

FLYING PHOENIX FIREWORKS

COWBOY P.O. Box 31 #92 CíHair Lane Riverton, WY 82501 rapahoe, WY 82510 307-856-0778 D7-856-3336 FAX flyingphoenix@tcin on.-Thurs 7am -5:30pm

BRAND

1.3G
300sh Red/Green/Blue Moving Star
100sh Coconut Pistil w/Red Tadpole
0sh Blue Tail to Brocade Crown Crossette
110sh Fan shaped - Silver/crackling/blue/
reen glitter mines to blue tail to chrys willoush Fan shaped - Three stage massive
crackling mine
88sh Fan shaped - Flying Gold Eagle
80sh Fan shaped - Ice on the Cake
recade crown w/blue and crackling mine)
48sh Fan shaped - Silver Waterfall
18sh Fan shaped - White Strobe Waterfall
300sh iZi shaped - Colorful Whistling
5i - 10i Red, Silver or Blue Ghost Shells

More Brands in Stock

Brothers Shogun Winda Cannon Golden Bear

Lightning Bolt Black Cat Flower King **Flying Dragon** HopKee

Beihei Wizard Huisky Lidu Yung Feng

To receive a catalog or request information, please call or email. Ask for Jim or Becky on 1.4G and or Glen for 1.3G.

WPA Newsletter,Volume 22, Issue 1

July, 2011 Volume 22, Issue 1

Western Pyrotechnics Association P.O. Box 990 Fontana, CA 92664

E-mail: Tom@WesternPyro.org

Inside this issue: Editor Thoughts What's Happening? 2 Vice Musings 3 WPA P&L Report 5 Treasurer's Report 4 General Board Mtg Minutes 8 **Board Meeting Minutes** 10 **Board Meeting Minutes** 11 Firecracker Raffle Pictures 12 The Long Goodbye 13 Blue Whizzies 15 Dirt 18 About the cover 18

Editor CommentsBy Tom Calderwood, V.P. Publications

First: I'd like to apologize for the tardiness of this edition. BUT—not many people responded with the plea for articles! And since this is a newsletter BY you (not by me) and FOR you, it just didn't seem right to release something just because something needed to be released.

IF YOU can help, I'll crank out another newsletter before Do It—but only if YOU can contribute! I've groveled, begged, pleaded, bribed, coerced and even black-mailed for articles, but without anything I'm rather stuck.

Second: You may see references sneak through about the "upcoming 4th of July", because those contributions were made before the 4th. I've edited as many of these out, but like anything I've been doing, something will sneak through. Don't blame it on the author, blame it on the editor. (My shoulders are broad....)

Third: THANK YOU to Charlie Wilson and the Rocky Mountain gang for letting us steal, er, borrow the article about Dirt! Yup, if you're a rocket guy, then you know what I'm talking about. Grog, Clay, Nozzles!!! Time to press some stuff!

We will have information upcoming through the newsletter email address and the web concerning registration for Do It. It will be up-n-running in due time.

In the mean time, read on, consider what you can contribute, and let's get ready to LIGHT SOME FUSE!

- Tom

Important Notice:

The Western Pyrotechnic Association, Inc., also known as the WPA, is a non-profit group of fireworks professionals and their apprentices. This newsletter is a vehicle for their exchange of information in this craft and the right to publish this information is guaranteed by the Constitution of the United States of America. Nonetheless, readers are urged to learn and obey all laws and regulations of all federal, state, and local jurisdictions and of their agencies and representatives. Some information herein may contain incomplete descriptions of fireworks techniques based on the experience of its author(s) in a controlled environment with circumstances, and conditions different from the reader. Readers must form their own opinion as to the application of this information. This information is considered documentary in nature and no opinion is given as to its suitability or use. No warranties are made either expressed or implied, including but not limited to warranties of the accuracy of the information herein. The WPA is not responsible for the opinions of authors or mistakes in printing. All information is intended solely for viewing by members of the Western Pyrotechnic Association, Inc. and its associates. The WPA's entire liability and anyone else's remedy shall be a refund of the subscription price. In no event shall the WPA, or its officers, or the editor, be held liable for any damages whatsoever arising out of use or inability to use the information in this publication, even if said parties have been advised of the possibility of such damages. This publication is published by and is the sole property of the copyright owner, and is not to be sold or reproduced in whole or in part without written consent of the editor and publisher. The contents of this newsletter are Copyright 2006. All Rights Reserved by the Western Pyrotechnic Association, Inc., or the author(s), if so indicated, and is re-published by permission of the copyright owner. Any previous agreement to allow any one to re-publish any material from the WPA, Inc. Newsletter is revoked and void as of March 1, 1995. Reproduction without permission will be deemed a purchase and implied authorization by the user to accept billing and make payment of a minimum \$50 user's fee per instance of use. Distribution is limited to paid subscribers. Submission of written material, graphics, and photographs dealing with pyrotechnics or fireworks, related technologies or activities of, and information to the benefit of the members of the WPA, Inc. are gladly solicited. All submissions become the property of the Western Pyrotechnic Association, Inc., and may be edited or rejected for any reason. No payment is made for submissions and submitted materials cannot be returned.

What's Happening?

By Pete Wood, WPA President 2011

What's happening? Where do I start -

WWB XXII - A GREAT time! We must be doing something right, as the weather gods seemed to be on our side (for once) and grant us the ability to get the Saturday Grand public Display off, without a hitch. It was touch and go for a while on Saturday, with rain in the morning and predictions of more for later on in the late afternoon but it didn't happen. All went so incredibly well and Extreme Pyrotechnics LLC, from Texas did a display to make us proud. I never heard a bad word regarding this. The public loved it, as did I. Great job and kudos to Extreme and Mike Wagner and crew!

