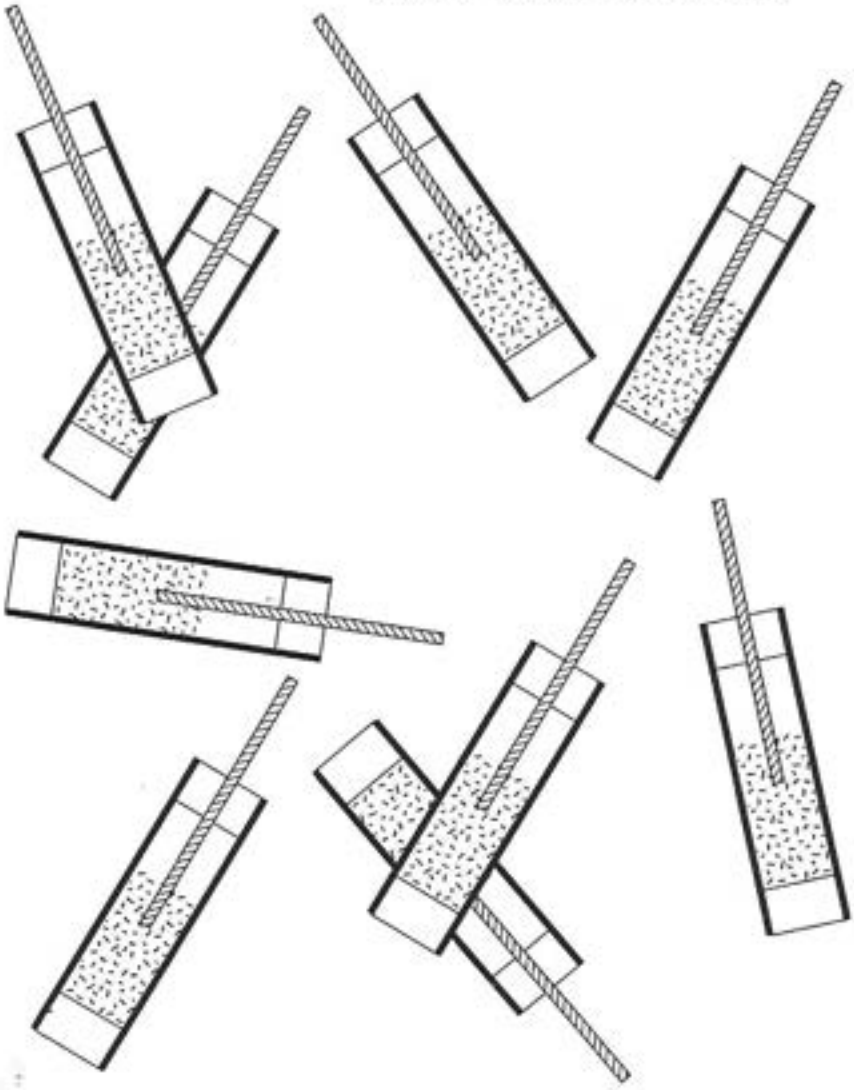
WPA

Western Pyrotechnic Association

Newsletter

Volume 11– Number 3 – January 2000



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Instructions for Authors and Advertisers

The WPA Newsletter is published quarterly by the Western Pyrotechnic Association, Inc. Articles submitted to the Newsletter may be on any topic of potential interest to WPA members. The Newsletter Staff will do their best to publish any reasonable manuscript submitted by WPA members. Electronic submission of manuscripts is strongly preferred. Guidelines for preparing manscripts appear in the first issue each year. If you have an article, advertisement, or other information you wish to submit to the Newsletter, please send the material to:

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IMPORTANT INFO ABOUT WINTERBLAST REGISTRATION

We don't know how it happened, but when the Winterblast Registration forms were printed, the deadline for early registration was listed as December 31. This is not correct. The real deadline is January 31, and early registration fees are in effect until then. Late fees will be assessed only for registration forms postmarked on or after 2/1/00. If you overpaid, the difference will be reimbursed when you check in at the WWB registration desk.

From the Board of Directors

A volunteer organization, like the WPA, cannot survive or thrive without commitment and hard work from its members. In fact, it is often true that the fate of an organization is determined by a very small number of dedicated members. The most recent WPA event, *Do It By the River*, was a great success because a relatively small number of members worked very hard and were committed to making it happen. Kief Adler, the organizer for *Do It*, deserves special thanks because of his hard work and dedication – particularly during the two tumultuous weeks leading up to the event. Kief was assisted by many others (e.g., Kurt Medlin, Mike Carter, Jill and Paul Salverson, Dimitri and Beckie Timohovich, Greg Adler, Noye Balmer, Keath and Miki Nupuf, and "Turds" Turro), who also deserve a big thank you from the WPA. (Apologies to anybody we omitted.) Collectively, these dedicated individuals banded together to make *Do It* possible. But when all was said and done, *Do It By the River* never would have been a success without the commitment from three groups of people: (1) Gary Lillich and the folks at *Flash! Fireworks*; (2) Gary Purrington and the folks at *Firefox Enterprises*; and (3) the folks at the *Avi Hotel and Casino*. These three groups stood by the WPA when many others would have walked away. On behalf of all members of the WPA, the Board of Directors extends its most sincere thanks and gratitude to these people.

