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DO-IT 2004 DEMO

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If you need to call one of our officers, please be considerate.

Do Not call after 9:00P.M. (PST) Keep in mind there may be a time difference.

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From the President

Russ Laurie

Hey there fellow pyro's. Here we are again just a few weeks after a very successful DO IT 04 in Mesquite NV. What a great place for fireworks and the WPA. The weather was outstanding until the last day when the sand storm from hell broke loose but other than that it was great. We were blessed with warm sunny days and nights with just a slight breeze to blow away the smoke. The night skies were filled with awesome pyro; some made on site with the chemicals from FireFox, and the rest brought in by Flying Phoenix.

My many thanks go out to all the members who worked so hard to bring this event to you. Rob Foelak did all the legwork working with the City staff of Mesquite as well as the landowners who were gracious enough to let us come out and play. I also want to thank Kevin Bollinger the event Chair, his Co-Chair Pete Wood, Safety Chair Lynden King, MFG Chair Chris Spurell his Co-Chair Tom Calderwood, Security Chair Bill McGregor, Communications Chair Bill Daily, Seminar Chair Steve Wilson, Electrical Chair Steve Humphrey, his Co-Chair Todd Blake, Food Vending Ann and Brian Huffman with the late arriving Mike Hill (word has it he was working in Vegas), Registration Chair Rita Oesterle and helper Jon Cooper, Afterglows Alicia Ledbetter and husband Elmo Hernandez and the rest of the members that volunteered to make DO IT what it was - truly an awesome pyro experience.

Armageddon was a great show - Great job Dave Bernard! Your first attempt at putting this type of show together was truly inspiring. So, a special thanks to the many members who volunteered their time and product who helped out in setting it up, wiring it together, and cleaning it up after it was over. It was a very cool show.

So now it's on to Winterblast 16 our "Sweet 16". Yes 16 years of Winterblast. This year we are

staying at Sara Park for everything - no traveling to the point for Saturday nights show. So, since we are going to be at Sara, we are going to have open shooting as soon as the Public Display area is deemed safe. That gives us more time shoot the things we love - pyro! We are working on some other entertainment for your viewing pleasure, and of course it involves pyro, as that is what we are about - isn't it?

The Ramada will again be the host hotel, with the Afterglows at the hotel each night after we close down Sara Park. We are working on allowing you, the members, to purchase class B (pre-orders only) on the clubs license just like at DO IT and of course Class C to fill all of your desires.

Hopefully by the time you read this we will have our new web site up and running along with our new list /digest. New format so that unwanted spam and unwanted copying of the entire digest doesn't happen. Plus it's going to save the club money, cheaper rates, faster and bigger server, electronic forms, videos, pictures, and other important WPA stuff.

There is one other thing that I want to add to my column here and that is the issue of the large salutes and noise at our conventions. Now don't get me wrong I'm as big as thump junkie as anyone, in fact I love a large hit! But we need to limit them, as stated in the clubs policies, -4" salutes are our limit and so we must stick to that. We can't afford to lose our shoot sites and wear out our welcome. We need to be reasonable when it comes to shaking the entire town to their bones. If we want to keep our sport and hobby going, we have to make concessions and if limiting the size of salutes is a concession then that is what we have to do. The powers to be are attacking us in all directions (just look at the issues with the CSPC on chemicals) and we don't need to give them more ammo. We need to be and act

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BOD Letters (Cont'd)

Letters to the WPA

responsible and show them, and the rest of the pyro-haters out there, that we are not "MAD BASEMENT BOMBERS", but that we are artists, hobbyists, and professionals at what we do and do best, - pyro, no matter your forte. So until next time smell some smoke! Stay safe and we'll see you at Winterblast 16.

Russ Laurie

Your WPA President

From the Vice President

Don Oesterle

Well folks, this will probably be my last letter as your Vice President. After 4 years of serving the club as Vice President, being Event Chairman of the past 2 Winterblasts, Event Co-Chairman of the 2 Winterblasts before that, I've decided not to run for another term as VP. These past 4 years have been a challenge, but through good decisions and strong leadership, the club is running strong, and is in great shape. Since I joined the club about 12 years ago, I've seen a lot of change. At my first Winterblast in 1993, I remember these small green army tents that we used as the vending tents. This year we will once again have a huge tent that measures about 120 feet x 60 feet, packed to the roof with excellent product. What a difference! At each event I attended, I always took an active role volunteering to be on staff, working numerous shifts at the gates, the firing lines, or working with the vendors. This club wouldn't be as strong and successful without the hard work of volunteers. So, I want to thank everybody who has worked so hard with me on the events through the years, and especially those who are always there helping out.

This year's Winterblast is going to be great! We are all working very hard to make sure everybody has a great time, and everything will run smoothly.

Remember, all of the area Vice President positions are up for re-election at the business meeting on WWB Sunday. If you think you can help the club by stepping up for the position, I encourage you to do so. It is not very hard, I was the Los Angeles Area VP

for a couple of years before running for the club's VP position. All you need to do is have a few local meetings, try to get new members to join the club, and answer a few questions about the club for prospective new members who might run across your name on the club's webpage.

It has been both an honor and a privilege serving the club.

See you at the Blast!

Don Oesterle

WPA Vice President

Winterblast 16 Chairman

From the Secretary

Rita Oesterle

I have really enjoyed my term as WPA Secretary. I hereby announce that I am running for another term. I know I can offer the position stability and I will gladly be registration chairperson for DO IT and Winterblast if reelected. I have the time and desire to do a good job. I love it when members come up to registration and I can put a face with the many emails I answer all year long. All of you have become my friends instead of just members.

Another great DO IT is over. Pyro Novelties did an outstanding job on the shirt design. For those of you who didn't get to see one, I hope someone wears his shirt at Winterblast. There were no left-over shirts to donate to the auction.

I want to thank all of the on-site registration attendees for their patience. If you did not get your 2004 WPA membership card on site, please email me and I will send it.

I know now what a 16" shell looks and sounds like. I want to hear more of them. Flying Phoenix donated one for the raffle. Neil Wiencek got to shoot it. (Did you know that Neil and Sandra only checked their winning number about 5-10 minutes before shoot time? That made for more excitement)

Now for helpful hints about filling out the WPA forms.

1. Your membership # is on the mailing label of the letter containing your registration / WPA membership

forms. Put it on your forms before you discard the envelope.

2. Clean up fee is mandatory. I will email you to pay it if you do not include it with the form.

3. The Winterblast form is 2-sided. Sign the waiver on the back side. If you are bringing a spouse/partner and/or children, they sign also. A member can sign for a minor. Spell the child's name the way it should be on their badge. I can't guess nick names or even last names. There are too many requests for on-site name changes. Please help me now by taking the time to print names legibly.

4. A return address label works great for most of the home address type information.

5. Email addresses need to be printed legibly if you want me to email you a confirmation. Your information is not for public distribution by the club. If your email is included, I will email you a confirmation that the form and \$ have been received. I even tell you if you sent the wrong \$ amount so you have time to send it before the event. (Or if you are due a refund). If you do not have email, then your cancelled check is your confirmation.

6. If there is an addition charge for seminars listed, it does NOT apply to members. Just spouses need to pay the extra fee if they wish to participate.

7. Remember there are no free shirts for Winterblast. Pyronovelties will be selling the official event t-shirt at the trade show.

8. It would be helpful if you wrote a note on the form telling me that you have a new address, email address, phone number, etc.

9. Include proof of current enrollment for the current term when asking for a student membership (ages 18 to 25 only). I will ask you for it.

10. Mail on time. You can save \$\$ by getting it to our PO Box before or on Dec 31, 2004. Note: there is a second date for saving \$ before the on site registration.

11. Yes, you can always call me about any questions about the form or email me at pyromom@socal.rr.com. Phone # 818-883-2349. Please only

call between 9 am and 9 pm (Pacific Time). (I really hate calls after 9pm.)

Come join us for the fun, fellowship, trade show, and great pyrotechnic shows at Winterblast Feb 17-20, 2005. (And it is warmer in Lake Havasu City, AZ than a lot of your hometowns in FEB.)

Rita Oesterle,
WPA Secretary

From the Treasurer Alicia Ledbetter

I've really enjoyed my first few months and first event as your treasurer. We were able to pay our entire yearly fee for our insurance cost, which is currently \$37,845.23. This saves the association fees for paying in installments. If all goes well we will be able to do the same in July 2005.

We do not have all of the Do It expenses in so the costs will be higher than reported below.
Do It 2004 Income & Expenses to date (02Nov04)

Do It Fees \$11,313.00 - This is net for the \$15 refunds for those who paid \$75.00.

Clean-up \$1,640.00 - All is paid to those who stay unless donated back to WPA.

Armageddon	\$2,244.00
Extra Ts	\$841.00
Total	\$16,038.00

Expenses \$10,368.73 - (includes the costs of all T-shirts)

C/U Refunds	\$1,566.00 -
Donations equal	\$74.00.
Armageddon	\$1,893.48
Total	\$13,828.21

To date there is a net \$2,209.79 to the general funds of the WPA from Do It. However, I do not have all the receipts in to date so the actual amount will be lower. Please keep your fingers crossed we do stay in the black. This is not much wiggle room. Many thanks to Kevin & Peter for their hard work in keeping the expenses to a minimum so we that we

can continue to keep this a low cost event for the members.

Many of you have asked about Afterglow so I am providing a breakdown here. The budget is \$300. The actual cost of the Afterglow was \$642.72. All of Thursday's food and \$242.72 plus some of the beer was donated by the Bay Area group. Another \$100 was donated by a So Cal member. Going forward we need to make a decision to either increase the budget or decrease the expectations of the members of what to expect.

A big thanks to Flying Phoenix for donating the big 16" shell that was fired as the finale for Do It 2004. We held a raffle to decide who would fire the final shot. We raised \$178.00 which is included in the positive net balance to date. Thanks Jim & Becky!

Our current balance is \$15,490.72. This includes new members and renewal fees already in as well as paying for the porta potties for WWB 2004 and the Sara Park rental for WWB 2005.

I hope I've answered everyone's questions about our financial status. As always feel free to email or call me with questions.

Regards,
Alicia M. Ledbetter
WPA Treasurer

From Editor and VP of Communications

Gary Berg

To my fellow members of the Western Pyrotechnic Association,

In this age of non responsibility towards one's actions let me be the first to admit that I, Gary Berg - as your editor, take full and complete responsibility and hold blame for any and all misspelled words, grammatical errors, stupid jokes, nonadult-like behavior, rantings, non proper margins, "what the heck?" layout design, improper posture, spilt coffee, non-primed stars, improper lift charge, far too much 80 mesh charcoal in the rocket comp, no chicken-wick, non participation in the lit quick match tug-of-war, too close

for comfort viewing of the Haase 12" mine, holding B-rockets open until the last second (with Bill Ryan of course), and profusely thanking all volunteers, vendors, and staff many times over.