Sunday nights tribute to Jill Salverson, done by Sam Bruggema of Pyro Spectaculars, was equally as impressive. Jill, Paul and all the WPA thank you for this tribute Sam – you did a great job!

All of the demo providers, Wolverine West, the Jackalopes, the B-Cake segment, the anvil guys (what a kick! – and LOUD!), the firecracker wall etc., we thank you and thoroughly enjoyed your efforts and presentations.

We had a great turnout for the shell building class and the Shell Shack. Many thanks to Allen Lillie and crew plus Richard Haase for heading up the shell-building seminar.

Many seminars were had, including the ongoing PGI shooter certification course taught by Micki and Steve McDanal from Aurora, Co. With the help of our Treasurer Debbie Ludwig as an apprentice instructor for the course, we hope to continue to provide this ongoing certification process for a better understanding of the safe and legal shooting aspects in pyrotechnic displays.

The Annual Business Meeting was well attended and had some twists and turns in policy additions. Also, Kathy Baird once again took on the Office of Secretary for another two-year term. Thanks Kathy! Your devotion is commendable to say the least.

The Position of WPA Vice President was taken on by Greg Dandurand and again, I thank all who donate their time and efforts to see that the club continues on.

Speaking of elections, I might as well put this out there now, (and will continue to do so) on the matter of the upcoming 2012 Elections for Board Positions. The Office of WPA President will be up for grabs – I will not be accepting an-

other term, as my time now needs to be focused in different directions, including health, family and career. The Office of Publications VP and Treasurer will come up as well, and while I can't speak for those that currently hold these positions, I can guarantee they have served the club over and above. If they stay or leave – that's up to them, but their devotion here again, is admirable and most appreciated by us all.

If you have ever entertained the desire to join the BOD's and help mold the future for the WPA, this upcoming election is the perfect opportunity for your entrance into club politics.

Again! I WILL NOT accept another term as President! So think hard! After the Business Meeting the WPA, <u>MAY or MAY NOT</u> have an acting President to go forward with, unless one of you takes the initiative to fill this position. It's your club. Your decision.

The Membership voted to enact the proposed Minors in Manufacturing, beginning with (and at) the upcoming DO IT 2011 in Hawthorne, Nevada. It was then decided that the WPA BOD's would review the event (DO IT 2011 / Minors in Manufacturing) and make a decision as to whether this would be an ongoing policy change that would encompass ALL WPA events in the future. Stay tuned, as I'm sure this will be the "hot seat" item at the upcoming General Business Meeting, in February 2012.

On the subject of DO IT 2011 in Hawthorne, here's what I have so far.

The dates are confirmed for September 22, 23, 24 and 25, 2011. The 25th is clean up.

The host hotel will once again be the El Capitan. I suggest you act quickly to reserve your rooms. We have a 75 room block as of right now, and if more are needed, they will try and accomodate us. The sooner all of us make our reservations, the sooner we will know where we stand with this room block. (IMPORTANT! IF YOU WANT A MICROWAVE in your room, be sure to ask for this when making your reservation.)

If you stay 3 nights or less - you pay \$43.95 plus tax per night. If you stay 4 nights - you pay \$32.95 plus tax per night. If you stay 5 nights you pay \$29.95 plus tax per night.

What a great incentive to have more help on Wednesday setting up! You get in Tuesday night, and then you get to leave on Sunday (after cleanup) and you get the 5 night rate!

When members call to make their reservation all you will need to say is group WPA block. Reservation Info -

El Capitan Lodge and Casino 1-775-945-3321 1-800-922-2311

You can reach the El Capitan at 775-945-3321, 800-922-2311 or Via E-Mail will be fine

www.northernstarcasinos.com. That cut-off date will be September 8^{th} , 2011.

If you have a motor home or RV, you can contact the Whiskey Flats RV Park to make your reservations. They advertise 60 pull through spaces with full hook ups and free WI-FI.

Call them at 1-775-945-1800 or on line at – www.whiskeyflats.net . They are located at 3045 Hwy. 95 in Hawthorne.

Last year's DO IT was GREAT! This Year's will be even BETTER! Please plan now to make your reservations. Bear with us as we struggle to get the WPA website updated to reflect this information. We recently lost our web and e-mail list admin, and are in a period of transition.

Rest assured, those working on this will do so just as soon as they can, so your patience is appreciated.

All for now guys and girls, just please have faith in your club, your BOD's and yourselves!

We all need to join together to have the political numbers and clout necessary, to keep those who oppose us, from making what is currently a reality, into nothing more than a story we can all relate to future generations, on how it "was".

The WPA is here for you! Now, please be here for your club.

See you all soon!

Pete Wood

WPA President 2011

Vice Musings by Greg Dandurand

Well, here is my first column as V.P. I would like to thank everyone who voted for me. Winterblast is behind us and now we look forward to Do-It. Minors in Manufacturing (MiM) is going to be done at Do-It, with an evaluation to see if it can be done at Winterblast 2012. Do-It is the perfect opportunity for those who want to learn what it is like to be on staff to shadow a staff member to see what the job is like. This club is for us, by us. We always need help., and several new members have stepped up to the challenge, so you will see some new faces on staff at Do-It.

Fourth of July is coming up, So I hope everyone stays busy and safe. Have a safe and happy holiday!



WPA Corporate Members

Combined Specialties

Novato, CA

Extreme Pyro

Mansfield, TX

Flying Phoenix

Riverton, WY

Holatron Systems, LLC

Honolulu, HI

Pyro Novelties

Lenexa, KS

Pyro Spectaculars

Rialto, CA

Thank you ALL for your continued support of the WPA!