From the Vice-President

by Kief Adler

This will be my first, and only, written greeting to you all as the WPA's newest Vice-President. Having been recently appointed by the Board to fill the vacancy left by Greg Boyd, my term will end at the next general meeting and I will then have to be voted into office by you, the members. You can read my candidate statement elsewhere in this newsletter regarding the upcoming elections. Since our last newsletter, many of you have enjoyed *Do It by the River*, the latest pyro event sanctioned by our club. I am delighted to have chaired the event and trust that the 200 plus in attendance had as good a time as I did! It was great to see our manufacturing license put to good use, and equally great to witness the fruits of some of our seminars. The wheels, rockets and shells that I watched were superb... especially those made by the first timers! Many thanks are due to those members who graciously gave of their time to conduct classes, helped with set-up and take down, and helped to fill the skies over the Avi hotel with fabulous fireworks. The Avi wants us back and I have every intention of "Doing it" again, so... look forward to a future announcement for *Do It 2*.

For those who did not make it to *Do It*, a small part of *Do It* will be making its way to Winter Blast this year in the form of Chef Joseph, proprietor of the Chef House in Riverside, CA. Chef Joseph provided food for the event, and he had all of us smacking our lips. (Don't miss his homemade Cajun hot link sausage). He has agreed to supply

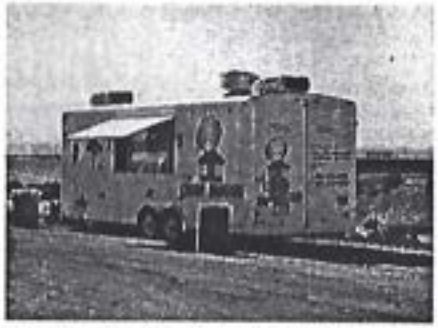
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us not just with dinners for the Blast, but to continue until closing time with an offering of short order snacks. I hope that you enjoy his cooking as much as the rest of us did.

Finally, as we head into a new century and a new Blast, I ask you all to remember that it takes a great deal of effort on the part of many people to organize this event for you. If you get a chance to see Jose Marquez, our convention chairman, or any of the other key people who help to bring you this event, be sure and say thank you. Sometimes, it's this simple acknowledgment that makes all of the hard work and sleepless nights worthwhile.

See you in Havasu!



Thanks to Chef Joseph for doing it by the river.

Sincerely,

Kief Adler

From the Communications VP

by Mike Workman

1999 was a busy year for the WPA. We weathered a tough couple of storms, and we did it well. We have a new VP, Kief Adler. Kief and many members put together a wonderful event in Laughlin, Nevada. The event was fun, profitable, and precedent setting. Beyond being a special, hopefully trend-setting event for the club, it was a strong statement of the strength of our members, and leadership, to carry it off under the dark cloud of sabre rattling by California authorities. Our club leadership, and our now Vice President, Mr Adler, did a terrific job of navigating these choppy waters. I was proud during these tumultuous times to be a part of that team.

As a club, and as members of a larger pyro community, we banded together in defense of Greg Boyd. For me personally, and many other pyros – including John Steinberg and Harry Gilliam, this was a chance to strengthen the bonds in our friendships. In all of the time since this occurred on August 26th, 1999, our community stuck together. I did not get a single negative letter, comment, or remark regarding Greg's situation or anything to do with it. The outpouring of donations left me at times choked up, and I was stunned by members' generosity and energy toward setting things right.

We have new officers and, as you'll see in the candidate statements, a chance to strengthen the club's leadership further. I personally would like to assume the role of Vice President, if elected, and allow Frank Feher to run for Communiations VP.

Before closing I would like to personally thank a few of the club's "godfathers", who you may not, but should, know: Harry Gilliam, John Steinberg, Gary Lillich, Richard Cole, Steve Rhodes and Jose Marquez. These people were constantly advising many of us throughout the year on difficult issues facing the club, and their patience, time and dedication to our club was truly spectacular. I have to say, if there is anything as wonderful as a sky in bloom, it is the way I feel when I observe the way the people nurture and protect our club. To all of them, a big thank you.

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I firmly believe that the club is on the right track, and that the gains we made in 1999 can be strongly parlayed into even more accomplishments and fun for our members in 2000. Let's enjoy each other, continue to help each other, and have a great time with pyro this year.

Sincerely,

Mike Workman

From the Newsletter Staff

by Frank J. Feher

This is the third newsletter since Winterblast X. Like the two before it, this newsletter was created using standard desktop publishing software and reproduced by xerox copying at a local *Office Depot*. These production methods allow newsletters to be created quickly and at a rock-bottom price (55¢), but they cannot produce newsletters with high-quality photos. While preparing for this newsletter, we briefly explored the possibility of producing a photo-containing newsletter by digital printing rather than xerox copying. After collecting a few bids, this idea was shelved because it would have increased production costs by a factor of 7 to 12. For a club the size of the WPA, this increase represents about $3,600 for each newsletter, or slightly more than $14,000 per year. This is a lot of money, and the Newsletter Staff did not feel comfortable pursuing this course without approval from the Board of Directors and members. The current newsletter was therefore produced by xerox copying of a document that could have been printed with a modern digital printer.