I am writing this on Thursday evening, the 4th of November. We have just re-elected the President of the United States and, as it is in the real world, my time is also up for re-election. I was not originally elected to this position but was asked to take over the reins of Vice President of Communications a little over 18 months ago to fill the position for someone else. I accepted the duty not knowing how or what I was supposed to be doing but had that morbid curiosity of being an editor for the newsletter and felt a duty to help out the club. I was assured that it was not a daunting task (which turned out false) and, after 6 months, one newsletter, and one Winterblast brochure under my belt, (along with a few pizzas and intermittent batches of polverone), I was allowed up on the dais to rub elbows with the elite members of the BOD and be accepted (or rejected) by the attending members. I was indeed delighted and astonished with a delectable approbation as I was accepted with a rounding applause. I thank you all so very much for that and also for your trust in allowing me to put your thoughts and interests forth in written form to be shared amongst us.

The newsletter has been a bittersweet task for me. The truth being, I hated English in high school and never completed the required English composition course in college - that is until just 2 years ago I returned to college and, with much dread, enrolled in the one class that kept me from my degree. Maybe I was fortunate as I had a professor that inspired me to write and I became enthralled with the seemingly overwhelming task of putting pen to paper, or is it cursor to screen, but I digress. The newsletter has given me another opportunity to compile and write about something that I enjoy.

The incredibly fascinating obligation of my being the editor is hoping and praying that articles will

somehow find their way onto my hard drive. They have miraculously, and what a glorious gift they are. To watch the members give forth of themselves about their passions for pyrotechnic artistry and imbed their individual writing styles, it is just something that you cannot describe. To those members that have contributed articles and information I commend them and give them the accolades that I received for our last newsletter. I was just the one that put it together; they are what made it what it is.

I have put this newsletter together just in time for the holidays. I have also been working backstage on helping to get the new WPA website (www.westernpyro.org) up and running. Kudo's to Kelly Goebel who brought the team together to make it happen. And now, here it is almost time for another Winterblast and another brochure to put out and my duties are finished for the current term.

I have tried my best to bring this newsletter up to something that inspires someone to read and save and to be read again. My goal was to emulate the PGI Bulletin which seemed an insurmountable daunting task as they have been doing it for quite a few years. I would like to think that we have just about achieved it.

The new look and content of the newsletter is more like a magazine and I am hoping that it is something that is to be cataloged and saved for future reference. I have garnered articles that interested my fancy, stories that made me smile, and humor that made me chuckle. I wonder sometimes if my twisted sense of humor is appreciated or just endured. I have made countless inquiries from around the globe searching for interesting pyrotechnic material that maybe a few of you have not witnessed or heard of. I know I am finding all kinds of new things to wet my adventurous appetite and keep my sense of discovery alive. I hope that I have instilled that in a few of you as well.

That being said, it is with a heavy heart that I have made the final

decision which I have fought with countless nights. A project I have been working on is the rebuilding of my house. It was just over 8 years ago that a renter burned it down while I was living in Seattle. I finally got the plans approved last winter (long story) and just today (after 4 tries) I received word that my building loan has been approved. Therefore, I shall not run nor seek the nomination to fill the office of VP of Communications and your Editor for another term. This is indeed hard for me to do as I have great plans for the continued expansion and success of the WPA Newsletter but I just will not have the time with the construction of my house. I would welcome the opportunity to work closely with the next VP/Editor if they need help in the transition to see that what I have tried to do will continue. I have enjoyed working with the BOD and it has been a rewarding experience for me to work closely with them to bring our events to fruition. So many man hours are required to bring these events together that you cannot imagine what goes on behind the scenes to accomplish that task. I know now and it is up to you the members to help whenever you can in any capacity that you are able. That is what this club is, volunteers working together towards a common goal; that we may frolic together in the playpen we love - under a night sky filled with glitter. I thank you for it all.

Flash - Backwards

In order to incorporate the oxygen needed to burn magnesium powder chemically, (later aluminum powder was also used), a finely ground mixture of the metal powder and a compound such as potassium chlorate or barium peroxide were used. When such mixtures were ignited they gave an intense flash of white light, followed by copious clouds of white smoke. Traill Taylor made the first experiments with such mixtures around 1865. It was only around twenty years later, in 1887, that 'flashlight powder' or 'Blitzlichtpulver', developed by Adolf Miethe and Johannes Gaedicke in Germany in 1887 was first marketed, starting the widespread use of similar materials.

At the recent Do It, I sat next to Ken and Bonnie Kosanke one evening, and after a serious thump that made what's left of our hair move, Ken reminded me that ground salutes were forbidden by our own safety rules. "Whatever happened to that rule... seems to not be enforced anymore", Ken noted. I had to admit that we seem to ignore ground salutes anymore, especially if they are sitting under several gallons of gasoline!

Okay, so we all like a good thump at our events. And a volley of several hundred salutes at the end of one of our public displays certainly is appropriate and satisfying. But what about the repetitious thunderings from the B line during open shooting? And what are we learning new from shooting one 25-shot salute cake after another?

It is easy to dismiss the situation in that we are a pyrotechnic organization and loud explosions are a mainstay in our daily feast. But what if you are a resident in our convention's host town and you find that thump, thump, thump irritating?

We wore out our welcome in Laughlin due to excessive noise - not excessive color, glitter, rocketry, seminars or even wine drinking. Wake up and smell the perc.....It was excessive noise from the salutes.

Luckily, through the hard work of many, primarily Rob Foelek (a thump junkie himself) we got a new location for Do It this year. But what are we going to do if we get kicked out of Havasu? As much as I don't really care for LHC myself, I recognize the importance of this venue for the greater WPA good.

In the past few years there have been at least 3 notable trends with regard to the Winter Blast:

- 1) Salute usage is growing at an alarming rate. There are more of them and they are getting larger. Salute cakes, though they shouldn't be available to non-BATF license holding members, are appearing to be more plentiful.
- 2) The population of the great LHC area has moved closer and denser around SARA Park.
- 3) The Consumer Product Safety Commission (CPSC) is on the move

IN MEMORIAM



Jack Davis was a great guy. Remember how he entertained us with scores of 6 lb whistle rockets that howled like a kicked hound as they ripped through the sky at Do-It 2003, and a few more at WWB 2004? He was always willing to help out his fellow pyros and he loved "the big stuff" (and produced a good share of it, masterfully). He was always cheerful (I know, it's not THAT hard to be happy at pyro events), and knew how to enjoy life. I'll miss his ever present smile, sense of humor, and willingness to help.

Steve Majdali

For those of us who knew Jack, whether it's been since he was younger, or whether we only got to know him relatively recently, one thing that all of us can agree on is that Jack was definitely very passionate. Whether it was being passionate about cars, passionate about his kids, and of course the obvious, being passionate about fireworks. He had a very infectious love for all of these, and anyone who spent any time around him picked up that quite easily and felt the 'flare' that Jack brought with him.

I've only known Jack for the past two or three years, and in that time, we've definitely had some very enjoyable times, mostly shared through our love for fireworks. Not only was Jack very interested in shooting the fireworks, but he also had the drive to figure them out, and try to control some of the properties in his own way. Anyone who went to "THE" Do-It at the Avi a couple of years ago will remember seeing (and hearing) Jack's now notorious whistle rockets. Jack definitely wanted to put his own spin on fireworks.

Another thing that I recognized about Jack was that he was one incredible father. I remember thinking to myself many times how great it would be to have a father who came to me and asked me if I'd like to go shoot fireworks, or one who hopped on a Harley to go to the store. I know that Jack's kids really enjoyed spending time doing what he was doing, whatever that was.

I'm sure I could go on and on about Jack, but for those of you who knew him, you know that's not necessary. We all have our own memories of Jack, and I guarantee that if any of those are like mine, you all get a big smile on your face when you think of them. You just had to be around Jack to really get a sense for who he really was, and that is something I'm very happy that I had the opportunity to do. I know that all of us: Jack's family, friends, and pyro family will very much miss him, but I think I can speak for all of them in saying that we're very happy to have been fortunate enough to call him friend and father.

From a fortunate friend,
Jake Neumyer

We Get Mail (cont'd)

cracking down on the sales of pyro chemicals, ESPECIALLY THOSE CHEMICALS USED TO MAKE SALUTES.

In short, we are on a collision course with the inevitable unless we take steps to control our appetite for loud and repetitious salute use. Am I suggesting that we ban salutes entirely, HELL NO! What I am suggesting is the we become proactive in curtailing the use of salutes to some reasonable level. In particular, the size of the salute and the time of discharge.

I believe I have heard just about every argument so far on "Thumper's Rights". Here's a few of them:

- 1) Thump junkie's have the same right's as any other pyro.
- 2) 12" shells make just as much noise as a salute.
- 3) Bring it on baby!
- 4) They haven't shut us down yet.

Well pyro brethren, make all the arguments you want about how salutes are good and right. It is not going to change the fact that if you are one of the handful of sensitive permanent residents of the host town of our convention, and you have the mayor's ear, something is going to give. "The squeaky wheel gets the grease" so goes the saying.

As a founding member of this organization, I don't want to see us scrambling for a new home. Nor do I want to give some federal agency anymore ammunition to squash our very existence. I think the time has come to not ban, but regulate our excessive use of salutes before some other group who isn't so keen on fireworks stops us altogether.

And for you right right wingers out there, yup you guessed it, sometimes a pre-emptive strike is justified. :-)

Steve W. Wilson

WPA Member #3

WINTERBLAST AUCTION 2005

Last year's first ever WPA Auction was a big hit with the membership, as well as for the treasury! It only makes sense to follow up last year's success with another one so consider this your notice to check the garage, under the rug or anywhere else you might have some

IN MEMORIAM



Joe Pfeffer

1959 - 2004

I first met Joe Pfeffer at his first WinterBlast in 1998. He and my husband Paul and our friend Richard Cole had been involved in bidding wars on e-bay for a couple of months. The guys didn't know who he was, just his screen name - "The Bald Avenger". Then they found out his name and he had joined the WPA and was going to be at WWB. Arrangements were made to meet him in the 'C' tent and before I knew it, there I was being introduced to this man in an army jacket and floppy hat. All I remember about that first meeting was thinking, "What a nice man he seems to be." As long as I knew him, that was always my impression.

I mainly got to know Joe through e-mails we sent back and forth. With his humor and good-nature, he unknowingly helped me through some dark times while my father was dying. He always made me giggle.

Joe loved fireworks. Of course, why else would he join WPA? He was particularly fond of rockets. That's where you would find him, out at manufacturing or at B-rockets.

Joe was a working actor. He did voice-overs and industrial films. Last year, he was in a feature movie. But, his biggest pride was being in the cast of a weekly sketch-comedy television show in the San Francisco area. Since I don't live in the Bay Area, I wasn't able to watch the show, but I do have a couple tapes and they were quite funny.

Joe was a son, a brother, a loving husband and father. And...he was my friend.

Good-bye, Joe. I love and painfully miss you

Jill Salverson

tidbit hiding for the auction. Drop me an email to kief@sbcglobal.net or call me at 818-383-7755 and let me know what you have. Vendors! I would be happy to auction off gift certificates, chemicals, live product, clothing, etc. Just remember that we do NOT want live product at the auction. Leave the product at Sara Park and simply bring me a card with what you want to donate. The

winner of your item will bring you back the card to claim his prize.

Do you have something hanging around the shop that you would like a few bucks for? Give me a consignment price and I'll auction it off. If we exceed the consignment cost, we'll pay you for your item and the club will keep the rest.

Give 'til it hurts and I'll see you at the Convention Center in February.

