPA's very own Vanna White, tip toes her way into your wallet. And, if you have something to donate, contact Kief of course!

All forms are up on the website. Get signed up early, save money, and help us plan for a great Winterblast by getting your registrations in early... don't wait!

Come join us in Lake Havasu in February as we celebrate what we do best: FIREWORKS!

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*Thank you ALL for your continued support
of the WPA!*

Dolt 2006

By Greg Dandurand

Thursday of Do-it was just another workday. I didn't take the day off and was going to leave for Lake Havasu City right after the whistle blew at four o'clock. My supervisor had already been by and was on my case about the cover sheet on my TPS reports. "Lumberg" also was hinting around about having me stay late. I danced around the question with an Icky shuffle combined with a foxtrot and ending on a nice cha-cha-cha. The others in my work area quietly shook their heads. I knew I would leave at four to rocket my way to Do-It.

The next problem was the evening Phoenix traffic that would slow me down until Tonopah. I-10 west could be a real pain in the butt. Hunkered down at my workstation, among the dissected skeletons of various aircraft hydraulic actuators, the creative section of my mind hatched a little plan. At lunch, using my trusty cell phone and some chutzpah, I first contacted the Arizona Highway Patrol and then the Phoenix police department about having an escort to get me from Tempe, through Phoenix, to the Vicksburg exit on I-10, where I would head north to pyro heaven. Nothing special I asked, just a cruiser and two motorcycle officers, full lights and sirens, I'd just need them for about an hour or two. The stony silence on the other end of the line indicated to me I had some more convincing to do. After speaking to several different people, using the Do-It and WPA names, I was left with one more big gun to try. Incredibly, they had never heard of Kief Adler, and I had to admit defeat. Further compromising ("just one motorcycle cop") was met with the promise of having a K-9 officer dispatched to my place of employment. Not to arrest me, but to have the dog bite me in the crotch. I finished my lunch and returned to work. Hours later found me in the stop-and-go traffic, gnawing on the steering wheel cover and playing tic-tac-toe in the dust on my dashboard.

Patience is a virtue, and thank God, I'm a virtuous man. I soon found myself in the darkness headed north of Parker, on the last push to LHC. I had heard of possible rain this weekend, but was prepared for it. I could see lightning ahead of me and hoped that everyone and all their gear was undercover and staying dry. I was surprised I hadn't hit the rain yet. I finally realized that the flashes in the distance were FIREWORKS! Duh, open shooting until 10:00 pm. I pulled up to the back gate at Sara Park, the security guard not wanting to let me in (that's what we pay him for), until I saw both Bill McGregor

and Russ Laurie. They vouched me in (after I promised to dance for them later, don't ask, don't tell), and I found that I had just missed Rita and registration by about ten minutes. She had left for the hotel for some well-deserved rest. I just didn't go down to the shooting lines, and wandered around talking to people in the upper area of the track. When shooting was over for the night, people started filtering into the Afterglow tent. It was nice to see the faces that I only see once or twice a year. Catching up was fun and we all went our separate ways for some rest.

The next morning I went out to get my credentials and see what was going on. The registration staff was on the ball (as usual) and I had my badge and temporary wristband before I realized what was happening. It occurred with such speed that I felt I had been roped and branded. As I wandered off to join the rest of the herd, I noticed that the track had been renovated. I found out that the city had leased it to some people who spent some serious money on it and were going to have races on a regular basis. I only mention this because even though we do clean up after ourselves, now it was more important than ever to leave no trace of our existence behind (except scorched earth) or we might not be able to come back. Manufacturing was humming along, but the tents seemed farther apart. I found out that the BATFE had set up distances of 60 feet between each manufacturer. But if there were three or four of you together, it counted as one site, with a 60-foot difference to the next site. Something to think about for WWB. If everyone partners up, we can get more people down there and not run out of room. I can't tell y'all what to do, let's work together so everyone can build their stuff.

The BATFE is also getting pickier about our record keeping requirements, please be prepared to deal with it when checking stuff in and out of the magazines. I know some of these new rules can be a pain, but if we don't keep up with it, the WPA will become the Western Parcheesi Association.