The photos in this newsletter looked fine when printed on a high resolution printer, but we are not sure how well they will reproduce when xeroxed. We apologize if the photos in your newsletter reproduced poorly, and we hope that you will understand and appreciate what we are trying to do. The Newsletter Staff has learned a great deal about desktop publishing over the past 6 months, and it has laid the foundation for producing high-quality printed newsletters in the future. When a new Board of Directors is elected in February, we will ask it to provide the budget necessary to produce four high-quality newsletters per year, including at least one newsletter with color photos. If our request is approved, you can expect your next newsletter to have many more photos. You can also expect it to be a lot crisper and classier.

A Letter From the PGI President

by John R. Steinberg

To the Editor, WPA:

Having read the letter from Frank J. Feher, in the October '99 newsletter, I couldn't agree more. Having now served as President of my regional club for a two year term and as President of the PGI for over a year now, I understand what is required to administer a pyro organization perhaps a bit better than most.

I am by no means the most accomplished pyro. I have never before managed an organization so large. But, I am willing to work. If more members who have organizational and administrative talents do not step up to the plate, our clubs will not realize their potential and thrive, as they should.

Management by default burns out those who stay on and attracts those who should not serve. To be an officer of a volunteer organization requires a commitment to selfless service and sacrafice. It requires time. There are no monetary rewards, but the satisfac-

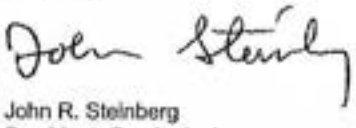
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tion of seeing your club fourish and grow is compensation enough.

To those who have the time and the willingness, the love of pyro and the necessary organizational talents, let me add my voice to Frank's: come forward, state your qualifications, run for office, and serve with honor when elected. We need you!

Sincerely,



John R. Steinberg
President, Crackerjacks
President, PGII
Member, WPA, FPAG, CPA (honorary)

P.S. Frank: regarding your other article in the October '99 newsletter, add step 9 – learn to make rockets!

Statement by Candidate for President

by Kief Adler

Dear WPA Members:

After careful thought and much soul searching, I have decided to become a candidate for President of the WPA. In the past year, I have worked hard on behalf of the the Club. I put together *Do It by the River* and overcame a number of last-minute hurdles that threatened to cancel the event. I also investigated the finances of the WPA and secured our permits with the ATF for the next three years. Most recently, I was appointed Vice President to fill the vacancy left by Greg Boyd. For those who do not know me, I am a "take charge" person who believes in getting things done rather than simply talking about getting things done. My passion for fireworks and dedication to you – the members of the WPA – has been demonstrated many times since I became involved with the WPA at Winterblast 4. I hope to remain involved for many years to come, and I believe that I am the kind of leader the WPA needs as its President.

The WPA requires strong leadership as it enters the 21st Century. If elected as President, I intend to accomplish many things. I will continue investigating new sites for Winterblast and continue the new *Do It by the River* event. I will also investigate hobbyist issues that continue to plague us and work hard to improve the lines of communication between the Board and both the area VPs and the membership. In order to accomplish these goals, I need a solid Board of Directors to work with me. To this end, I am running for office as part of a slate of candidates that includes Mike Workman as Vice President, Frank Feher as Vice President for Communications and Kathy Baird as Treasurer. Keath Nupuf will be returning as our Secretary. (Note that Mike Workman, after completing his first year as Communications VP, would like to finish out his two-year term as VP position and leave the Communications VP position to Frank, who has done an outstanding job as our most recent Newsletter Editor.) I not only ask you to elect me. I ask that you elect these exemplary fellow members as well.

The WPA has grown from the few dedicated pyros who incorporated the Club eleven years ago to the second largest pyro organization the country. We need to address the needs of the members as individuals, as well as the needs of the club as a whole. I know that I can meet the challenges facing the Club. I ask for your vote on February 20th and for your support of my selected slate of candidates. Together, I know that we can make a difference and lead the WPA forward.

Statement by Candidate for Vice President

by Mike Workman

Dear WPA Members:

I am a pyro hobbyist who has served the last year as the VP of Communications. While my intention was to run for VP last year, I was asked by active members of the club to run as communications VP and rely on them for help. Keath Nupuf has handled the Web page, membership, and data base work. Our newsletter publisher stepped down, but luckily Frank Feher stepped forward and has done a great job. We have put out some newsletters with member contributions, but we have much room to improve. Frank is willing to run for Communications VP if I leave before my term is up. I have decided to do this and run for VP with Kief Adler's ticket. Kief is a very talented, hard working pragmatist who I have come to admire and respect tremendously. He will do a great job as President of our club.