Kief Adler

Rocket Fun Facts

To prove the intimidating effect of the fire of rockets upon the horses of a body of cavalry, I may here mention the following circumstances. About the year 1821 or 1822, when that excellent officer, the late Colonel Charles Graham (then captain) was commanding the Rocket Troop at Meerut, it was his practice to make use of common penny paper rockets to accustom the horses and camels to the noise and fire produced; and the colonel commanding the 11th Dragoons, then at the station, with many other officers, having been in the habit of speaking contemptuously of the war-rocket [Congreves] as a weapon, had stated that if a field day took place, they would, at a charge, ride over the Rocket Troop.

It happened soon after, that this fine regiment of cavalry was exercising on the plain at Meerut, when Sir Thomas Reynolds then commanding officer of the district rode up, and he intimated to the commanding officer that he should like to see the regiment charge. On the inquiry, in what direction, it should be. Sir Thomas happened to cast his eye upon Captain Graham's Rocket Troop (at a

considerable distance from the usual exercising ground, which that officer always chose to prevent interference with other corps), and Sir Thomas said, "Oh, there is the Rocket Troop, charge at that."

Captain Graham saw the Dragoons advancing towards him, heard the usual trumpet sound for preparing and charging, and having a presentiment that the threat of riding over his troop was about to be accomplished, he ordered his men to lay a number of these paper rockets on the ground, ready to fire a volley when he gave the command, should the Dragoons advance into too close proximity. The charge, however, contained with undiminished speed, and some of the horses' heads were nearly in line with the rockets when Captain Graham gave the command to fire: the effect was such on the horses, that the whole regiment was thrown into confusion, — one officer and several men were unhorsed, and the charge completely broken. As some arms were and military accoutrements of the Dragoons fell upon the ground, Captain Graham ordered his men to run forward and secure them, and had them brought to the line as trophies of his victory, and a memorandum was sent round in the station orderly-book, that they might be

recovered by sending to the main guard of the Horse artillery, where they would be delivered up.

Unfortunately, one of those small paper rockets struck a dragoon horse in the soft part of the chest and disabled it. On a complaint, and reference to the Marquis of Hastings (then Commander-in-Chief), on the subject, his lordship's reply was, that while he regretted the accident, he was glad to find that the Rocket Troop, if called into action was likely to be so serviceable.

Col. William Anderson, C.B.
Sketch of the Mode of Manufacturing
Gunpowder at the Ishapore Mills in
Bengal.

John Weale, London. 1862

For more than you ever wanted to know,
albeit well written about Congreve and
Hale rockets —

Frank H Winter

The Golden Age of Rocketry:
Congreve and Hale Rockets of the
Nineteenth Century
Smithsonian Institution Press 1990

(Editors note — reprinted from the PML)

WPA BOD Minutes June 24, 2004

Call to Order 8:01 pm

Conference Call attendees: Russ Laurie, Don Oesterle, Alicia Ledbetter, Rita Oesterle, Gary Berg

1. Approval of minutes from March 5 minutes

Motion by ALICIA; Seconded by RUSS

2. Treasurer's Report

March 5 – June 24, 2004

Total Income

Total Expenses

140.00

Bank Balance

\$51,028.46 (not reconciled)

3. Club updates

Guy Wilkins death

Jack Davis is in coma from a motorcycle accident.

B of A signature card should be sent to Alicia very soon.

4. Insurance

Alicia has filled out and sent in the insurance paperwork to John Allen at Combined Specialties, Inc
Discussion followed for the next payment as to paying in installments or by lump
sum. The main concern is if DO IT 2004 will require pre payments for supplies such as
tents and vehicle rentals

ACTION ITEM: ALICIA

5. DO IT 2004

A. Mike Hill offered to be the EMT if he gets his EMT license before then.

B. Container

Rob Foelak has a friend in Mesquite who will let WPA permanently store it on his property.

Alicia has a trucker friend who will transport the container from Needles, CA to Mesquite, NV, for the cost of fuel, and maybe a hotel room for 1 night. We will need railroad ties to put the container on.

C. Naming of DO IT event

The official name of DO IT will be DO IT followed by the year. (DO IT 2004 or DO IT 04)

Motion by RITA; Seconded by GARY

6. Newsletter

Gary picked it up from the printer June 24, 2004. It should be in the mail Monday, June 26, 2004.

Costs: Printing \$2,000; Collate \$200 Postage around \$700. (Previous voted on that it needed to be sent as first class mail)

OLD BUSINESS

7. Suspension of vending privileges of a WPA member

Russ has written the letter. It has not been sent to WPA's attorney for approval. BOD will do no action on this item until right before Winterblast 2005.

Motion to table until next meeting by DON, seconded by RUSS.

Page 2 BOD minutes for June 24, 2004 meeting

8. Winterblast 2005 class B PRODUCT

Committee is still working on the implementation of plan.

ACTION ITEM RUSS

9. Power upgrade at Sara Park

There still needs to be a statement of Work.. It was suggested that Steve Palassas of LHC Parks and Recreation be the contact person.

ACTION ITEM: DON

10. Web Page / WPA Digest/ WPA list

Don and Russ met with independent contractors about designing our web page(s). Our current service has been poor in updating our page in a timely manner. Items the BOD are considering updating:

a. A new web page design from a different server.

b. Safety factor built into system that will allow only current WPA members access to WPA digest/list.

c. A link to our bank thru credit cards that will allow paying online for events etc.

d. Online registration for events in connection with "c".

The contractors gave a ballpark estimate of \$2,000 to design the web page and to set up the digest/list. (Gary Berg offered to micromanage the web site once it is up and running by the contractors.)

ACTION ITEM: DON and RUSS

11. Internet Domain name

www.westernpyro.org is now the WPA official Internet domain name. We purchased it & paid for 5 years registration for it at a cost of \$119.97. Thank you Gary Berg for facilitating this for WPA

Motion made by RITA, seconded by ALICIA.

12. Agent for the State of Calif incorporation paperwork.

The BOD is placing the name of Donald Oesterle on the form as we did last year.

There was discussion about if we needed to be incorporated in Delaware also. We are a not for profit corporation in both states. Alicia offered to call her friends and see if she can get an answer. Our attorney may be able to help answer this question also. We need to know what Section 1505 refers to about the agent.

ACTION ITEM: ALICIA

Meeting was adjourned at 9:06

Motion by RUSS; Seconded by GARY

Respectfully submitted,

Rita Oesterle, WPA Secretary

WPA BOD Minutes Oct 4, 2004

Call to Order 8:04 pm

Conference Call attendees: Russ Laurie, Don Oesterle, Alicia Ledbetter, Rita Oesterle, Gary Berg, Kevin Bollinger for the DO IT segment and Kief Adler for the Winterblast 2005 segment

1. Approval of minutes from June 24, 2004 minutes were approved with the typo of the domain name corrected.
Motion by Russ Laurie; Seconded by Rita Oesterle

2. Treasurer's Report

June 30, 2004- Oct 4, 2004

Starting balance	\$51,228.46
Total Income	\$14,154.00
Total Expenses	\$32,816.28

Bank Balance	\$32,566.18
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3. Insurance

The club's proof of insurance was sent to Rob Foelak for DO IT 2004

Alicia is to get in touch with Alice Allen of Combined Specialties International, Inc. and

request a copy of our current insurance form. We are current in our club coverage for events.

ACTION ITEM: ALICIA LEDBETTER

4. DO IT 2004

A. Eureka Hotel will furnish ice at the event.

B. Peter Wood and Alicia have the debit card pass words for easier payment of bills- especially for the tent, table, and chair rentals.

C. Handouts

The gate policy, seminar schedule, welcome letter and safety schedules will be printed and ready for the stuffing party or to be handed out at registration on site. The Waiver policy will be ready for the stuffing party

ACTION ITEM: FIRST 4 ITEMS, GARY BERG; LAST ITEM RITA OESTERLE

D. Armaggedon is budgeted at \$1900.

E. Afterglow items will either be bought beforehand by Alicia or she will buy them in Mesquite.

Ice chests and buckets for the beer kegs will be brought by staff members.

ACTION ITEM: ALICIA LEDBETTER

F. Compressors to fill the fire extinguishers will be brought by members. Kevin mentioned that some fire extinguishers need maintenance. He will set aside those at the close of DO IT so they will be fixed before Winterblast. A 12" gun also needs fixing.

ACTION ITEM: KEVIN BOLLINGER

G. The rental truck will be driven from Las Vegas by David and Kelly Bernard.

H. There will be a bulldozer and back hoe already on the site for our usage.

I. The security guard will cost \$15/hour. For overnight coverage, some staff members will be staying on site in their trailers. They will be there if the security guard needs extra support staff.

J. GUEST area will be outside our secured area. No badges or wrist bands are necessary for them.

K. Press release for the Mesquite, NV newspaper will be written and emailed to them.

ACTION ITEM: GARY BERG

L. Russ will take the registration supplies to DO IT from the stuffing party. Rita will be unable to arrive until late afternoon on Thur. Oct. 14. Russ and Alicia will handle registration until Rita arrives.

Kevin Bollinger leaves telecon at this point and Kief Adler joins for the Winterblast 2005 portion of meeting.

5. Winterblast 2005

A. Public Display

Russ signed and mailed the contract to Ken Lantis on Oct 4, 2004.

Another fireworks company will be contacting Ken about a possible 5 minute pre show.

B. Afterglow

Kief is in communication with the Ramada Inn to possibly put on the entire afterglow—

Beverage and food. They have given him a quote.

ACTION ITEM: KIEF ADLER AND BOD

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Fax: 651-855-0088
jallen@combinedspecialties.com

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Luna Tech, Inc. will be offering the following on site:

Large and Small Ice Fountains! Flash Paper!

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**This is also an excellent time to pre-order test items from
Luna Tech, Inc., including Angel Fire pyrotechnics, and
other items from PYROPAKÆ**

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Order Deadline is Feb. 4, 2005.