We would like to take this space to express our thanks to our corporate members. These are folks who recognize that the health and longevity of pyrotechnic clubs and organizations is responsible in part of the continued success of fireworks in America. In these economic times, their support can be especially hard on them. It goes above and beyond the standard.

The WPA is reliant on our corporate members continued support for the health of our club. Do us ALL a favor and be sure to use their services.

*****FIREWORKS VIDEOS FOR SALE*****

#66) 2011 Western Winter Blast XXII Lake Havasu, AZ. ***DVD \$25.00***

#65) NFA EXPO in Springfield, MO. 6 hours. ***DVD \$30.00***

#63) 2010 PGI Convention at Appleton,Wi. 8 hours. ***DVD \$40.00***

#64H.....(2010 PGI...2 hours of HOT Fireworks! DVD \$25.00)

Send for a list of PGI videos back through 1988, all Western Winter Blasts and the last nine years of the NFA EXPO. Your satisfaction Guaranteed! Please enclose money order, check or cash(if you insist) with order and mail to: Eldon Hershberger, 15707 Allen Ave, Belton, MO 64012. 816-331-5297 ggg47@aol.com

Western Pyrotechnics Association Profit & Loss

April 2010 through March 2011

	Apr '10 - Mar 11
Income Advertising Do it Income Afterglow Clean Up Deposit Donations	75.00 400.00 1,350.00 436.25
Registration	4,436.00
Total Do It Income	6,622.25
Membership 2010 Membership 2011 Membership	3,210.00 42,489.50
Total Membership	45,699.50
Other Types of Income Miscellaneous Revenue On Line Fees	1,426.74 1,182.86
Total Other Types of Income	2,609.60
Pyro Playa Registration	670.00
Total Pyro Playa	670.00
Winterblast Auction Clean Up Corporate Member Donations P/D Donations Raffle Registration RV Parking Fees Seminar Fees Staff Shirt Sales Vendor Clean Up Deposits Vendor Tables	4,291.00 5,740.00 2,000.00 3,767.43 15,000.00 846.00 58,622.37 1,000.00 1,109.00 390.00 950.00 2,200.00
Total Winterblast	95,915.80
Total Income	151,592.15
Expense Do It Armaggedon Charge Back Fees Clean Up Refund	494.50 66.00 1.222.31
Site Preparation Containers Contract Labor Misc. Permit Fees Portable Toilets Security Site Materials Tents Trash Dumpster Truck Rental	1,290.00 312.40 2,728.83 316.55 320.00 600.00 447.72 1,227.75 320.00 1,302.04
Site Preparation - Other	455.43
Total Site Preparation	9,320.72
Site Rental Fee	500.00
Total Do It	11,603.53
General Operations Alpha Card Systems Alpha Card Software Ribbon Cartridges	1,337.90
Total Alpha Card Software	1,337.90
Total Alpha Card Systems	1,337.90 7.15
Aplus	7.10

Western Pyrotechnics Association Profit & Loss

April 2010 through March 2011

ACCOUNT THE STATE OF THE STATE	Apr '10 - Mar 11			
Bank of America Checking Printing Charges	75.87			
Total Bank of America	75.87			
Communications Computer Management	371.00			
Web Site Search Engine Computer Management - Other	213.24 275.00			
Total Computer Management	488.24			
Dues Forms Membership Mailing Supplies Membership Postage	310.00 1,008.20 129.60			
Total Membership	1,137.80			
Total Forms	1,137.80			
Insurance Liability D&O Liability Ins. Yearly	2,931.00 38,755.00			
Total Insurance	41,686.00			
Mailing Supplies Miscellaneous Office Supplies Officer Stipends On Line Credit Card Fees Post Office Box Rental Postage	20.84 250.00 283.36 3.425.00 1.833.49 218.00 52.63			
Total General Operations	51,497.28			
Professional Fees Accounting	925.00			
Total Professional Fees	925.00			
Pyro Playa Expenses Site Preparation PortaPotties Site Permits	202.00 155.00			
Total Site Preparation	357.00			
Total Pyro Playa Expenses	357.00			
AG Registary Charitable Trust Co. Corp Delware Franchise Tax Board State of Ca	25.00 410.00 20.00			
Total Taxes	455.00			
Winterblast Expenses Afterglows Bunker Supplies Charge Back Fees Clean Up Refunds Crackers Event Chair Stipends Event Meeting Costs Printing Programs Printing - Other	7,043.29 1,718.39 481.00 4,282.89 960.00 1,785.00 38.46			
Total Printing	2,138.07			
Public Display Registration Office Supplies Wrist Bands	15,000.00 -18.82 158.00			
Total Registration	139.18			
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	260.00			

Western Pyrotechnics Association Profit & Loss

April 2010 through March 2011

Apr '10 - Mar 11						
+ 300 km						
2.434.94						
3,158.65						
391.86 1,495.12						
					200.00 600.00 635.87 1,328.04 63.68 700.00	
520.00						
1,025.00						
2,976.00						
395.65						
6,000.00						
15,152.66						
225.00						
350.18						
460.00						
395.30						
38,505.95						
40.00						
1,459.07						
2.172.69						
463.00						
4,094.76						
750.00						
77,236.99						
142,074.80						
9,517.35						