I have worked hard this year for the Club through several devastating turns of events: Greg Boyd's resignation, our treasurer's resignation and all of the work leading up to it. Our club has a new vice president, an active newsletter publisher, a new treasurer, and we sponsored the first non-WWB event in the Club's history. With the help of many members of the pyro community, we have also raised over $15,000 and received many generous contributions of time and energy for the legal defense of our previous vice president. Hopefully, the WPA BOD will continue the great precedents set by *Do It*, as well as the spirit of teamwork that developed during the difficult times. I am also hopeful that the BOD will remain focussed on positive club activities, like *Do It*, better newsletters, and the like. I would be happy to serve as Vice President for the remaining year and focus my energy toward these goals. I look forward to serving you as Vice President in 2000, if you choose to elect me. With the great new talent we have on the team, we will strive to make the second biggest pyrotechnics club in the US, the best pyrotechnics club in the US!

Statement by Candidate for Communications VP

by Frank J. Feher

The Winterblast is approaching rapidly, and it will soon be time to select a new group of officers to lead the WPA. I would like to be one of these officers and have the opportunity to help the WPA realize its awesome potential. If nominated for the office of Communications Vice President, I will run. If elected, I will serve with honor, integrity and distinction.

As many WPA members know, I am a Professor and Vice-Chair of Chemistry at the University of California's Irvine campus, and I have been the Newsletter Editor since June of last year. I have worked hard to provide a regular newsletter, and I am committed to seeing that the average member of the WPA knows what the Club is doing. If elected, I will continue to improve the quality of the newsletters you are receiving, and I will work with the other WPA officers to address and solve many of the problems currently plaguing the organization. I am especially determined to help the WPA make the difficult transition from an informally, inefficiently run club to a well-managed, highly respected organization that is capable of earning the respect and trust of people, politicians, law enforcement and regulatory agencies. A effective Board of Directors that is able to develop a set of short-term and long-term goals for the Association, a realistic plan for achieving these goals and a feedback mechanism for interacting with the membership could accomplish many important things in a very short period of time. I am sure that I can work effectively with the other candidates who provided statements in this newsletter, and I am confident that the WPA will make major strides forward under our leadership.

Jill's Report on "Do It By the River"

by Jill Salverson

The odds against "DO IT BY THE RIVER" were stacking up higher than those in the casino. But due to sheer will, mainly on the part of Kief Adler, the event went on and was a smashing success. My husband and I arrived Thursday afternoon to work registration. We weren't really sure what to expect. I have to admit there were some nerves working overtime on the drive out (& home), keeping eyes open for whatever may occur. But, alas, nothing. Anyway, we set up registration with the help of a man named Larry, whose last name I unfortunately can't remember. Believe me, it took three of us to keep up when it got busy. I enjoyed doing registration, it gave me a chance to meet and speak to alot of people whose names I've only heard or were completely new to me. I even learned how to pronounce Frank Feher's last name. (I'll tell ya at WinterBlast, for a buck!).



The first sign you see when leaving the AVI is not "Welcome to California".

Thursday evening shooting was a little quiet; not everyone had arrived yet. On Friday there were seminars about building rockets and making stars, and folks were busy making rockets and other things that go BOOM! There was a short kick-off meeting before shooting started, and as an opening ceremony, Beckie Timohovich fired a display of many thousands of crackers (16K?). Dimitri Timohovich launched several pumpkins from a 6" gun, and I got to fire a confetti bomb built by my buddy, "Turds". (I was kinda in a crouch and not really steady on my feet, so the concussion almost knocked me on my butt!) It was reported that the blast was heard inside the casino! Did you know pumpkins disintegrate when they hit water? The evening's fireworks were beautiful and very loud at times. We were allowed to shoot until midnight, and since there were no formal demos or public displays, there was plenty of time for anyone who wanted to shoot. We were tired and went back to the hotel early. Just as I was dropping off to sleep – about 11:30 PM – I could hear the "BOOM, BOOM, BOOM" of shells. Who needs a white noise machine when you've got pyro to lull you to sleep?



Salutes fired in the afternoon could be heard inside the casino!

On Saturday there were more seminars, one on cut stars (I think) and another on shell building. My husband, Paul, and I, and a couple of friends bought a case of silvery swallows and floral bouquets. We wired them together to test Paul's new "one-shot box" and went back to the hotel to wait until dark. After a swim in the chilly pool and some rest, we went back to the site. The shell building seminar was still in full swing, so I decided to join in. I built a 4" gold flitter shell with dragon eggs and 2 blue stars in the center. To my great surprise, it worked - beautifully! Even the battalion chief for the Fort Mohave Fire Department built and shot a shell! We set off our silvery swallows and then floral bouquets. Greg Adler made a class C

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Kief Adler inspecting some of the crackers used in the opening ceremony.

display called "Armageddon" from 100 shot Thunder Kings and other tasty treats. It was magnificent!!! – a master pyro in the making.

It was a terrific weekend, and everyone had a great time. People stepped in and helped everywhere needed. I was constantly asked what needed to be done. Volunteerism at its best. Sure, there were some who didn't pull as much weight as others, but there were others who did more work than was necessary. I especially enjoyed seeing those who gave 150% take some time off to have some fun. I also enjoyed the smaller size of the crowd at the event and not feeling intimidated by the large numbers of highly experienced pyros who attend the Winter Blast. I never would have built a shell at WinterBlast, but now I'll probably be in the thick of all future things.