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- C. Ramada Inn has raised room rates by \$4. Lake Havasu City's Tourism Bureau will be handling the room reservations again. Ramada Inn will be the host hostel.
 - D. The LHC Aquatic center has also increased its fees. This means an increase in cost for the trade show and seminar rooms there.
 - E. Sunday night memorial show
Kief is looking into getting this show donated (Fireworks / FX America is considering doing it) or WPA will be paying for it.
 - F. Power upgrade at SARA PARK
WPA members from Lake Havasu City have volunteered their labor if the city will pay for the electrical equipment upgrade on site. Mike Hill will be the Winterblast 2005 site chairman.
6. Consumer Products Safety Commission (CPSC)
The CPSC has started a test case against Firefox to shut down retail sales of all chemicals that mixed together make items that pyrotechnics need for manufacturing. (Flash powder, rocket motors, or any thing flammable or hazardous that may be an item of concern) This will in effect shut down all pyrotechnic hobbyists. Firefox is suing the CPSC. If Firefox continues to have problems with the CPSC, then the WPA BOD has decided to hold money-making events at Winterblast in order to help fund their legal costs. These events could include our raffle and auction. PGI has already donated \$\$ to this cause. This lawsuit may be an item of discussion in one of the DO IT seminars or a show of hands in support of the club helping via \$\$ may be asked for at the DO IT safety meetings.
7. Public Display for Winterblast 16
- A. Seating
Possible suggestions for handling the seating for the member viewing of the shows at Sara Park on Saturday and Sunday night:
Cordon off a section of the grandstands each night for WPA members only.
Have the members sit in their own chairs inside the gate by the seminar tent etc.
ACTION ITEM: PUT ON WPA-DIGEST FOR COMMENTS
 - B. Parking
The members will have a parking pass in their registration package. This pass, displayed on their cars, will permit them to park for FREE at all events. The public will be charged a fee by a city organization. We will ask the members to arrive early in order to have a place to park closer to the show.
 - C. Donations at the shows
There will be donation buckets at each entry point. There will also be loud speaker announcements that buckets will be passed thru the stands for donations.
 - D. Traffic between Sara Park and city for the 2 shows
8. Web Page / WPA Digest/ WPA list
The domain name is westernpyroorg.org. Kelly Goebel is building the web page now. We still need a design for the logo. The wpa-digest and list will be on the new web site. We hope to have the Winterblast 16 forms and WPA 2005 membership forms on it soon. More information should be available by the next BOD meeting.
ACTION ITEM: GARY BERG, DON OESTERLE
9. Calif and Delaware incorporation paperwork.
There was continued discussion about if we needed to be incorporated in Delaware also. We are a not for profit corporation in both states. Alicia offered to call her friends and see if she can get an answer. Our attorney may be able to help answer this question also.
ACTION ITEM: ALICIA LEDBETTER

Meeting was adjourned at 9:26

Motion by GARY BERG; Seconded by RUSS LAURIE

Respectfully submitted,
Rita Oesterle, WPA Secretary

Fargo-a-go-go

Greg Dandurand

Vacation! Fireworks! It was 102 degrees at two o'clock in the morning as I loaded my trailer and packed my car to head north from Mesa, Arizona. Marinating in my own juices, I grumbled something to myself about finding some cooler weather. The old adage "be careful what you wish for" would soon become a prophecy that would fulfill itself.

Now, for the record, Fargo, North Dakota is a haul from the West Coast, and next year's convention in Mason City, Iowa isn't much closer. But it is just as bad for the guys from the East Coast and Florida, too. If you have a chance to go, even just once in your life, PGI convention is a lot of fun and worth it.

Camping out is the way to go, as the Red River Valley Fairgrounds has a lot of spaces. All the convention activities, with the exception of the banquet, were held right on the fairgrounds. I lucked out this year, as I usually do, because a friend offered the couch in his RV as a place I could crash. In past years, this is a welcome respite from tenting, as the hot August weather and winds as warm and dry as Satan's breath are the norm. (The smell is there, too. Love them stockyards.)

I knew this year was going to be different when I called my buddy while I was in Sturgis, S.D. Sturgis has a little motorcycle rally in August, some of you may have heard of it. But that is another story for another time. I asked my friend if he had the air conditioner running on high, so the RV was cool enough. He laughed maniacally and responded ominously that the heater was working just fine.

I left Sturgis in my shorts and t-shirt, settling in for the 10-hour drive. When I pulled up in Fargo, the words "cooler weather" from my departure preparations nightmare hit my mind like the blast of Arctic air hit my body as I climbed out of the car. It was COLD! I mean freezing! It had also been raining and looked to want to rain again. I picked up my credentials and went to find my friend. He had a sweatshirt I borrowed. Actually with him

being a large and me being a 2XL, it'll never fit him again. I got warmed up not only from the sweatshirt, but also from the exercise required putting it on. My friend muttered something under his breath about 10 pounds of something in a 5-pound bag. At least I was warm.

It was Monday night, just before the evening displays when I arrived. The convention has public displays every night except Thursday. That is the built in rain delay in case some competition gets cancelled during the earlier nights so all judging and tallying can be completed for the banquet awards presentation on Friday. No rain bothered us during the shows for the week, but it rained a few times at other parts of the day. Late Monday night saw some snow, for about five minutes. When we all noticed it, nobody could swear it was snow, but we all knew it wasn't rain.

If Do-It is a neighborhood block party, and Western Winter Blast is the county fair, then PGI convention is Disneyland. It has up sides and down sides. The up side is that there is everything to do. The down side is that it can be overwhelming and you won't be able to do it all. Plus there are a lot of people. However, PGI is sort of set up

like Disneyland. There is Class C land, Chemical vending land, Class B shooting land, Seminar land, Rocket Barn Land, and Trade show land.

There are a lot of seminars at PGI. They range from Cremora Fireballs to Adult Sparklers to Principles of Choreography. Also, there are many different classes on shell and rocket building. If you are not sure whether you prefer rockets or shells, there is a class on girondolas; the El Camino of the pyrotechnic world. The ATFE even has a question and answer session, to help clear up any issues that people want to talk about.

Novelty noses and glasses are available at the door so participants can remain anonymous when asking questions (just kidding). Most of the seminars fill up fast, with the hands-on ones being the most popular.

Open shooting starts at five each evening, most of the stuff going up before it gets dark are smoke shells or salutes. Safety does a great job of controlling the organized chaos that the B line becomes when everyone brings out

all their shells. The only problem was that there was a six-inch shell building class, and the B line only had five

six-inch guns planted. I had brought two boxes of six-inch commercial shells to shoot. Needless to say, it took a while.

Everyone does work together, and I always have to plug for the volunteers. There

is no paid staff for the PGI (ditto for the WPA), all the set up work, running the convention and teardown comes from unpaid labor. Remember, the PGI (AND the WPA) are run by the members, for the members. Any help you can provide, no matter how small, will be appreciated and will make events run better and smoother. Besides, if you have volunteered in the past, it makes you understand and be more compassionate when dealing with staff members and the board. I swear I'm putting the soapbox away now.

This was John Steinberg's last year as president. Camille Coman is ready to fill those shoes, and brings her vast experience as first vice president to the role. Tom Handel will be the new first vice president, and Bill Bahr was elected to another term of second vice president. Mike Swisher is the publications vice president, Frank Kuberry was elected last year as secretary-treasurer.

The shows were spectacular. Every night there was at least one demo. That allowed the vendors to showcase their wares. The nice part was that when they had class C demos, most of what they shot was available in the class C vending area. One show that was very well shot and choreographed was the Pyro All-Stars. The work that went into that display by the master builders involved was phenomenal. The Grand Public

Display on Friday by RES was also very well done. However, all those who put on displays deserve a big round of applause. I can hardly remember all of them. However, there was a grudge match between two class C guys, one from New York, the other from New Jersey. The rules were they could only use class C, had one day to do set-up, and had to work alone. Both shows were choreographed to music, and ran about twenty minutes each. It was hard to choose a winner.

The only bad time happened the last day, when three guys were mixing flash

(which is against PGI rules). They spilled some and one guy kicked it to spread it around.

Don't kick flash. Three guys in the hospital, with possible federal charges being filed against them.

The Convention was great this year, with everyone's hard work paying off. Alas, I had to return to the Valley of the Sunstroke. I look forward to seeing everyone in Mason City, Iowa, in 2005.

Chlorate Compositions in Quick Match

K. L. and B. J. Kosanke

After the 1999 PGI convention, we were told about a type of quick match that had been sold there and which was suspected of being made using a chlorate oxidizer. The individual's suspicion was based on his perception of its extremely fast burn rate. Subsequently, a sample of that fuse was spot tested and found to contain a nitrate but not a chlorate. Sometime later, the authors were given a sample of quick match thought to be of the same type. The burn rate of the quick match was observed to be most vigorous; however, there was not a sufficient amount for the authors to make a usefully quantitative measurement of its burn rate. Small amounts of the composition were removed from the black match portion of this fast burning quick match, and two tests for the presence of chlorate were performed. The first test was the concentrated hydrochloric acid test, in which a few drops of the acid are placed on the composition. The presence of a chlorate is revealed by a modest rate of chlorine dioxide gas production, with its characteristic color and odor.^[1,2] The second test was the analine-HCl spot test, in which some of the composition is dissolved in a tiny amount of water, the water is decanted and treated with a drop of analine-HCl test reagent.^[1,3] The presence of a chlorate is revealed by the appearance of first a red then blue color. Again, both test results were negative for the presence of a chlorate. Accordingly, another possible explanation for the

vigorous burn rate of the quick match was sought.

The design of the quick match was typical of the fuse seen in recent years being used on some higher quality products from China. The fuse had a series of 5 individual strings, each of which was well coated with a pyrotechnic composition that remains noticeably more flexible than that of traditional products. These strands were laid side by side and surrounded with match pipe that was quite flat. This configuration is illustrated in Figure 1 and identified as *Recent Chinese*. This manner of construction is in contrast to the configuration most commonly used in the US (also illustrated in Figure 1 and identified as *Typical US*), in which the collection of strings are coated as a group with a Black Powder slurry and forming a somewhat rounded grouping of the strings.

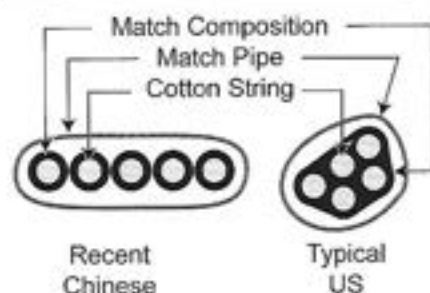


Figure 1. Illustration of the configuration of two types of quick match.

One significant difference between the two configurations is the total amount of surface area of exposed black match composition. For the Recent Chinese fuse, the surface area is proportional to $5\pi D$, where D is the diameter of each individual black match strand. Based on measurements of typical US black match, the overall diameter for the group of threads is typically no more than about $3D$, thus giving a surface area proportional to no more than about $3\pi D$. Accordingly, the Recent Chinese fuse has nearly twice the burning surface area. If it is assumed that the compositions are otherwise effectively the same in their burning characteristics, the Recent Chinese fuse will produce nearly twice

the flame as the Typical US black match. Based on our understanding of the manner of functioning of quick match,^[4,5] the greater volume of flame produced will result in a greater initial rate of burning for the quick match. (Ultimately, the rate of burning of unobstructed quick match is mostly determined by the strength of its match pipe.)

The Recent Chinese quick match has another property that may cause it to appear to be especially fierce burning. The method generally used to slow the burning of quick match is to close the fire path between the black match and the match pipe. This is found to work well for the Typical US quick match, where the closure of the match pipe around the central black match can easily be made with a moderately tight wrap of string, and which causes approximately a 1/4 second delay.^[6] On the other hand, when the same method is attempted with the Recent Chinese style of quick match, it will be most difficult to get a complete closure of the fire paths. This is because small spaces (fire paths) between the individual strands of black match will persist (see Figure 2), unless the composition on the black match strands is sufficiently crushed to completely fill the gaps. Accordingly, this type of quick match will be quite difficult to slow using the normal methods of fire path closure, and thus probably suggesting to users that its burning is especially fierce.

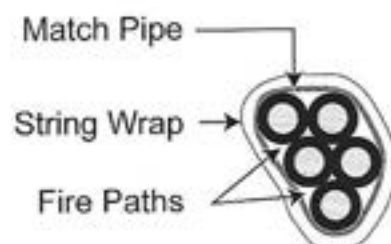


Figure 2. Illustration of the difficulty of closing fire paths to slow the burn rate of the Recent Chinese quick match.