Greg Dandurand

Dolt 2006

(Continued)

By Greg Dandurand

Firefox was there, selling chems and discussing topics of the day with everyone. Thanks to all who support them, so they come to our events. Jim and Beckie from Flying Phoenix were the class B and C vendors. They also sponsored the Saturday night after-glow. Good food, and Bill McGregor scored some beer from one of the local micro breweries.

The rain did come on Friday. The wind blew so hard that we anchored the tents using vehicles. A couple of manufacturing tents went to Oz, but for the most part we escaped unscathed. The down time caused by the downpour allowed us to get the cakes ready for the show that has become known as Armageddon. The cases never seemed to stop coming. Tape them together, sticky match, and e-match. The rain stopped before we

lost all our shooting time and a lot of product went into the air that night. Saturday was the setup for Armageddon. It went well, but we can always use a few more people. The wall of eight-inch mines on the racetrack looked spectacular (they were real) and the wall of crackers went off without a hitch, leaving only the mound of red paper in its wake.

Sunday morning cleanup was a little light, people wise. I know this has been beaten to death on the WPA digest and elsewhere in this bulletin, but remember, the club is all volunteer. Many hands make light work. The burn pile was fantastic, with not one not two, but three Barney dolls vaporizing. Things looked good when I left and headed back to the house to rest up and start waiting for WWB! — Greg

Paul Retzinger RIP 1953-2006

by Mark Devon

My good friend and longtime WPA member Paul Retzinger died a couple months ago. He was a member of my crew, shooting shows with us in Morgan Hill and San Jose over the last 15 years. He had contracted Hepatitis C about 25 years ago and it apparently smoldered in his system un-noticed, until about five years ago when he became very ill. He had gotten liver and kidney transplants, but it only bought him a couple more years.

I got into fireworks as an adult after attending a PGI convention in 1991 in Lacrosse, Wisconsin, and shortly thereafter joined the WPA. The first Northern CA meeting I attended was at Pauls' house. I met most of the north-people at that time and became friends. I met his brothers who were also the same kind of experimenters, rocket-electronics-computer hackers. So I felt pretty good hanging around with them.

Once at the "Desert Blast" event, I remember him with a piece of plastic pipe he had found on the freeway in L.A., launching a bowling ball with a pound or two of black powder. The bowling ball didn't quite fit into the pipe, so he had wrapped it with a towel. The ignition device was a squib connected to a garage door opener receiver. The transmitter was a little key chain dongle. It's hard to describe, but the froooooomp this bowling ball made as it hurtled out of this drain pipe, together with the smoldering towel following the bowling ball was one of the funniest things I have ever seen. I guess it helped that it was launched by a garage door transmitter on a keychain. I remember looking at the bowling ball, little BB up there in the sky, and thinking - Holy Sh-- , I better get under the car!

Pauls' plastics business had really taken off, he had 30 people working for him at the time and was doing really well.

He was also a writer in poetry and prose. He has a book out at Amazon called "El Louise", about his life growing up in LA.

He really liked the desert, in particular the Mojave. His interests included the wildlife, flora and fauna, and native petroglyphs, I know to him the desert meant freedom. He would always take the back roads. He told me once he was tooling around in his 4-wheeler in the desert around Havasu and had stumbled on a saloon out in the middle of nowhere populated by the local desert rats.

One thing he always told me: The simplest effects are the best, and you have to go back to the basics, so he would favor willow, firefly, tigertail, brocade and glitter effects. We were always entertained with Paul around. A few months ago, he showed me some bamboo rockets he had made. He said he wanted to see if he could do it the Chinese way, that is, go back 1000 years and see what you could do with the materials available then. Well, he never got to make his own fertilizer, but I'm sure that would have been the next step had he gone on with it.

Ashes to Ashes, charcoal to charcoal.

See you on the other side, my friend.

— Mark

A Fireworks Note

By Greg Pita

(Note: The WPA does not condone the use of fireworks that violate the law. However, I can't say I haven't done this as a kid..... ed.)

I have loved watching fireworks as long as I can remember. It probably all started when I was a kid 4 years old living in Anaheim; we would go out to the front yard every night to watch the fireworks at Disneyland a few blocks away. They were mesmerizing. Then on the Fourth of July (my favorite holiday) we got to have fun with our own fireworks along with those of our neighbors. Cones, sky rockets, wire sparklers (we would bend them in a "J" and throw them up to hang, sparkling in the trees above), smoke bombs, Cardboard house on fire—much better when you actually light the house on fire along with the smoke bomb. Oh boy! Pinwheels, Piccolo Petes and let's not forget, firecrackers, Bangsite Cannons, the smell of burning fireworks and the noise until my ears rang. The louder, the better.