WESTERN PYROTECHNIC ASSOCIATION

Minutes of Business Meeting February 20, 2011

- Call to Order: Meeting was called to order by President Pete Wood at 10:12 AM. Also in attendance are board members VP Kelly Goebel, Publications VP Tom Calderwood, Treasurer Debbie Ludwig and Secretary Kathy Bauer and at least 10% of the general membership to meet the quorum requirements.
- Motion was made by Randy Baranek, and seconded, to approve the minutes of the 2010 Business Meeting. All in favor: unanimous Motion was passed.
- Lynden King, WWB XXII Chairman discussed the Staff Compensation Policy. Motion was made by Kief Adler to approve the XXII Staff Comp Policy. Motion was seconded. All members were in favor and motion passed to approve the Staff Comp Policy.
- Pete Wood discussed the passing of WPA member Jill Salverson. She has been a part of the WPA and events since the beginning of the club. She and her husband Paul are part of the "Total Blasters" and she had held many positions in the club during the years, including, past Area VP, Membership Chairman & Secretary of the club. Jill will be missed. There will be a memorial show in her honor Sunday night donated by Sam Bruggema & Pyro Spectaculars.
- Treasurer's Report was given by Debbie Ludwig.
 - Donations from the Public Display to date = \$4291.00
 - Donations from the Auction to date = \$2286.00
 - Pyro Playa in 2010: Income \$670 less Expenses \$257 = Profit of \$413.00
 - Taxes for the past year were filled.
 - Profit and Loss statement will be printed in the next newsletter as there were not enough copies for all in attendance.
- Secretary Report by Kathy Bauer.
 - 2011 membership to date stands at 548 members.
 - 2010 membership was 573 members. 2009 membership = 669
 - WWB XXII registrations to date = 566
 - 2010 registrations = 577 2009 registrations = 727
 - please note 2009 WWB was the 20th anniversary Blast.
- Publications Report by Tom Calderwood.
 - Still working on ideas for getting the newsletter to people who cannot download them from the website.
 - One idea is to send CD copies of it to people who have computers.
 - Another would be to send Black & White copies to people.
 - Tom had people come up after the meeting to sign up for copies/CD
- Do It Report by Pete Wood. Pete commented on the great venue and great people he worked with in Hawthorne, NV and getting the event moved there. John Dicks joined the discussion and thanked volunteers and members for supporting this event. A survey was taken by the people of Hawthorne and any suggestions will be considered for the next event held there this fall. Do-It in Hawthorne was a great success agreed by all who attended.
- Vote on Minors in Manufacturing: John Dicks made a Motion to have just recorded discussions made and not including members names to help keep secretary notes easier. Motion seconded and passed by the members
 - A DRAFT of the WPA Policy related to the Presence of Minors in any Manufacturing or Seminar Area was available for members.
 - Members discussed pros and cons of this issue. Discussions have been ongoing on the WPA list, blog and printed in the XXII program.
 - Motions were presented and discussed and rescinded until John Steinberg was asked by Pete Wood to take over the proceedings for awhile to correctly monitor the motions.

- The Motion was made to permit minors in manufacturing and manufacturing seminars, consistent with the DRAFT policy at Do-It in Hawthorne, NV 2011; the board would then discuss and decide what the policy will be for the next Winter Blast event.
- Motion as made to Call to the previous question: to end the debate. Vote was taken, with 122 people in favor of ending the debate; 5 opposed. The Motion carried to end the discussion.
- Vote was taken on the Motion to permit minors in manufacturing and manufacturing seminars, consistent with the DRAFT policy - at Do-It in Hawthorne, NV 2011; the board would then discuss and decide what the policy will be for the next Winter Blast event.
 - 110 members were in favor of Motion.
 - 41 members were opposed to the Motion.
- It was brought up to take a recount of the members: 11 members wanted a recount, 140 members did not want a recount. There was not a recount of the vote.
- MOTION carried as cited above.
- Elections for open Board positions: VP & Secretary and Area VPs
 - Position of the Secretary: Nomination named Kathy Bauer, Kathy accepted nomination. It was moved to close nominations. Kathy Bauer was elected to the position of Secretary by acclimation.
 - Position of Vice President. John Dicks Nominated Greg Dandurand: Greg accepted the nomination. Nomination for George Cacilhas. George accepted the nomination. Both nominees' gave told the members of their qualifications. Ballots were given out. The vote was counted by Board members and the results were 88 votes for Greg and 49 votes for George. Greg Dandurand is the new VP of the WPA.
 - Area VPs were discussed, nominated and voted upon. The results are as follow
 - San Diego Area VP Jim Ludwig
 - Los Angeles Area VP Chris Spurrell
 - No. Calif. Area VP Lynden King
 - North Western US Vacant at this time
 - AZ/NV Mike Hill
 - Rocky Mts. Blue Parrish
 - Texas Vacant at this time
 - Eastern/Foreign: Vacant at this time
 - Hawaii Richard Rasmussen
 - Alaska Jackie Whedbee
 - Canada Darrell Fiss
- Life Membership was awarded to Lynden King, this years WWB Chairman and long time volunteer and support of the WPA. Many thanks to Lynden for years of service.
- Old Busniess
 - Kief Adler addressed the members stating he was adamantly against the passage of allowing minors in manufacturing and would no longer be a volunteer nor staff member in any capacity of the WPA. He would remain a member.
 - Discussion of the legality of minors in manufacturing was brought up again and speakers talked of law suits and personal
 experiences.
 - PGI President spoke on the fact that there is no law prohibiting minors at this time.
 - The club's attorney read from the ATF about the laws pertaining to minors in manufacturing and said it is not against the law. He would continue to look into any issues of legality and insurance for Board Members.
- New Business:
 - Questions were discussed about extending manufacturing hours at WWB. Since there can not be any manufacturing during open shooting, manufacturing gets shut down. Manufacturing opens at 7:30 am to extend hours.
 - Pete Wood thanked Kief Adler's years of service to the WPA and countless hours of dedication he has donated for the good of the club.
- The meeting of the WPA Business Meeting for 2011 was adjourned at 12:14 PM.