Although it is somewhat understandable that this Recent Chinese quick match was suspected of having been made using a chlorate oxidizer, both its high burn rate and the difficulty with

slowing its burn rate can be explained based on its manner of construction. Over the years, the authors have tested many suspect samples of quick match. However, except for a type of quick match used on Horse Brand shells for many years (and possibly still today), none of the others was found to contain chlorates. (Note that is not to say that no quick match ever has been or is being made using a chlorate oxidizer, just that we have not found any except for Horse Brand shell leaders.)

Figure 3 is an illustration of one form of the Horse Brand fuse found to contain a chlorate oxidizer. The quick match shell leader contains two fuse elements. One is a somewhat conventional strand of black match, although it tends to be made of a single thicker strand of fairly coarse cord and to which the powder coating tends to adhere only poorly. This powder coating is found to contain no chlorate, but it is found to contain sulfur, and is presumably hand-made Black Powder. (In some cases, especially on larger shells, this quick match has two strands of black match.) The second fuse element is a single (but sometimes double) strand of so-called Chinese fuse, made with a powder core wrapped in tissue paper, which is similar to the type of fuse typically used on small firecrackers. It is in this Chinese fuse that the chlorate oxidizer is found to be present.

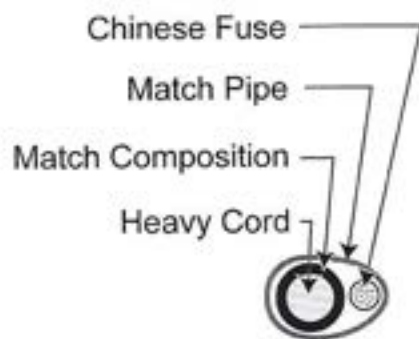


Figure 3. Example of one type of Horse Brand quick match shell leader found to contain a chlorate oxidizer.

The problem with the presence of chlorate in one element of this Horse Brand fuse is exacerbated by the presence of sulfur in the other element. When this

fuse is cut or the Chinese fuse becomes sufficiently damaged through handling, there will be a commingling of the chlorate and sulfur compositions, with all the sensitiveness problems that are known to result.^[7,8] (For example, in some recent testing of the impact sensitiveness of these Horse Brand fuse compositions, the combination of the two compositions was found to be 2.5 times as sensitive as the rough Black Powder composition alone.) Over the years, there have been a number of serious accidents thought to have been caused by this fuse.

Acknowledgment

The authors are grateful to S. Majdali for initially identifying the suspect quick match (sold at the 1999 PGI convention) and for performing the initial spot tests that identified the lack of chlorate and the presence of nitrate in the fuse composition. We also wish to thank R. Fullam for providing a sample of quick match for our laboratory testing.

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- 5) K. L. & B. J. Kosanke, "Quick Match: Its Construction and Manner of Functioning", *American Fireworks News*, No. 221 (2000).
- 6) K. L. & B. J. Kosanke, "Quick Match: Methods of Slowing its Burning", *American Fireworks News*, No. 222 (2000).
- 7) C. Jennings-White and K. L. Kosanke, "Hazardous Chemical Combinations"

Journal of Pyrotechnics, No. 2 (1995) pp 23 and 26.

- 8) J. A. Conkling, *The Chemistry of Pyrotechnics*, Marcel Dekker (1985) pp 56, 59 and 109.

Below is an advertisement for a Flashpowder firer from the back of 'Snapshots at Night' a Kodak publication from 1934

KODAK
FLASHLIGHT
OUTFIT

The Outfit consists of a holder and tray and enough flash powder for twelve to sixteen exposures. You put a little heap of powder on one end of the tray and a lighted taper at the other. Tilt the tray forward; the powder falls on to the taper and burns with a brilliant and practically instantaneous flash. That is all—so easy as striking a match.

The price of the complete Outfit is 3/-



Cannon Man – San Diego Chargers

Ron Dixon
Charter Member 007



Means of ignition:

Friction Primers: Friction Primers were used almost universally throughout the last half of the 19th century, to fire

muzzle loading cannon. They are still being manufactured today in limited quantity, however they are very expensive at around \$.85 each to \$1.50 each. While friction primers are very authentic and are acclaimed to be 'sure fire', I do not recommend the use of them in sporting events.(1)

Quills: The most popular alternative to the use of friction primers is the use of "quills". These were originally powder filled goose quills, which were inserted into the vent of the gun and ignited with the linstock. This type of ignition was common at least as early as the 18th century. In some cases, tin or copper tubes were used instead of goose quills. Today, the use of paper soda straws is common for this type of primer. (Plastic soda straws will not work). We do not recommend this type of ignition for sporting cannons. (1)

Cannon Fuse or Safety (Visco) Fuse: The use of waterproof fireworks, cannon or safety fuse is also a common means of ignition. This type of ignition has the disadvantage of creating an uncertain delay in ignition. By the same token, it allows the novice to retreat some distance from the gun to observe, while becoming familiar with his cannon. This type of ignition is more applicable to smaller scale cannon. We do not recommend this type of ignition for sporting cannon. (1)

Touch Hole: Priming with loose powder through the vent tube, from a powder horn or other container should be avoided. If, for any reason, the main powder charge did not completely fill the chamber of the gun, an overcharge could occur when the vent tube is filled with the fine powder. This fine powder will greatly increase the pressure inside the tube adding to the possibility of bursting of the tube. We do not recommend this type of ignition for sporting cannon. (1)

Electric Match: An electric match is the preferred method of ignition for sporting cannon. The benefits to this type of ignition are the following:

1. High reliability of electric matches.
2. Ability to precisely control the point of time of ignition.

3. The ability to test continuity of the firing circuit.

3. Relatively low cost per shot.

(1) Geo. Patten, M.C. Switlik, *The Complete Cannoneer*, Ray Russell Books, 1979

Black Powder:

The only powder to be used in sporting cannon is BLACK POWDER. The following powder must never be used in sporting cannon:

1. Flash Powders
2. Smokeless Powders
3. Home Made Black Powder
4. Mixtures of various types and granulations of black powder.

All gunpowder used in antique cannon was black powder.

USE ONLY COMMERCIALY MANUFACTURED AND GRADED SPORTING GRADE BLACK POWDER!

Smokeless powders are sophisticated chemical compositions yielding infinitely greater pressures and are categorically unsafe - disastrously so.

Granulation is a highly important factor in black powder, since it is what determines the burning rate. The smaller the grains, the faster the burning, therefore the faster the powder reaches peak pressure. The general rule of appropriateness is the larger the gun, the larger the granulation.

The point is to provide optimum working pressures yet to have consumption of the powder complete, or nearly so. Powder that is too fine grained for a given gun results in excessive pressures through too rapid burning. In some cases, pressures can be relieved somewhat through the use of lesser charges, though the method is roughly comparable to controlling the speed of a wide open engine by pinching the fuel line instead of adjusting the throttle. **FULL CHARGES OF TOO FINE-GRAINED POWDER RESULT IN SKYROCKETING PRESSURES AND RELATED ILL EFFECTS.**

On the other hand, powder that is too coarse for a given gun yields less than

optimum efficiency by requiring needlessly large quantities in order to develop sufficient working pressures. The result is waste and less than uniform performance.

Grade	Kernels per pound	Typical Use
FFFFg	Many Millions	Flintlock priming powder
FFFg	2,100,000	Calibers up to about .35
FFg	240,000	Calibers up to about .75
Fg	150,000	Calibers > .75, small cannon
FFFA	20,000	Cannon
FFA	12,000	Cannon
FA	8,000	Cannon

(2) J.P. Barnett, *The Lifesaving Guns of David Lyle*, Town & Country Press, 1976

Keep in mind that just like fireworks compositions, the smaller the particle size, the faster the burning rate, the higher the pressure, thus increased heat, then faster the burning rate, the higher the pressure, thus increased heat, then faster the burning rate, the higher the pressure, thus increased heat, then faster the burning rate, the higher the pressure, thus increased heat, then faster the burning rate.....BOOM!

U.S. Standard Testing Sieves

Granulations	Through	Size	On	Size
FA	2	8.0mm	5	4.0mm
FFA	4	4.76mm	12	1.68mm
FFFA	10	2.0mm	16	1.19mm
FFFFA	12	1.68mm	20	.84mm
FFFFFA	20	.84mm	50	.297mm
FFFFFFA	30	.59mm	70	.297mm
FFFFFFFA	40	.42mm	100	.149mm
Cannon	6		12	
Fg	12	1.68mm	16	1.19mm
FFg	16	1.19mm	30	.59mm
FFFg	20	.84mm	50	.297mm
FFFFg	40	.42mm	100	.149mm

The above applies for either glazed or unglazed powders.

Table is courtesy of Coonie's Black Powder and Explosives, Hobbs, N.M.

Suggested Starting Fg Grade Blank loads for Cannon :

1/2" Bore 3/4 measure Chapstick tube

5/8" Bore Full measure Chapstick tube

3/4" Bore 1-1/2 measure Chapstick tube

1" Bore	4 measures	Chapstick tube
1 1/4" Bore	1/5 measures	Juice Can
1 1/2" Bore	1/3 measures	Juice Can
2 1/4" Bore	1/2 measures	Juice Can
2 3/4" Bore	2/3 measures	Juice Can
3" Bore	Full measure	Juice Can

Chapstick tube: (the tube not just the cap)
Hold 110 grains of Fg.

Juice Can: (Just under 4" tall and 2 3/16" diameter will be marked "6 oz." can.
Holds 170 grams of Fg.

Load Table = J.P. Barnett,
Antique/Replica Ordnance, South Bend
Replicas, 1992

Sporting Cannon Safety

This list is not inclusive, but simply a compilation of experience and recommendations.

Obtain competent information on cannon and the proper techniques for using same:

1. J.P. Barnett, *Antique/Replica Ordnance*, South Bend Replicas 61650 Oak Road, South Bend, Ind. 46614, 1992.
2. Harold L. Peterson, *Round shot and Rammers*
3. M.S. Switlik, *The Complete Cannoneer*

Barrel construction

Best barrels are poured solid and drilled to size, thus to ensure good concentricity of bores and the soundest of castings.

Barrels should be sleeved with a seamless steel liner with a welded base plug.

Liner needs to be twice the tensile strength of highest estimated pressure.

NEVER FIRE A BARREL OF UNKNOWN CONSTRUCTION!

USE COMMON SENSE

NEVER RUSH A SHOT

Fabricate a sponge and use with a water source. Swab with a very damp sponge.

Fabricate a worm and use before and after all shots to remove all debris from bore.

Swab bore and pause a sufficient length of time between shots to guard absolutely against lingering sparks. (I like to leave the sponge in the barrel for a while.)

Keep powder magazine lid closed before firing and when not immediately accessing.

Keep Flammables away from cannon and powder magazine.

Know your powder. Use only commercially manufactured sporting grade Black Powder.

Never load abusively. **DO NOT DOUBLE LOAD OR USE WADDING.**

An under loaded blank in a cannon will 'sneeze' rather than produce a healthy boom. The proper blank load is the minimum quantity of powder required to raise the report over the edge of the 'sneeze' into a resonant report.

Reports that become high pitched 'cracks' are excessive and must be reduced.

Sporting Cannon Safety, (continued)

Never use cannon when under the influence of alcohol or drugs.

If you must ram the charge, use a safety rammer that is headless. (Shepherds crook)

Read and understand the cannon manufacturers' instructions.

Never guess at charges. Measure accurately each and every charge.

Never fire when the range is limited or personnel are in front of the muzzle.