The Bangsite Cannon was always good for some laughs out at curbside when I was in my young teens. There would be three or four of us out there just waiting to get ourselves into trouble. "Hey, let's wait till there's a car coming, then we'll all shoot off our cannons and pretend to throw something in front of the car as it is passing by." We all ended up running into the backyard as the first car came screeching to a stop, the driver pounding on the front door convinced that some-

one threw something and hit his car and my dad telling him to go away as he knew that we wouldn't actually hit a car with something. That wouldn't be right; but he did ask what we did to irritate the guy so much, and he seemed to have a chuckle when we told him the story. Anyway, back then the fireworks we played with were cool but we were always pressing the legal limits, wanting "bigger" and "louder".

One day in my teens, I was over at my friend's house down the street. We were looking for something to do, some way to make some noise. We were rummaging around the garage and came up with some mostly empty butane lighter filler containers, and what we thought was a great idea. "We'll cut a large coffee can into a 3" deep pan, then we'll add some gasoline and a butane canister, light it and sit back and wait". We set the canister in the coffee can, with the nozzle down, lit the gas and moved back to about 100 feet. We sat back watching and waiting for about 10 minutes after lighting the gas. All of a sudden it took off like a rocket! It shot up about 300 feet making a loud wooshing sound as it went! Oh Boy, let's do it again. We did it a couple of more times before we ran out of butane containers. We poked around in the garage shelves some more then one of us found the next test subject. "Hey, let's try this mostly empty can of green spray paint." In retrospect, it wasn't a good idea at all. Ten minutes later in the backyard orange field, WHAM! It blew up. It was really loud, and our bodies shook with the shockwave. We hit the deck and watched as a huge, rolling, green mushroom cloud rose out of the orange field. There was a big green dot about 20' diameter and a small hole in the ground where the explosion was. There was nothing left of the experiment. It had all vaporized into the mist. Did I mention it was loud? Paul's dad, a Lt. Colonel in the Marines, stormed out the back door of the house, around the pool and the pool house into the orange grove to find out what we did this time to the tune of "What in the Sam Hell is going on out here?!" as he also watched the now 50' and still rising, rolling, green mushroom cloud. Needless to say, after the hour long lecture we were both grounded for a week. I learned my lesson: no more unsafe practices. I learned to settle on watching the legal fireworks shows.

In the early eighty's, I visited New York for the reopening of

A Fireworks Note

(continued)

By Greg Pita

the Statue of Liberty after a long refurbishing job. The night time celebration included a nice fireworks show. There were barges spread out around the Statue of Liberty and up and down the river shooting fireworks choreographed to music broadcast over the local FM radio channel. We watched from a rooftop onshore close by. It was the biggest and best show I had ever seen.



Now, years later, I found out about the WPA from my friend Rich. "You can learn a lot about fireworks and how to use them safely, how to make fireworks, how to properly fire mortars of all sizes" he tells

me. "They even have guys that make these huge rockets that have 3" shells and up as payload." Oh Boy! Well, I joined the WPA that year. My first Winter Blast was indescribable. Four days and nights of fireworks fun, and related events. One of the best things is the people. I've met, and continue to meet all kinds of great people that have a passion for fireworks. and a wealth of knowledge they are ready to share.

Now I've been to a few Winter Blasts and a few Do Its and have learned a lot and have had some great experiences, and lived to tell about it. I love it all! The vending tent, the B and C lines, the rocket line, the trade show, the seminars about all kinds of fireworks related items from how to make Senco Hanabi to large scale show choreography, and all the fireworks shows! Least we not forget the unforgettable Afterglows. Finally it's time to sit down after a long fun firework filled day and night, and have some chow and a soft drink or a beer or 2 while discussing the day's events with your friends.

It still isn't enough though. I want more. Did someone mention shows? That's right. I started working fireworks shows. It is another way to spend time doing something fun with fireworks. I love taking the time to set up all the racks of mortars and cakes, and all the wire! Then when the time is right, I watch an awesome show that I helped create. I love hearing the lifts go, and waiting for the burst overhead, then hearing

thousands of people scream like kids after the finale. What a rush! Now I don't have to wait so long between WPA events for my fireworks and great friends.