Finally, there were no arguments or ego clashes. Just a bunch of people who love FIREWORKS! Kief Adler, you are a terrier! Once you get your teeth into something, you don't give up! Thank you, thank you, thank you. You did a wonderful service for the Club, if nothing else than show us to control a situation, not allowing it to control us. Thank yous also go to the Avi Hotel for, oh well, EVERYTHING! They could have shut us down in the blink of an eye, but they didn't. They told outside law enforcement to keep to themselves and outside the Avi's jurisdiction. That's brave. Firefox Enterprises and Flash! Fireworks were terrific supporters by donating product so that seminars could go on. It is the dedication of people like this that makes the difference. We're really a quiet and low key group, and I don't know why the outside world is so wary of us!



Many people built shells during Mike Workman's shell-building seminar.

My Favorite Sound Bites from "Do It By the River"

by Chris Spurrell

I've got too much rocket fuel. Does anybody want some?

Hey, can I borrow some flash powder and a bit of visco?

Good, the fire department is here.

Let's see if one of the firemen wants to light the fuse?"

"Do-It!" (The response from the Safety Officer when asked if we could set off 3 pounds of flash powder.)

Q: Was that Turds? A: Nah, that was TNT - Turds 'N Training.

"No matter what you do, there are some people who will complain. I just tell them it's across the river in Arizona and there's nothing we can do. (Avi desk clerk)

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Workman's Comp Corner (#3)

by Mike Workman

White Flitter and White & Gold Flitter Stars and Comets

There are many formulae in the world for making stars. So many so that sometimes it seems silly to invent new ones. But it only takes a few hours of study to discover why people keep working on formula and why there aren't as many formulae as appear on first glance: many published formulae stink. Poor availability or high cost of ingredients make many others impractical, and concerns about the toxicity of key constituents cause many pyros to set aside a number of other formulations. So, the pyro world continues to search for formulae that are: (1) composed of easily obtainable materials; (2) inexpensive; (3) safe; (4) easy to make; and (5) aesthetically pleasing.

There is a common theme amongst pyros that often drives new formulations according to (1) and (2) above: "I have a truckload of something-or-another and I want to find some formula to use it in." This approach is the "frugality/laziness is the mother of invention" category. So it was with me when I obtained a ton of 40 mesh spherical titanium. I designed two formulae that work equally well for both stars and comets. Formula I is a fairly bright white, medium-tailed black powder formula that makes wonderful stars and comets. Formula II produces a white star with a long gold tail. The head of this star is bright white, while a very long gold tail develops behind the star. This star also makes a spectacular mine, with white ascending flitter and a long gold flitter tail that develops somewhat delayed or behind the star.

	Formula I	Formula II	
Potassium nitrate	45	45	
Charcoal (Air Float)	15	12	
Granulated charcoal (80 mesh)	14	9	
Granulated charcoal (36 mesh)	0	8	
Sulfur	6	6	
Spherical titanium (40 mesh)	15	7.5	
Ferrotitanium (40-60 mesh)	0	7.5	(coated with WD-40)
Dextrin	5	5	

The ingredients above, save the metal and granulated charcoal, are ball milled together. I do 1250 gram batches for 24 hours because I have a Loritone tumbler and media that work well on this scale, and because I can make a batch every day and store for final mixing and either rolling or pumping comets. One word of caution, however, about using your comet pump with titanium. Spherical titanium, especially 40 mesh, has a way of getting between the walls of the comet pump and either jamming or ruining your tooling. This is easily prevented, but you have to be disciplined to save your tooling: put a thin layer of Chrysanthemum #6 or other Ti-free powder against the piston of the pump. The metal-free powder acts like a squeegee to wipe the metal down the cylinder wall when pushing the compressed comet from the pump. I have made many 1.25", 2", 3", and 4" comets in this fashion, and my tooling is still in great shape! I have also witnessed people trying to get away without doing this, only to permanently jam their tooling. Two tips: (1) don't contaminate your metal-free powder by using the same scoop, and (2) don't try to free jammed tooling with brute force. Be patient. Bang the outer part of pump lightly against a hard object and allow the vibrations to jiggle the components loose.

It can be a little tricky to roll stars using Formula I because the spherical titanium is like 40 mesh ball bearings and tends to roll around in the rolling machine rather than collect on the stars. To avert this strange behavior, the stars should be extremely wet. When cores are small, I typically use 2:1 (v/v) water/alcohol. After the cores are well coated, I use 9:1 (v/v) water/alcohol for stars up to 18 mm in diameter. For comets, I use about 0-15% alcohol in water. Have fun, and be careful!!!! The next installment of Workman's Comp Corner will include a guide for choosing the proper alcohol content to dampen compositions for stars and comets.

The Incredible Blast Shield Experiment

by Tom Calderwood

A Report from the 1999 Do It By the River

I have the great fortune of having a co-worker who is also a good friend. His name is Chris Spurrell, and he was the one who got me acquainted with the WPA. Last October, the WPA organized *Do It By the River*, held by the Avi Hotel along side the Colorado River in Laughlin, Nevada. It is at these events that we can fulfill our desires to construct and shoot off Class-B rockets. Chris likes to build whistlers, while I like pounding out black powder rockets.