Pre-measure and package your charges. Form aluminum foil bags on a tapered wood mandrel of a size just under the bore diameter, or use paper tubes with soft ends.

Never allow spillage of powder to accumulate in the magazine box or on ground.

Kill Sparks. There is a chance of sparks from a previous shot lingering in

the bore.

Ear Protection - Where exposure is intense or continuous, wear good ear protection.

Public Events - Be cautious about accepting invitations to participate in public events. Insist that any area of use be roped off, and that guards be posted to keep people away. Refuse to participate if haste is required, and unless totally safe conditions exist.

Do not use old historical charging tables for blank loads. Grades and potencies of black powder to which those table refer, no longer exist. The old powder was weaker.

In the event of a misfire, wait 15 minutes or more, thoroughly flood the barrel, let it soak, and withdraw the charge using safety equipment. **NEVER DOUBLE LOAD.**

Pyrotechnic projectiles: Leave pyrotechnics to pyrotechnic mortars. Never introduce pyrotechnics into a bore with blank charges. **The combination may be deadly!**

Periodically clean the bore to remove the build-up of black powder residue. When thoroughly cleaned, swab with a light grade oil to prevent rust accumulation.

It is highly recommended that the crew wear safety glasses when operating cannon.

Keep the muzzle covered when not actively using the cannon.

Treat the cannon with the respect it deserves. **It can kill or seriously injure you.**

Note from the Author:

It is now football season and the use of cannon at football games and other sporting events is on the rise, so it may be timely to publish this article again. If it saves one person from becoming injured, it is all worth it.

The Good Ol' Days

Bobbie Piety

I remember Camel firecrackers when I was young, in San Francisco; they were the loudest, we thought. We would cherish them, lighting them one at a

time—not by the pack like most people do now. We would spend hours building “forts”, as the boys called them, which were anything from sand castles to houses of cards, then we’d blow them up. Or the Campbell’s Soup cans, where we’d poke a hole in the bottom, just large enough to hold a firecracker snugly, and set it with the large open end in a pan of water, then watch it shoot up 60-80 feet into the air. Some of the boys thought it was fun to play “chicken” and put a firecracker in a fresh pile of dog-doo at the corner park, light the fuse, then run. I watched that from afar—it was quite funny to see what happened to the bravest kids.

My Dad brought home some Red Devils one year that he got from a Chinese friend. These were way cool—packs of 50, packed with two layers of 25. Red Devils were a bit larger than the others, being about 5/16” in diameter. They were louder and rarely had any duds. We liked them so much that we even formed a club called the Red Devils and what devils we were. The initiation was that the victim, (I mean inductee), had to have his finger tied to the spark plug of a lawnmower engine with a wire, and one of the members would pull the starter cord.

One year, my Dad brought home; in addition to several packs of Red Devils, some blockbusters, which were about 4” long and 3/4” in diameter. They even had two fuses! just to make sure. They were awesome, as were cherry bombs and M-80’s. Any of these would shoot the lid of a galvanized garbage can some 50 feet into the air, and once we split the seam on a neighbor’s can! I also heard about vandals that would flush one down the school toilet, but I never tempered such destruction.

After the 4th of July, my Dad and I would look for duds. The little firecrackers could be just broken open by bending them in two, and then lighting the powder in the middle, making a “fizzler”. We could step on them to make them pop, too! My Dad found a couple of large blockbusters. These were about 8” long and 1.25” in diameter, and made from tightly rolled Chinese magazines. The dark powder, (not silvery flash powder), seam was a good 3/8” or more in diameter, which we discovered after my Dad cut a notch in

the middle of it with his razor-sharp pocket knife, and bent it like a little fizzler. Dad always sharpened his knife until he could shave with it, so it cut the rolled magazine easily. Anyway, he lit the powder seam, which started fizzling but quickly exploded, startling us both.

I found a cherry bomb without a fuse, at our local sand dunes, and shook some of the powder out, making a powder trail. This was going to be a cool fizzler, I thought. Ha! The moment the powder trail was lit, it exploded, driving sand through my blue jeans, into my thighs. It also got sand into my eyes, so I had my hands over my eyes, rubbing them to get the sand out. I remember the panic in my Dad’s face, as he ran toward me thinking that I had blinded myself. I don’t recall playing with duds anymore after that.

As I got older, and had more money, we bought more firecrackers. One year, the Chinese girl on the block, whose Dad always got a crate of firecrackers for her to sell to her friends, only sold a few bricks, so we took about 35 bricks (of 80 packs of 16), and put them in a cardboard box, doused it with gasoline, and lit it in the middle of the street. I remember the ball of fire, a good 20 feet in diameter, and thinking that this is what it must be like to be inside of an atom, with flashes of light and an incredible roar.

I spent 2 more decades trying to perfect flash powder, without any literature or know-how. One day, I made about 3 pounds of black powder, no ball milling, just mixing—lousy stuff. So, I spent two days grinding magnesium, since I was sure that that was what turned gunpowder into flash powder. I mixed it up and took it out into the back yard to test it. I poured out a small, maybe 1” mound on the concrete and lit it. A slow “whoosh”, but with sparkles. Just then, the 1-pound coffee can five feet away caught and sent up a huge WHOOSH. “OH NO!” And, a moment later, the 2-pound coffee can that was ten feet away went up in an even larger WHOOSH. There went three days worth of work, and I gave up on flash powder. In recent times, I picked up some books, met some WPA members, and learned how to make the real McCoy, but that’s another story.

I remember using CO2 cartridges and other dangerous items that I’d fill with flash powder from firecrackers, painfully

taking each apart for the powder. Once, the shrapnel broke my parents’ bedroom window. I was smart enough to hide and still have my 10 eyes and two fingers left or something like that. I finally scrapped that idea before something bad happened.

I then played with gasoline, pouring about a quart of it down the sloping driveway, then lighting it. The flames would be ten feet high, but die out quickly. Great fun, but the neighbors always spoiled it by calling the cops. I got back at them, though, by taking a 4” cardboard tube from carpet rolls, plugging one end and creating a spark gap connected to a high voltage transformer. A few seconds of oxygen and acetylene into the open end, then plugging in the transformer. BOOM! The windows in the homes across the street rattled so that they looked like they almost broke. Spoilsports—they called the cops on me for that, too. And the time my feeble black powder rocket hit the little kid across the street and melted a hole in his nylon jacket—they called the cops on me for that too.

Ah, the good ol’ days!

(Editors note: Not condoning any of these practices this article was published in order to show how unknowledgeable and unsafe practices in the formative years can be dangerous to life and property. The WPA teaches the proper and safe way to harness these pyrotechnic endeavors with their safe handling and discharge for the sheer artistry of the craft - as it was so intended.)

The annual pilgrimage to celebrate El Dia Del Independencia It gets better every time!

By Todd Hall

(Cont’d next page)

Tlaquepaque, Mexico September 16th, Here is how I describe it to someone who was not there:

In the US, the audience sits here and the fireworks are out there (this is why we became pyros – we wanted to be on the other side of the line). In Mexico, there is no separation, no distinction between where the audience is and the pyros are.



The fireworks are happening directly above you, in front of you, behind you, beneath you, over you, and even running circles around you.

- Above you: On the rooftops directly over your heads are: Rockets and 8" bombas (shells) being shot off. Coronas (crowns or girandolas) by the dozens are launched, with the luckiest kids catching them. Large set pieces honor The Liberator (Father Hidalgo), the flag and the country.

- In front of you: 45-foot high bamboo castillos (castles) with wheels, coronas, lances, wings and whistles. These are works of art, with children running beneath them under showers of sparks.

- Behind you: The coronas landing that maybe you didn't really want to catch.

- Beneath you: The "buscapies" (foot-finders) are basically 1/4" x 5" rockets with no sticks. These fall off the toritos as they run by you, fly and bounce around the area like crazed fireflies.

- Over you: Cascadas (waterfalls) rain down off the fronts of 18th century buildings onto the heads of the celebrants.

- Running circles around you: Papier-mâché toritos (little bulls) are covered with lances, wheels, buscapies and whistles and are held over the runner's head as he weaves through the crowds. He must run fast the entire time to keep the sparks flying behind him (and not on him!). Ask Steve Wilson and Tom Lusk what happens when you stop and maybe they'll show you their scars. Oh yeah, the crowd's job is to try to TRIP the person carrying the torito!



And all the above is from the audience's perspective – and there must have been over 10,000 packed into the squares and cobblestone streets to see four castillos, eight toritos and everything else.

From the pyros' vantage point

There's no high in the world quite like being on 200 year old rooftops, approaching midnight, the Presidente (town mayor) on his balcony across the square from where we are, leading the crowds in deafening choruses of "Viva Mexico", knowing that on the 5th chant, we (Kief Adler, Devon Dickenson & myself) will be hand launching the opening salvo of rockets to start the show. And when I say hand-launching, I mean the three of us, holding Francisco Guzman's rockets in our hands, lighting them with cigars, and initiating the biggest show of the year. That's a high like no other!

Next comes lighting the cascadas, coronas, the set pieces, the racks of rockets, the 8" shells. Down in the streets, the Guzmans are lighting the castillos. All lit with cigarettes, not a torch in sight. The military band (under the Presidente's balcony) is hitting all the favorite patriotic songs at full volume. Next come the toritos in full run, literally crashing into people as they careen about the center of the town. Total chaos. You get the picture.



Last, it's drinking the world's best local tequila in a tiny bar – 10 meters from one of the most beautiful castillos I've ever seen, still smoking. A bar barely bigger than an elevator, while you try to digest what you've just done.

The other events – all of these at the hotel: hand-launching rockets in the patio by the bar (over 700 in 5 days), watching Jean Starr teach the stunningly beautiful Maria to hand-launch (then drop) her first rocket, only to have it launch into her inner thigh (I got to pat out the embers), then to see Maria change into a gorgeous gown and sing Mexico's national anthem with the voice of an angel. Oh yeah, and backed up by a 13 piece mariachi band in full regalia! Steve Wilson "running the torito" from hell while the mariachis retreated to the farthest corner, Bill MacGregor courting and dancing with Maria, Lisa Jimenez knocking a part of the roof off with a rocket, watching my own mother & father (in their late 70s) hand-launch their first rockets. Phil Sandmeyer doing target practice with hand-launched salutes, Kief on his knees, proposing to Maria (Bobbie doesn't know about this, but Mexican proposals don't hold up in the states).

When it really comes down to it now, if folks ask how the Mexico trip was I reply, "It was ok, I'll probably be going again next year." And I leave it at that.

P.S. When I returned, my assistant at work looked at some of the 1000 photos taken by me, Devon, Steve and others. His only comment was that it looked like a bad Hollywood movie. "I don't understand" I replied, "What the hell do you mean by that?" He said, "It's too story-like. The century old buildings, the insane fireworks, the flower-covered cobblestone streets, the Presidente on his balcony covered in green, white and red Christmas lights, all look like a low

budget version of what a cheap Hollywood director thought a Mexican Independence Day festival should look like. It looks poorly staged, nobody would ever really do this."

I just smiled.

For information on Kief's annual Mexico Pyro Extravaganza, contact Kief via email at kief@sbcglobal.net or call him on his toll free hotel line at 800-220-8689. You can even check out his hotel at <http://www.mexonline.com/ensueno.htm>

Do-It, Mesquite Flavored!