One more thing that I wanted to mention is that I would like to thank all those people that made it possible for these events to happen, In the WPA, I would like to thank those that go out to the site days early and spend their time laboring to set up racks, tents, awnings safety areas and the like for our convenience. I would also like to thank those that donate their time in other ways like doing the registrations, giving a seminar or being a safety at B or C line or wherever needed. It takes a lot of people to make the events happen, and I have found that my fun is directly proportional to the time I get to spend doing something helpful in making the event happen like being a safety or helping set up a show for an event. Thanks again to all those that make it possible, and I look forward to seeing you all at the next event.—Greg

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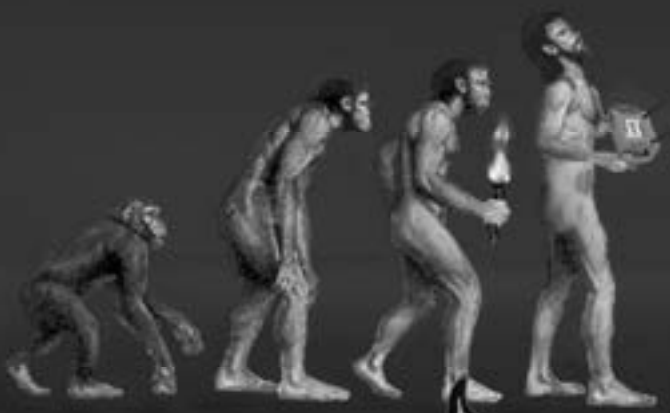
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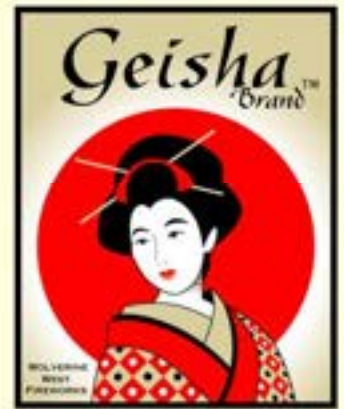
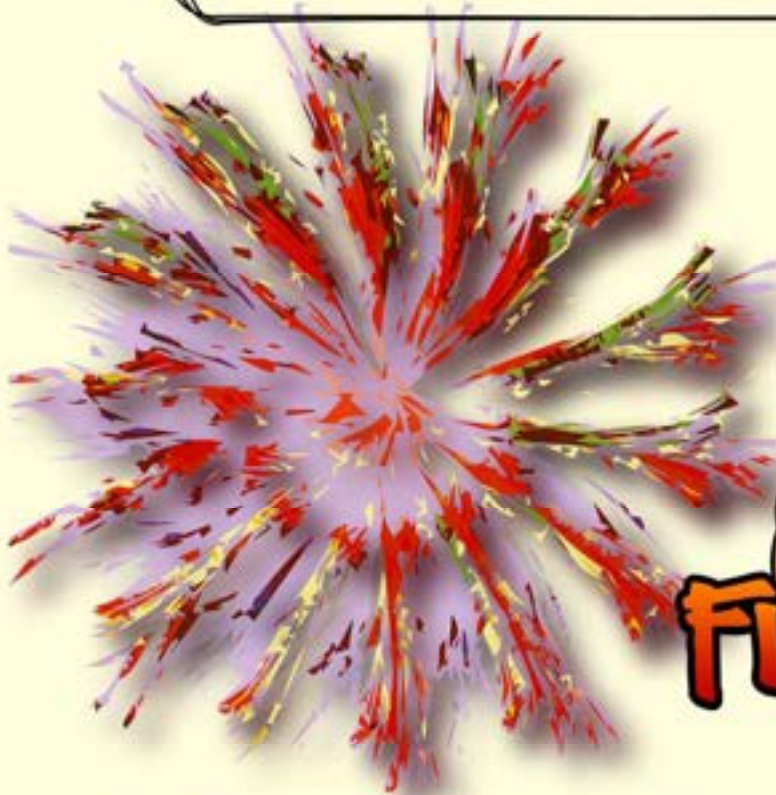
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