Whistle rockets can be quite hazardous, especially if they blow during construction. There is a lot of pressure applied to the composition, and it is common to place the motor in a reinforcing sleeve constructed from PVC pipe and a number of hose clamps. Eye protection is a must when pressing whistle rockets, and it is a good idea to have an additional barrier for protection. Chris uses a Lexan shield to protect himself in case of a catastrophic failure during construction. But there always have been nagging questions about this shield. Would it really work? What materials would work best – Lexan, acrylic, wood? And how much Lexan would be required? One 1/4-inch sheet? More?

In order to answer these questions, Chris devised and staged an experiment where different kinds of shields would be tested by purposely blowing up a rocket engine inside a square box made with different materials on each side. Three different materials were tested: Lexan, acrylic (i.e., Plexiglass) and oak. One side of the box was constructed from 1 sheet of 1/4" Lexan. A second side was made from 3 sheets of 1/4" Lexan. The third side was constructed from a 1" thick piece of oak, and the fourth side consisted of two sheets of 1/4" Plexiglass. Because the goal of this experiment was to see if a shield would hold up to an open blast, gaps were left between the different materials. Each side was securely fastened at the bottom, but only clamped at the top to allow for flexibility (which is like the situation we face when dealing with rocket presses). The top and bottom sections were reinforced with steel plates held together by four threaded steel rods with heavy washers and bolts on the outside. A small hole was drilled in the upper plate to allow a fuse to be inserted into a whistle motor containing standard sodium salicylate whistle mix.



Figure 1

Figure 1 is a close up showing three sheets of 1/4" Lexan on the left, and 1 sheet of 1/4" Lexan on the right. The fuse, which was long enough for a 30 second retreat, is just visible to the right of the motor. Figure 2 shows the test box with 3 sheets of Lexan on the right, and two sheets of Plexiglas on the left. The side made from oak can be seen in the back, and the reinforcing sleeve with clamps is shown in the middle. Figure 3 shows how the top and bottom were reinforced with heavy washers. Steel plate was located on the inside of the top and bottom. The goal of this experiment was to imitate an explosion caused by pressing, so the upper and lower sections were really beefed up.

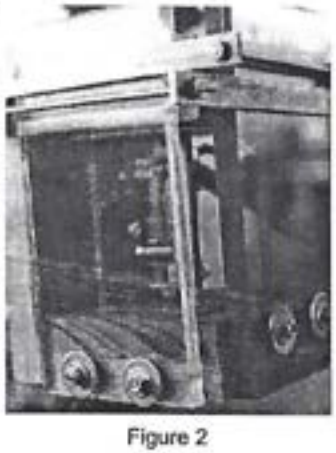


Figure 2

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The experiment itself was performed in a local dumpster. The fuse was lit and everybody retired to a safe distance. With a rather satisfying "POW", the experiment deployed. So what do YOU think happened? Did any of the shields fail? If any of the shields held, which ones sustained the least damage? Did the box hold together, or did it come apart? What happened to the dumpster?

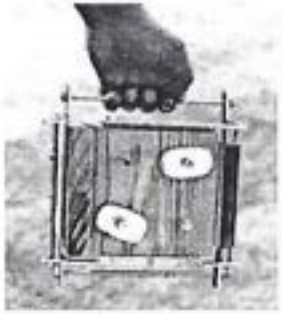


Figure 3

Well, the box survived surprisingly intact. It moved the lids of the dumpster when it went off, but the dumpster survived with no problems. The only shield that suffered any failure was the acrylic one. It was in two sheets, and the outside sheet fractured at the midpoint and separated from the device. All of the other shields came through without problems, but there was a lot of scorching and all of the shields were darkened on the inside.

Figure 4 shows what was left of the motor sleeve and clamps. Notice the lid, the steel plate used on the inside, and the charred wood. (There was no residual fire after the experiment went off.) The clamps in the figure were originally symmetrical, but they quickly turned into a lot of straight pieces. Imagine what would happen if you were standing right next to this motor without a shield and it went off while you were ramming it. At that point, you might want to call Steven Spielberg for a part in *Saving Private Ryan*.

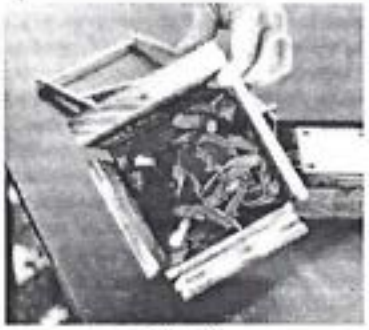


Figure 4

The end result? It is obvious that the blast from a whistle motor can create a lot of damage when the motor is inside a reinforcing sleeve. To avoid injury while pressing, it is a good idea to use a proper shield. Shields made from oak or Lexan are able to withstand an explosion, but Lexan is preferred because it is transparent.

One final note and a very big disclaimer: DO NOT TRY THIS AT HOME. As you can see, we did a lot of preparation for this experiment. Whistle rocket composition can be dangerous to handle. Our intention was to see what would be the best blast shield material, and we did this by imitating a real catastrophic failure. We did this to further safety for our fellow pyros, and under no circumstances do we assume responsibility for idiots who think that this would be 'cool' to try out unsupervised on their own.