Greg Dandurand

A new Do-it site! I wondered what challenges and adventures would await when I arrived in Mesquite. Those thoughts rolled around in my head as I winged my way north through the Arizona desert and realizing I was in my car and not an airplane, I slowed down as Wikieup, Arizona is notorious for its speed traps. I didn't want to end up a fourth for bridge with Andy, Barney, and Otis because it would have ruined the weekend.

I followed the precise directions I downloaded from the Internet and arrived on site to find preparations well under way. The food, class C, and chemical vending tents were set-up looking like white elephants awaiting instructions from their trainers. I sensed that this Do-It would be different. The one big clue was the sea of vehicles in front of me. They sat, trapped in the sand, empty, as if aliens had abducted their owners. Russ Laurie's tow strap was probably used more in that one weekend than the rest of the time he has owned it. People certainly learned how to drive in the sand rather quickly. Unfortunately, the rental truck with all the gear got stuck also, but it was unloaded and the equipment distributed to the appropriate locations with the willing hands of the many folks who helped for set-up.

Rob Foelak did an excellent job working with the property owners and the city of Mesquite to make everything run smoothly. The

property owner graciously donated the use of a bulldozer and a backhoe that were put through their paces all weekend. As usual, Kevin Bollinger (thanks for the wine) did a lot of the leg work required before we showed up on site and was on hand to run things behind the scenes so we all had a good time. He was ably assisted by Pete Wood who proved on Sunday, that you could pack an entire show of five-inch racks into the bed of a Toyota pickup. I still can't believe we got all that gear to fit. I can't even begin to thank or acknowledge all the people who work countless hours to make Do-It happen. From the Board of Directors, to everyone who gave their time helping at registration, safety personnel, setup and teardown, keeping us fed, and countless other duties I probably don't even know about. I know I always pontificate about volunteering for the club, but this is what allows these events to happen. No one gets paid well, except for the undying appreciation of the board and accolades hoisted upon them by the gratified members with trumpets blaring and rose petals littering their path, (OK, the medication is leveling out). I like being a member because everyone makes it happen.

I awoke early Thursday morning, gnawing on the carpet in my hotel room, clutching casino chips in both hands and I vowed to spend more on pyro than on gambling. Thanks to Flying Phoenix, I was able to have an extremely firework rich weekend. Many thanks go to Firefox for chemical vending on site to allow manufacturing to concoct many a spectacular item.

The WPA rented a pickup to run product from the vending area out to the shoot lines. This turned out to be a very good idea. I hope there was more positive feedback to this as it sure beat lugging shells through the sand. Just carrying my gear out there trudging along, I felt like a Foreign Legionnaire on a twenty mile hike. I should have gone to "Rocket Aerobics" that took place when that errant rocket doubled back into the area behind the rocket line. I saw a

couple of people move very quickly from their comfortable positions in their lawn chairs. It certainly got the heartbeats elevated!

There were many interesting little surprises. The ghost mines and wall of fire were too cool. I'm just glad that the protesters about the global warming effect weren't in attendance. I think there was a PETA rally at the Hoover Dam about some fish that kept them occupied.

The seminars were very informative; it was nice of the presenters to give their time. The Dr. Pyrophile Show is interesting as it presents some of dangers involved in mixing chemicals. Members of the Mesquite fire department attended as part of Haz-Mat training. They were driving a Suburban, but were not willing to subject it to experimentation.

Ken Kosanke was doing some serious work with his comets. I didn't wander down to his area, as I understood it was being videotaped for a dissertation for a school project. I didn't want to get in the way, but it was sure nice to see, and could be viewed from a distance.

Rod and Andy from Wolverine West Fireworks drove down from the Seattle area to do a little demo with some class C items. It looked to be some nice product. Saturday night provided us with a troupe of fire dancers at the afterglow. I was skeptical at first, but it proved to be quite hypnotic, circled by the colored flames. It has been suggested that the dancers be invited to WWB, but I think it was better in the intimate setting that Do-It provided.

I enjoyed the afterglows. I always enjoy the afterglows. Alicia and Elmo were dead on with the little finger sandwiches, it hit the spot, was easy to set up, and easier to clean up. Do-it is the hard-core pyros - we don't need to get too fancy. Jay Brown, Kief Adler, and Steve Wilson hosted the wine tasting. They were willing to share and offer opinions on all the wines presented.

Sunday morning, all those who stayed for clean up were rewarded with a nice breeze that turned the site

Rich Wolter

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into a sandstorm. I think it made us work quicker, just to get out of there.

I left Mesquite, tired but happy, headed toward Vegas, then Phoenix. About fifty miles down the road, I saw Brian driving the rental truck, with Ann behind him in her car. Mike was ahead in the pickup, towing their trailer. Brian was going slowly up the incline; I slowed down, pointing to the truck and giving him tentative thumbs up. He smiled wearily and returned it, letting me know the truck was OK. I accelerated, settling in for my drive south, returning to my neighborhood on the boulevard of broken dreams, where the block parties have stale beer, flat soda, the piñatas are filled with anguish and despair, and there is no pyro. See everyone at Western Winter Blast 16!

GunPowder Green Tea

GunPowder Green Tea is so-called rolled into small balls, reminding someone of old-time gunpowder. The Chinese name for Gunpowder Green Tea is Siao Chu, which literally means large leaf.

Rolling the leaf has two effects on quality of the tea. The leaves are tightly rolled into small pearls. When infused, they explode, yielding refreshingly sweet, amber liquor.

"Sixteen Inchers"

By David McNamee
WPA #2016

With all due respect, here's a version of Tennessee Ernie Ford's "Sixteen Tons", for y'all to sing around the afterglow fire:

Digging in the big ones is the Devil's work
Wrenches your back and a-drenches your shirt
Ain't it good to know the other half of the fun?
Is digging 'em all out again after you're done

*You shoot sixteen inchers,
what do you get?*

*A roar from the crowd that'll
make you go deaf*

*Saint Peter don't you call me
'cause I can't go
I just spent a month settin' up
for this show*

I was born on a day it hit a hundred
and nine
I dug in my mortars and inspected the
line
I shot sixteen inchers 'til the sky was
aglow
And I heard someone say "Now,
THAT was a show!"

(chorus)

They say I was born on the Fourth of
July
I'll be shootin' sixteens 'til the day I
die
I was raised in a haze of black
powder smoke
Playin' with that kind of fire is dead
serious, folks

(chorus)

If you see me runnin' better catch up
or hide
Some that didn't, well some of them
died
A ton or two of powder in tubes of
steel
Might never get you but you think like
it will

(chorus)

Box Stars

By Steve Majdali ©10-02-2004

A lot of effort has gone into explanations of how to make cut stars, pumped stars, round stars and even cylindrical stars made with a star plate, but very little has been said about box stars (also known as "pill box" stars). Several very nice compositions pose problems when it comes to star manufacture and/or priming due to incompatibilities of various components or problems with the physical characteristics of the composition itself. The solution can be the old fashioned box star. Some very hard to light compositions (like high metal content stars) are readily ignited when made into box stars.

To make box stars, first determine the optimum size star for the desired effect and obtain an appropriate former for that size star. Typically a varnished wooden dowel or polished piece of aluminum rod works nicely. Wet roll two layers of kraft paper around the form, slide the tube off and set it aside to dry. A long tube can be rolled and cut to proper lengths when dry.

Take enough of the cut tubes to make the desired number of stars, a bowl of moistened composition and enough pre-cut lengths of stiff black match (typically the match is cut to three times the length of the tube). Sit down and get comfortable at a covered workbench and wear rubber or Nitrile® gloves if messy composition is used.

The operation is to place a piece of black match through a tube section so an equal amount of match is protruding from either end of the tube. Next, grab a portion of the moistened composition with gloved hands and stuff it into the tube, pressing it firm with the thumb and index finger, locking the match in place, and set the star on a tray or screen to dry. Repeat this process till all the box stars are assembled and dry them thoroughly before testing. (cont'd)

(See Drawing # 1 Page 21)



Dispenser for magnesium ribbon. Magnesium, a metal which will burn with a brilliant white light, was used for early "flash" photography. The Kodak Magnesium Ribbon Holder was intended as a light source for contact-printing negatives, but it could also be used as a light source for photography.

If the composition is incompatible with black match, Thermolite™ or some other type of igniter can be used if properly primed. A highly active composition may fly around or spin in the sky and make an interesting effect. There are infinite variations possible and the only limits are your own imagination. Enjoy.

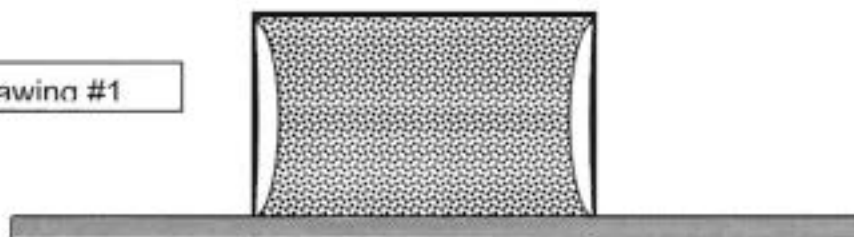
Authors note:

After I wrote this article I consulted with Fred Partin, former president of the FPAG (Florida Pyrotechnic Arts Guild), and he added the following information. Fred recommends very lightly tamping the composition into the tube (after hand loading) with the tools shown which are notched to

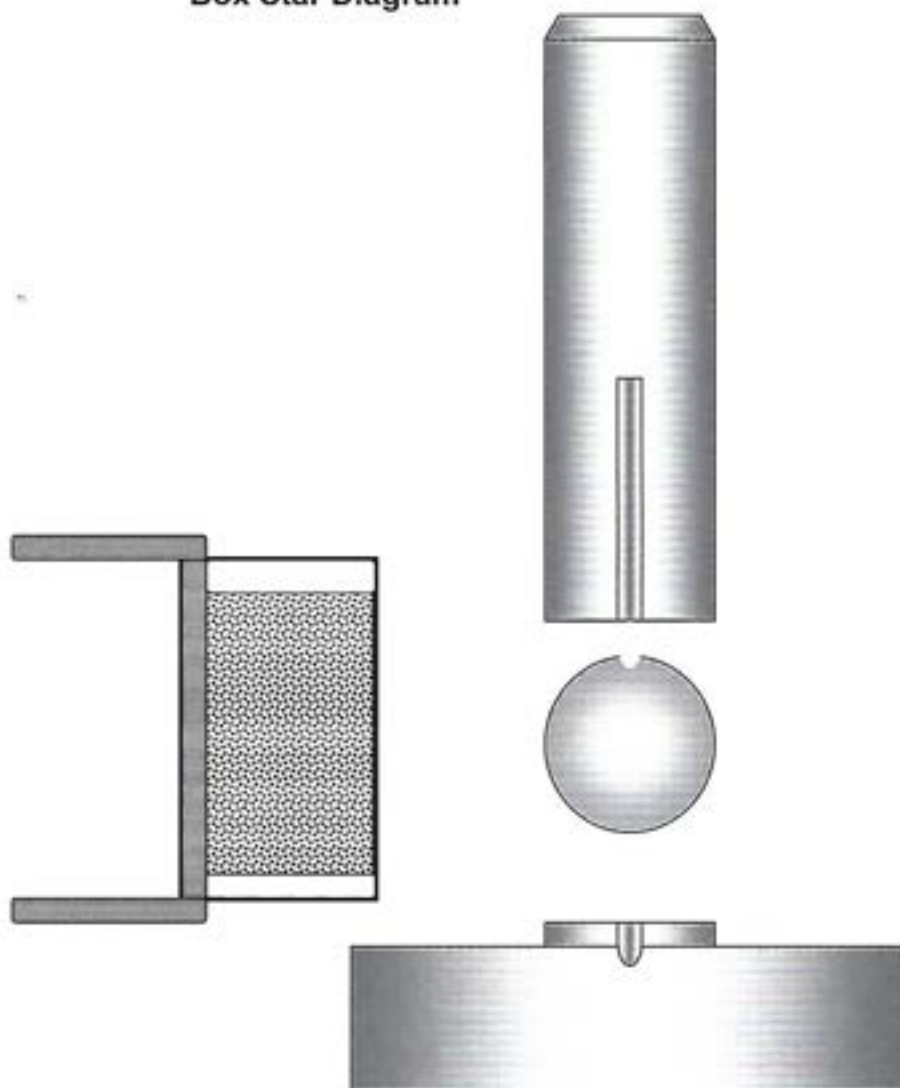
accommodate the black match. Use very light mallet strokes. Fred also suggests the basic size be $\frac{3}{4}$ " in diameter and 1" long. These tools are easily constructed from hardwood and varnished before use.