WPA Board Meeting February 20, 2011 in Lake Havasu, AZ

- Meeting was called to order at 12:30 PM by the President Pete Wood. All board members were in attendance: Greg Dandurand, Tom Calderwood, Debbie Ludwig, Kathy Bauer and John Brooks, the club attorney.
- The board discussed the adaption of new By Laws for the club.
 - Some changes were previously made changing some of the Secretary duties to the Treasurer.
 - Article 8 Expulsion & Suspension of members was discussed.
 - Member Eligibility requirements was discussed.
 - Changes to Article X and amendments were discussed
 - Changes to Article VII 3B was discussed.
 - What constitutes a quorum at a members meeting was discussed.
 - A discussing about changing wording of majority of the whole board to Super majority of the whole board; meaning any vote by the board be 4 out of 5 board members.
 - Discussion of the sales of Explosives was discussed and there is a need to change our handling of this.
 - Members buying B product and chemicals will have to use their own license.
 - The club will issue directions on how members can obtain this license and continue to purchase B product and chemicals.
 - Tom Calderwood will head a committee on Minors in Manufacturing to finalize the Draft.
 - Changes to the web-site was discussed about membership requirements for students, besides attending school, need regular new member requirements listed on the web-site as well as the paper forms.
- The club's attorney will draft new ideas about the by-laws for review.
- Meeting was adjourned at 2:20 PM

Respectfully Submitted by Kathy Bauer Secretary



Board Minutes for WPA BOD's Teleconference Wednesday, March 16th, 2011

Call to order at 7:03 p.m. by President Wood

- Attendees: President Pete Wood, Vice President Greg Dandurand, Publications Chairman Tom Calderwood, Treasurer Debbie Ludwig, and Secretary Kathy Bauer.
- Secretary Report Since Winter Blast the WPA has 1 new member & 6 renewing members. No official letters of request to leave the club have been received to date. Total membership for 2011 stands at 556 members.
- Treasurer Report Still working on calculating the Income/Expenses for WWBXXII and preparing the taxes for the end of fiscal year 2010/11 ending 3/31/11.
- Publication Report The next newsletter is scheduled for mid April. Tom is working on articles and pictures for this edition.

New Business -

- Minors in Manufacturing (MiM)
 - The board discussed recent discussions on the list about MiM.
 - Draft for this has been available to people since the 2010 general meeting and a forum had been put in place last year for discussions.
 - O The membership voted to have the BoD oversee MiM at Do-It in Sept. 2011 and have recommendations prior to the next WWB.
 - Discussions by all as how to form a comprehensive committee to develop and implement a conscientious plan.
 - O Greg & Tom were called upon to work on forming an adhoc committee, reportable to the BoD, to determine guideline & regulations and the people who will oversee MiM at Do-It 2011. The committee will use the pros and cons on how it went at Do-It and write a non binding recommendation proposal for the BoD to deliberate on.
 - O Tom has volunteered to be on this committee.
- The board discussed the still important legal and insurance questions: liability of the club, its members and children attending events and participating in MiM. The BoD will continue to work with the clubs attorney and insurance broker for any change in information that may arise.
- Re-assignment of duties (now vacated) by the loss of Winter Blast Staff members who do not want to return to their positions.
 - o Kathy Bauer has volunteered to take on the position of Registration Chairman along with Marisa Kline as Registration Co-Chairman.
 - o Pete Wood will be working as City Liaison along with changing permits to his name.
 - o Discussions with other staff members will be on going and changes made as necessary.
 - We are thankful to all past staff members for their years of voluntary service and their helping pass information they have from their experience to new members taking over.
 - Letter to all Staff members Greg will draft a letter and contact all staff members about continuing on staff for future events.
- DO IT 2011 Update Pete discussed the enthusiasm Hawthorne has on the WPA returning to their site for Do-It 2011.
 - O Pete is working on securing the dates for the events and information will be posted to the web-site soon.

Old Business -

- General discussion on MIM (Minors in Manufacturing)
 - o This discuss will be on going as more and more information is acquired by the BoD.

Meeting adjourned at 9:00 p.m.

Respectfully Submitted by Kathy Bauer Secretary



Robert Coover was able to get these snaps of the WPA Firecracker Raffle Winner—the person that got the ticket that started the firecrackers going!

Congratulations to Jodi Walker!!!

3—2—1—FIRE!

Robert was also able to catch the Set Piece from the show. Good shootin, Tex!

The Long Goodbye

By Kief Adler

It's been a great run. Countless hours of hard work and many, many good times but my work with the WPA has now come to an end. I'd like to take this opportunity to thank everyone that I've had the pleasure to work with, every member who's said hello to me and every volunteer that helps make this club what it is. You'll still see me around at Winterblast, and maybe even a Do It or two, but not in any type of leadership position anymore.

For those of you wondering why, I'm guessing that you weren't at the Business Meeting this year and therefore, don't know that a vote was taken at the meeting to allow minors into our manufacturing area and (certain) hands on seminars. It doesn't matter to me that there is minimum age requirement, nor that there will be a special area for parents with their kids, nor any of the other safeguards to be put in place. The bottom line to me is a simple one: I don't wish to be joined into a lawsuit when a kid gets hurt from this policy, period.