This story and many other pictures can be found at: http://members.aol.com/rockettom. Hope to see you all at WWB! You can find both Chris Spurrell (falcons@earthlink.net) and me (tcalderwood@earthlink.net) at the B-Rocket line.

A Note from the Newsletter Staff About Minutes from the WPA Business Meeting and Board of Directors Meetings

WPA by-laws require that minutes from the annual business meeting and Board of Directors meetings be published in the Newsletter. The minutes appearing on the following pages were submitted to the current Newsletter Editor, who was not present at any of the meetings. Rather than attempting to edit these minutes, the Newsletter Staff opted to perform light editing to improve presentation without changing content. Please address all questions about these minutes to the officers present at the meetings.

Minutes from WPA Business Meeting (February 14, 1999)

Treasurer's Report: Basically, no report was given because we currently did not have a treasurer. An overview was given by the Secretary as to our financial status and the club was notified that a CPA had been hired.

Officers Report: The current Publications Officer, Sean Hale, resigned and the new job duties were described. The new position will consist of two VPs, one for communications and one for publications.

Steve Rhoads, the current Secretary resigned, and then presented a life membership to Richard Cole for his many years of service.

President: Tom Grace informed the club that he would stay on for one more year. Asked for club members' opinions on the following issues: (1) Date for the Winter Blast (No preference); (2) Number of days (At least three); and (3) Location of site (No preference).

Jose Marquez was appointed as Convention Chairman. Mike Carter was appointed to work with Jose Marquez to scout out new convention sites.

Election of Officers: Keath Nupuf made a motion to change the publications VP job to Editor, Assistant Editor and Publisher. It was approved by the membership. (Officers will work out the details of job duties.)

Election was conducted by Steve Wilson

Treasurer: 2 candidates - Glenn Vodhanel (81 votes) and Kief Adler (76 votes)

Secretary: 1 candidate - Keath Nupuf

Vice Pres: 1 candidate - Greg Boyd

Communications VP: 1 candidate - Mike Workman

Area VP's (all other areas stay the same)

Los Angeles Area: 2 candidates - Keif Adler (26 votes) and Paul Salverson (28 votes)

San Diego Area: 1 candidate - Rudy Schaffner

Rocky Mountain Area: 1 candidate - Charlie Wilson

Minutes from WPA Board of Directors Meeting (April 9, 1999)

Location: The office of Progressive Solution, Brea, CA

Officers present: Tom Grace (Pres), Greg Boyd (Vice Pres), Keath Nupuf (Sec), Glenn Vodhanel (Treas). Mike Workman (Publications VP) was present via conference call for most of the time.

10:35 am Open the meeting. Minutes read and approved from last WPA meeting.

10:45 am Glenn Vodhanel made a motion: Accounting and checks for review.

10:45 am vote. Yes: Grace, Boyd, Nupuf, Vodhanel. No: none.

10:45 am Glenn Vodhanel made a motion: Proposal to buy checks and check printing software to eliminate waste and reduce the time required to obtain new checks when info printed on the checks changes.

11:05 am vote. Yes: Grace, Boyd, Nupuf, Vodhanel, Workman. No: none.

10:47 am Keath Nupuf made a motion: Proposal to have a permanent mail box with forwarding. Discussed and modified to eliminate forwarding.

11:06 am vote. Yes: Grace, Boyd, Nupuf, Vodhanel, Workman. No: none.

11:15 am Glenn Vodhanel made a motion: To have convention Chairman request seminar presenters to provide cost estimates for their seminars and then obtain approval from the BOD. Mike Workman indicated that this would involve too much work and that it would be better to require approval for only the seminars that are likely to exceed a certain modest cost. Vote on motion. Yes: Grace, Boyd, Nupuf, Vodhanel. No: Workman.

12:08 pm Glenn Vodhanel made a motion: Explore requiring photo ID and short

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essay for all new membership applications. The goal is to have photo ID on WWB badges and discourage anonymity by potential bomb makers. Vote. Yes: Grace, Boyd, Nupuf, Vodhanel, Workman. No: none.

12:15 pm Mike Workman made a motion to end the meeting. Vote. Yes: Grace, Boyd, Nupuf, Vodhanel, Workman. No: none.