(See Drawing below)

Drawing #1



Box Star Diagram



Fred's Box Star Tamping Set

Thanks are due to Fred Partin for reviewing this article and making helpful suggestions and additions.

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My top ten reasons that Wiley E. Coyote should be made the official Mascot of the WPA.
(in particular, the B-Rocket Line)



1. He has first hand experience with the need for safety.



2. Super Genius (as are we all...)

- 3. Proud American, Native of the Southwest. (He spends just as much time in the desert as we do!)
- 4. Spends inordinate amounts of money on his hobby. Has an open line of credit with "Acme" (another name for Skylighter)
- 5. Has great creativity. His pioneering work in applied physics is an inspiration to us all.



6. He knows when to run.

- 7. Spends a great deal of time designing, and plotting trajectories, payloads, and ballistics
- 8. Been in the Pyro trade since 1949.
- 9. First "Mainstream" proponent of the Anvil Test.
- 10. Innovator, and Beta tester for the following Pyro effects.
 - Bomb "Fastest With The Mostest" 1960
 - Detonator "Zipping Along" 1953
 - Dynamite "Ready Set Zoom" 1955
 - Explosive Tennis Balls "Soup or Sonic" 1980
 - Jet Motor "Gee Whiz-z-z" 1956

- Jet Propelled Pogo Stick "Hot Rod & Reel" 1959
- Jet Propelled Skis "Freeze Frame" 1979
- Jet Propelled Unicycle "Hot Rod & Reel" 1959
- Little Giant Do-It-Yourself Rocket-Sled Kit "Beep Prepared" 1961
- Matches "Beep Beep" 1952
- Nitroglycerin "Beep Beep" 1952
- Rocket Powered Roller Skates "Beep Beep" 1952
- TNT "Beep Beep" 1952

Now, some folks may say that Bugs Bunny may actually have more experience with high order explosives. And that may be true. But as far as actual innovation and range experience, few match Wiley E. Rockets and Pyro effects, to this day, are sometimes inscribed with the magic words "Acme" in homage to this pioneering pyrotechnician. It is my suggestion that the WPA make Wiley E. Coyote, an honorary member of the WPA, and our official mascot!

Robert Seutter
WPA Member.

Fireworks: Toy or Tool?

Four Important Uses of the Firecracker



1. Ridding the garden of pests.



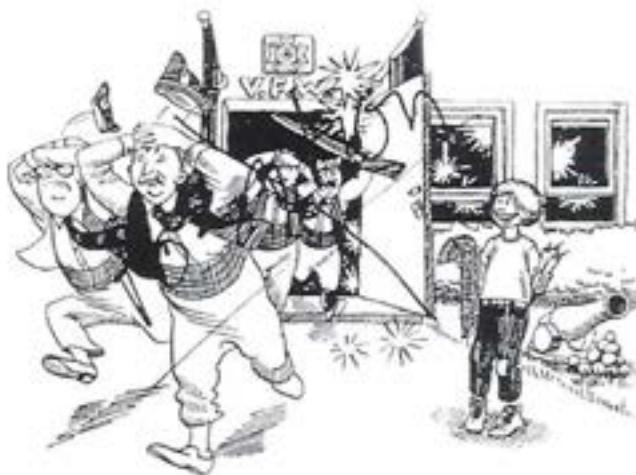
2. Providing economic stimulus for the toy industry.



3. On-the-spot training for future astrophysicists.



4. Insect Control



Important Warning:

This Fourth of July, keep in mind that fireworks displays can be disturbing to some members of the family. Especially men who served in Vietnam or participated in the fire-bombing of Dresden.

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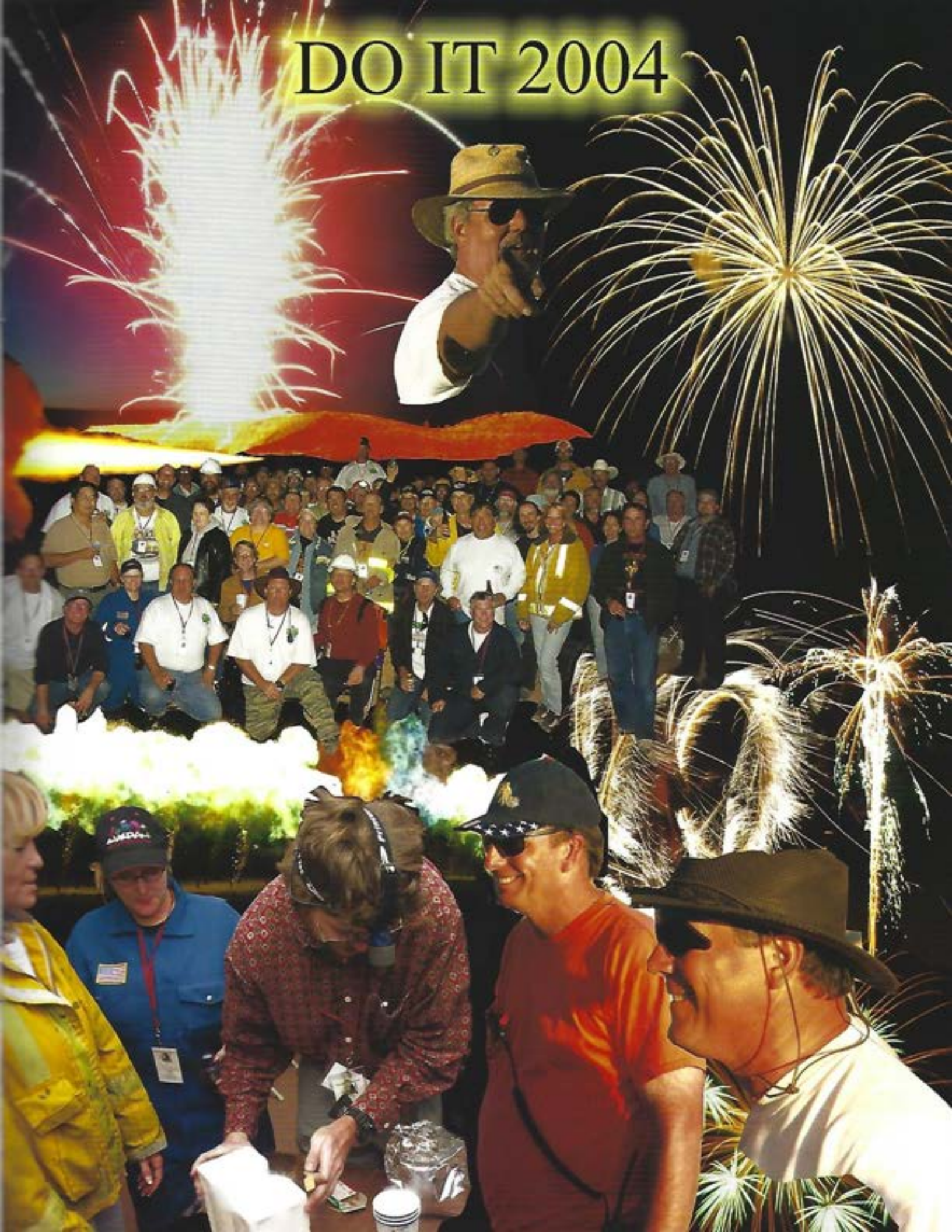
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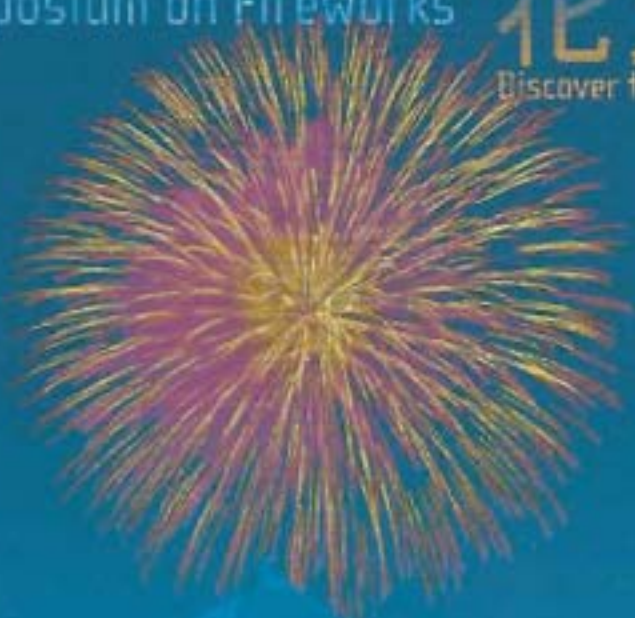


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Hi Gary,

I saw your post on the PML, and was hoping you would include a note about the next International Symposium on Fireworks in Shiga Japan.

The website is www.ISFireworks.com

Regards,

Fred Wade

8th International Symposium on Fireworks

Shiga, Japan April 18-22 2005

Editors note: We followed the link and found an amazing story and information. This is from that site:

"Since its inception in Montreal in 92 when attendees from more than 20 nations met, there have been seven very successful fireworks Symposia, Montreal Canada 1992, Vancouver Canada 1994, Walt Disney World Orlando 1996, Halifax Canada 1998, Naples Italy 2000, Walt Disney World Orlando 2001 and most recently Valencia Spain 2003. The Symposia were brought to life by CERL, the Canadian Explosives Research Laboratory. After five Symposia CERL turned the administration over to a non-profit International Symposium on Fireworks Society, which continued on with the organization of the 6th Symposium at Walt Disney World .

This series of Symposia has become the world's premiere international gathering of the pyrotechnic industry. Each Symposium focuses on bringing together individuals of diverse pyrotechnic background, to provide a fertile atmosphere in which to see the newest technology, to trade experience and ideas on ways to enhance the industry and to move the science forward. The emphasis of the Symposia is on the presentation of papers and the discussion of topics dealing with the safety, scientific, engineering, artistic, and regulatory aspects of fireworks and other pyrotechnics associated with entertainment and celebration on a global basis."



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