Let's take a look at the club's history with minors for a minute. When I joined the club around Winterblast 4 or so, minors were allowed everywhere. Hell, my son got to help load and wire guns for the public display. In fact, that's how he learned, which was a great thing for him. At the first Do It (Greg Boyd's Pow Wow), minors got to build shells, mines, rockets, etc. It was a great event. And then I got elected president and started thinking about the real world that we live in and thought, "what an incredibly dumb idea!" Keep in mind that our liability insurance does NOT cover members, it covers "others". At the time I was also dealing with the lawsuit that a member had brought against the club and started thinking, "what if this was a kid?" Juries might look at an adult as being responsible for his or her own actions but a kid???? No way. So, after bringing this matter up to the Board, we passed a resolution that said you had to be over 18 to attend any live product seminar, or to be in the class B shooting area or manufacturing. At the time that this policy was put into effect, my son was not 18 so this change effected him, too. This is one of the reasons that Armageddon began at Do It's. The original Armageddon's were class C only. They were run and organized by my son so that he, as well as other kids, could work with fireworks and put on the main, and only, show at this event. I believe that one had to be 13 to work on the show and Paul Salverson, and other adults, took leading roles in helping to teach the kids certain techniques, but it was really their

show. When adults at the event started adding class B product to the show, and began adding more and more of it, my son walked away from the event and it soon became just another adult activity.

What other policies were part of my presidency? Certainly allowing members to purchase and shoot class B fireworks was my idea. Why? Because I knew that it would become impossible to sustain an event like Do It without something other than class C fireworks and because I also knew that it would make it more attractive to a potential vendor to service the event. Besides, there were plenty of members who wanted to do this, too, and it would help perpetuate the event. I made it clear at the time that I was not in favor of doing this at Winterblast, only at Do It, as it would be easier to police and control. I also knew that, if we allowed this at Winterblast, that class C sales would be hurt and we could, eventually, end up with the exact situation that we find ourselves with now: class C vendors are becoming few and far between and many of our vendors are no longer interested in vending at Winterblast. This is truly a shame. Of course, the administration that followed mine felt differently and that is why you see class B sales at both events now.

So now that you've had some history, let's get back to minors in manufacturing. One of the most vocal arguments that I heard in favor of this policy was that, if we don't start bringing in new blood to our industry early, eventually no one will be interested in fireworks. Really? I guess we better start letting 14 year olds into med school too then, right? Kids that I know can't wait to be old enough to work on fireworks shows. They don't lose interest because there's an age limit!

So what about the legalities? Those who manufacture at our events may think that they're covered by one of the club's ATF licenses but that is not at all true. The ATF comes to our events because we store commercial explosives, class B or 1.3, on site for more than 24 hours. They don't inspect our manufacturing area, nor do they approve or disapprove it. Why? Because we fall into a grey area in their orange book that says that anyone making less than twenty-five pounds of fireworks in a 24 hour period, and shooting those off in the same 24 hour period, is a hobbyist and exempt from their regulations. What happens when a minor is thrown into this mix? From an ATF standpoint, nothing, simply because we are not under their jurisdiction (we're exempt, remember?). And to local

The Long Goodbye By Kief Adler

authorities? Let's remember that we have to be 18 to work on a fireworks display. When a kid gets hurt in manufacturing, and this is not an "if" but a "when", and the folks at the hospital report that the injury was explosive related, what do you think is going to happen? To say that the s_t will hit the fan is putting it mildly. Think about reckless endangerment charges, a felony, if you're a parent of this kid... then think about the medical bills and now you're calling your attorney. And what does that attorney do? He sues everyone listed in the Winterblast program for a starter, just to see who has the deepest pockets. Don't think this is the case? Then, in my opinion, you are living in a fantasy land where everyone takes responsibility for their own actions and no one sues for anything.

And all of this dribble now brings me back to what I said much earlier: I have no wish to be a party to a lawsuit so, therefore, I'm not going to be a responsible party for the club, or for it's events. I still intend to be a member, still intend to put in my required volunteer time, but you'll not see my name associated with anything that we do anymore.

I hope to see you all at Winterblast where you'll probably find me hanging out at Camp Kirby and maybe even playing with the Jackalopes. I'm actually looking forward to my retirement and, like I said to start, it was a great run.

Thanks for the great memories.



http://www.pyronovelties.com

Blue Whizzies and Associated Effects

A by-product of Blue Strobe Rockets^G From a WWB seminar by Gary Berg

		Soli	Binder	Effects		
Name	NH ₄ CLO ₄ A	CuO ₂ B	PVC ^c	Sr(No ₃) ₂ D	Silicon ^E	Mg /Ti ^F
Blue Strobe Rocket	63	10	5	~	22	
Blue Whizzie	81	13	6	~	Additional 50%	
Purple Screamer	81	13	3	3	Additional 50%	
Blue Whizzie w/Tail	81	13	6	~	Additional 50%	Additional 10%

(All % by Weight)

- A) Ammonium Perchlorate 90 micron (or finer)
- B) Copper Oxide (Black)
- C) PVC powder
- D) Strontium Nitrate
- E) GE Silicon II Kitchen and Bath (Clear)
- F) Magnesium Powder 60 mesh or Titanium Sponge 60-200 mesh
- G) Blue Whizzies are a by product from the production of Blue Strobe Rockets as explained by Bill "Doc" Barr (<u>Blue Strobe Rockets – AFN Vol. 27 Cat. # V8z 1999</u>). We will follow Doc's basic formulation with a few changes and introduce new uses for these little monster mosquitoes.

Weigh out the solids and then screen the composition 4 times using a 30-40 mesh screen to thoroughly mix the components. **Important! Mix all of the solids thoroughly, and prior to, adding any binder!** The additional materials (Binder and Effects) are an additional percentage that is added to the total weight of the combined solids.

After the solids have been screened, place your mixing vessel on a scale, add the desired amount of solids and then add the binder to a ratio of 50% (by weight). Example: If 100grams of dry solids are weighed out - then 50 grams of binder is added.

As this is a rather messy process, a sealable sandwich bag has been found to be very useful (and advisable) to mix the composition in. A large, short paper cup is useful in holding the bag upright while adding the components. A slight

amount of air is desirable in the bag at the time of the blending so allow for this before sealing the bag closed.

The best method for mixing is to place the bag across the open palm of one hand and then grasp the bottom opposing corners between the thumb and forefinger with each hand. (This will keep the mixture from entering the corners where it is difficult to mix). With the other hand, in a closed fist configuration, it is now possible to knead the contents with the knuckles in a circular motion into the open palm. Experience will dictate your own preference for mixing but this has been found to be quite effective and with a minimal of mess.

After the compound has been mixed in this manner for approximately 2 minutes, the bag is then cut down the sides and folded open on a flat surface that has been covered with heavy paper (40# Kraft or better). It is at this point that a pair of latex gloves is advisable. A plastic kitchen spatula or squeegee is then used to scrape the mixture off of the bag and onto the paper. Scooping up what mixture you can with your hands, begin to make that snowball that you used to do so well as a child. The trick is to make the snowball by flattening and then recompacting back into a ball with both hands to blend the components together until it becomes like Play Dough.

When the mixture gets to a point where it does not stick to your gloves and has no marbling of components, tamp

Blue Whizzies and Associated Effects A by-product of Blue Strobe Rockets

From a WWB seminar by Gary Berg

the ball on the paper and bag to pick up any remaining compound bits then continue squeezing and packing it. Roll the ball into a cigar-like shape between your palms and then fold it back upon itself in addition to the snowball procedure. Repeat this process until there is an absence of visible powder marbling in the mixture and it becomes one homogenous wad of goo. This whole blending process out of the bag should take approximately 3-4 minutes at best.

The compound is now ready to apply it to your favorite application. The process involved will dictate the end result. Some applications are:

- ◆ Rocket headings
- ♦ Mini-Rockets (Supplemental sheet included)
- ♦ Shell inserts
- ♦ Mine inserts
- **♦** Cat Chasers

Disclaimer: These devices should be made only at sanctioned WPA/PGI events or where they conform to all applicable federal, state, and local laws. This compound should only be pressed and not rammed into rocket tubing. It is not shock tolerant.

Components required:

- 3" wide strip of 40 lb Kraft or Paint Grade Masking Paper9/16" end discs
- 1/2" ID. (5/8" OD.) copper pipe 4" length minimum
- ♦ 20p Spike Nail
- Quick Match (approximately 6 inches)
- ◆ 3-Shish-ka-bob skewers (the 3/16X10 inch bamboo ones)

Cut 3"wide paper to length¹, roll into a tube using the copper pipe as a case former, and glue in one end disc.

Take a Peanut M&M™ size piece of compound and place in the tube. Push it in gently and tamp all the way down with the head of the 20p spike nail. Repeat this procedure until it is approximately ½ inch from the top. Using the pointed end of the spike, push it into the compound, using a twisting motion, until it bottoms out at the end disc. This will

be the core of the rocket that also acts as it is own nozzle. The compound should be displaced up to the top of the tube and some may ooze out. While the nail is still embedded in the body of the tube, remove the excess compound so that it is even with the open end of the rocket tube. A small ¼ in. cone shape is fine also.

Take the piece of quick match and carefully remove approximately ½ - 5/8 of an inch of paper and fold the exposed match back upon itself. Now fold the match into a V-shape lengthwise and push into the open end of the rocket compound. This must be shoved all the way up into the head of the compound so as to light the very top of the compound next to the end disc. Use care in doing this so as not to collapse the core of the rocket in the process. (The greater the surface of the core exposed to initial lighting, the higher the thrust.) Tape a piece of visco fuse to the match at the exposed end. Do not try and use straight visco for the core. This will not work!

Now remove the point of one of the Shish-ka-bob skewers and use this for the center stick. Butt the un-pointed ends of the other two up to each end and tape all three together using minimal tape (remember the weight) just so it is strong enough to stay together. 2-3 winds of 1" masking tape should be sufficient. Light in the usual manner.²

Notes:

1) Length is dictated by the wall thickness. Make it thick enough to hold up to lightly packing of the compound but bear in mind the weight factor. Too much weight in the rocket itself will cause the C.G. (Center of Gravity) to move forward and cause the rocket to be unstable. After a portion of the compound burns the rocket C.G. moves forward enough to become stable and achieve straight flight. When that happens it goes in whatever direction it is currently aimed at, which is usually *toward you or the Vendor tent!!! In* order to overcome the increased weight forward you will have to add more weight

behind the nozzle end - usually a longer stick. Now you have a rocket that weighs too much and does not fly well or just becomes an upside down fountain. It's pretty....... but not our objective here.

2) When using the rocket launch tubes at most events I have noticed a burr inside the tube from when the steel tubing is cut with a cut-off saw. Make sure these burrs are not there, (file down), as the tape on the rocket stick may become hung up on it on takeoff causing the rocket to become pointed at *you and/or the Vendor tent - again!*

Remember!!!

These must be shot at the **B-line**

rocket area.

They may be small and cute but.....

They will go far!!!

If shot at the C-area, they usually head for the Vendor tent!!

In passing I would like to mention that these like to head for the <u>Vendor tent</u> or worse yet.....the manufacturing area!!! Keep them well away from both of these areas...<u>PLEASE!</u>! I thank you, the Safeties thank you, the Vendors thank you, and that angry mob, (especially those rocket guys), in the manufacturing area thank you!

- Gary Berg

NOTE:

I think Gary is the first person I heard "If one is good, more is better. Insanity is *JUST* about right!" These little things are a hoot when combined with others, all going off at the same time. Just something to think about before Do It...

- Tom



Safe & Reliable Wireless Control Systems Design & Manufacturing

- 25 years wireless firing experience
- First wireless system for pyro displays
- All products made in USA
- > FCC certified
- High quality, low cost systems
- Spread-spectrum, frequency-hopping
- Ranges from 1/2 mile to 2 miles
- Rapid design custom systems
- Stocking distributors in US & Canada

Corporate WPA Sponsor

808-372-0956 Honolulu, Hawaii 808-732-5419 (fax) www.holatron.com

www.holatron.com



DIRT

Reprinted, with permission, from Charlie Wilson and the RPMG "Hothead" newsletter

I'm not talking about scandalous gossip here, or even the dirt that farmers grow crops in. I'm talking about what you use for rocket, gerb and driver nozzles – i.e. Clay

It seems like every rocket guy has a favorite composition for nozzles, some hold the the opinion that theirs is the ideal mix and everyone else is crazy. In reality, none of these ideas involving clay are too muchy different from one another. Nozzles can also be made from metal, machined graphite and even plaster of Paris (more on that later).

This article will attempt to explain what different kinds of clay are useful for making nozzles, especially for black powder rockets.

First of all, what is "clay"? Wikipedia says clay is "a naturally occurring aluminum silicate composed primarily of fine-grained minerals." Then: "Clays are distinguished

from other fine-grained soils by differences in size and mineralogy."

"There are three or four main groups of clays: kaolinite, montmorillonite-smectite, illite and chlorite. Chlorites are not always considered a clay, sometimes being classified as a separate group within the phyllosilicates."

Four our purposes, we are most interested in two of the characteristics of dry clay. One is resistance to heat, and the other is how well the nozzle will "form". In addition, the resistance to erosion may come into play, depending upon the application.

Of all the clays, Kaolin has the best refractory properties. It is the highest firing clay. One might think that this would make it the ideal candidate for a rocket nozzle except for one thing: it is not "sticky".

Enter another candidate: Bentonite, which is a montmorillonite. There are two more types of Bentonite. The

A Note About the Cover

by <u>Tom Calderwood</u>

What can you say about Todd's Teathered Balls that hasn't already been said? Well, if you come to Do It, he *may* be able to go to the next level. THAT will be something.

Everything you see in this collage of images is real—including those streaks across the top. What are they? For the colored one, they are falling leaves. IF you have VERY dark skies, you can leave your shutter open and expose these things as they fall all the way down. You can tell that they were allowed to burn out because they always seem to flair out and on the image it looks like some rather wild hair.

Those white streaks? I call them Caterpillars, but those are the gerbs suspended from a small parachute. 8 or 10 are attached to a line, allowed to drape down, and move gracefully across the sky.

Here's hoping for great skies for Do It!!!

2010 W.P.A. Board of Directors

President Pete Wood

pete@westernpyro.org

Vice President Greg Dandurand greg@westernpyro.org

> Secretary Kathy Baird

kathy@westernpyro.org

Treasurer Deborah Ludwig

deb@westernpyro.org

V.P. of Publications Tom Calderwood

tom@westernpyro.org

most common is "sodium bentonite". There are also calcium and potassium varieties.

Sodium bentonite finds limited use in ceramics because it swells with water and shrinks when fired. However, when pressed under high pressure, it consolidates better than other clays. In ceramics, it is used as a kind of glue for less "sticky" clays and glases.

Bentonite also has absorbtive powers that make it useful. It is the main or sole ingredient in kitty litter. It is also very inexpensive.

It is also used as a drilling "mud".

Bentonite is the clay used for Estes model rocket engines. These classic black powder engines are "end" burning types which require a very tough nozzle with low erosion. For this reason, the nozzle composition is bentonite clay combined with something called "grog".

Grog is a course powder made from calcined clay articles (ceramics), most often from broken tile. Since ceramic tile is most often made from kaolin combinations of clay, the resulting grog is highly refractory. Any fired or "calcined" clay is more refractory than plain clay. By including some 60 to 20 mesh grog with the bentonite, the Estes nozzle has both rigidity and resistance to erosion during burn.

In Denver, we are fortunate to have a major supplier of ceramic materials: Mile High Ceramic. They sell large quantities of all different type of clay and ceramic chemicals (such as copper oxide and CMC). They sell different mesh sizes of grog as well.

On to the next clay: "fire clay". For years I have made BP rockets with simple "hammered" nozzles made from fire clay. Fire clay is what fire bricks are made from, very highly refractory – kilns are made from them or lined with them. Fire clay is not as sticky as bentonite, but more so than kaolin.

"apache" fire clay is the red colored clay that red brick is made from. Missouri fire clay, with the brand name of "Hawthorne Bond" is a tan color and produces the brownish color brick. It is often used to make stoneware pottery. Either fire clay will make a good nozzle for core burning BP rockets up to six pounds.

Kitty litter is usually granular bentonite clay. For some unfathomable reason, it is popular as a nozzle material, despite the fact that it is more expensive than bentonite powder from Mile High. (Or your local dealer... ed.) Even cheaper is the drilling mud type, if you can find a source for it. Samples of drill-

ing mud clay that I have seen are a yellow color.

Finally, another nozzle material in use is a combination of "Durham's Rock Hard Water Putty" with a grog-like component. The front of the package says "Does not shrink". The primary component of this putty is calcium sulfate, better known as plaster of Paris. In lieu of grog, ordinary "play sand" can be used to provide structure and heat resistance. Bruce Steyding, who makes the giant rockets seen at WinterBlast uses Durham's and sand for his nozzles.





E-mail: dmerlino@combinedspecialties.com