Minutes from WPA Board of Directors Meeting (June 15, 1999)

Location: N/A (Conference Telephone Meeting)
Officers present: Tom Grace (Pres), Greg Boyd (Vice Pres), Keath Nupuf (Sec), Glenn Vodhanel (Treas), Mike Workman (Publications VP), Jose Marquez (WWB XI Chairman), Kief Adler (Do-It By the River Chairman)

7:53 pm Jose: All vehicles need to have $5,000,000 insurance policy while transporting products.
7:57 pm Jose: Convention - Sent crew to Avi. At Havasu, concerns of product transferring to public.
8:11 pm Jose: WWB11 - At the track, both show and open shooting. No rockets on Sunday.
8:13 pm BOD: Do we ask the city to give us a subsidy?
8:16 pm Jose: No salutes after 10:00 pm and 12:00 pm ends class B. Jose provided his e-mail address and phone number to BOD.
8:19 pm Jose: Add a second tent to have vending at the same location. Tom/Glenn: At this time, we have no contracts. Jose: All registration at the track.
8:30 pm Jose: Will secure the track and contact hotels to set the host hotel.
8:33 pm Jose: Will assemble a handbook while getting the convention together.
8:37 pm Kief: Started talking about Do-It by the River. Jose left meeting.
8:40 pm Kief: DOT concepts tabled to next meeting.
8:42 pm Kief: No kids allowed in classes at Do-It. Will use markers to post "Under 18" on all youth badges. Will use bright blue wristband for youth.
8:47 pm Kief: Reviewed disclaimer then left meeting.
8:51 pm BOD: Approve $5 million D&B Insurance.
8:55 pm BOD: Send bill to Gary Lillich for $200.00 for clean up for WWB10 vendor tent.
8:56 pm BOD: APA membership will cost $600.00.
8:58 pm Glenn: Will apply for the membership.
8:59 pm Keath: Discuss WPA list.
9:00 pm BOD: Photo ID tabled for further info.

Minutes from WPA Board of Directors Meeting (Nov 24, 1999)

Location: N/A (Conference Telephone Meeting)
Tom Grace nominated Kief Adler for VP position. Workman seconded. Vote: Kathy Baird (Yes), Keath Nupuf (Yes). Unanimous. Kief is our new VP
Discussing the Convention: Nautical Inn is the convention center. We're doing the Public Show a the point. We'll do a Simulcast and pipe the simulcast into an audio set-up at the point. Sound equipment about an additional $300-400 (Killer rate from Tom). Need a (2) Porta-potty(s). Radios with people, need enough. Check in and out over radio. Rooms have been set up to be at or near the minimums from last year.
Safety Chair: Mike Carter with Noye Balmer, Tom Keach. Get them teeth. Ability

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to shut the B and C line down if they aren't happy.
Must sign up help. Sign up sheets at registration.
Security: Dimetri Timojovich (?)
Food: Chef Joseph (determined this guy CAN feed that many). Kief
"Room Comping": Site Forman - Yes, including clean up. Convention Chairman - Yes (turned down, recommended as a bargaining chip for Jose). Class C Organizer - Yes.
Transportation - ??? (Rhodes may do, we'll ask)
Assigned Job - Registration Comped
"Big-Hat" Job: Reg plus "comped" room.
Grace and Marquez - Registration Forms. Adler and Son (Greg) to help mail.
Tents Tables and Chairs: Abby Rents in Santa Ana, or Party Pizazz, total bill $2500.
Tents for seminars: EZ ups???
Seminars: Tom Perigrin? Jose will ask.
Public Display: Fireworks America - "Bulk" $15,000; Devon Dickenson; Pyro Spectaculars
Registration: $85.00
BANK: Baldwin Park
Salute-athon: Registration Form; Size limit - 3"; Focus Article in the Newsletter.
NEED AN ARTICLE FOR THE NEWSLETTER WITH ALL PERTINENT FACTS to Workman/Feher

Minutes from WPA Board of Directors Meeting (Dec 23, 1999)

WPA: Tom Grace, Kief Adler, and Keath Nupuf
WWB: Jose Marquez

WWB General: Sara Park Racing Track will be handled by the city. Insurance will be issued. Track has big ass piles of sand that might be a problem. "Tom with county" will establish an off road course for future. We will not have he track next year. We might need to move the container from track. Deposit for Track – unknown. Tom Perigrin will be seminar coordinator. Extend registration deadline to 1-31-00

Public Display: Tom DeWille will give product. Devon Dickenson would like to do a segment. Dan Ramsauer. Pyro Spectacular – Segment. Ron Dixon – Sticky match. Pyro America - $12,000.00 budget. Fire Art will provide solutes. Kief Adler will coordinate (?) salute-athon. Larry Mattingly – Guns.

People in charge: Medical – Darrel. Site Foreman – Sam Bragama. Safety - Mike Carter. Safety Assistant – Noye Balmer. Security – Dimitri Timohovich. Seminars – Tom Perigrin. Registration – Keath Nupuf. Vendor Chairman – Richard Cole. Public Display – Fred May? Volunteer – ???. Communications – Bill Daly. Corporate Sponsor – ??. Power & Lighting – Matt Riley.

Fireworks – Tradition Lost?

by Mike Carter

Struggle, hardship and sometimes bloodshed are often inevitable by-products of monumental human endeavor. Nothing makes a nation greater than to have a nation's people pull together in times of depression, famine or war, and put the combined effort of millions into achieving a common purpose. The pains of loss and tragedy are suffered and agonized quietly in every home, but the mighty exuberance of a victory shared, a major obstacle overcome, or freedom returned is an earthshaking and public event; the tremors of which can be felt for generations. Celebrations have played an important part in just about every facet of human existence since recorded history. While fanfare and regalia, dancing, marches and ticker tape parades have a place in our history books, none quite match the splendor and awe-inspiring fascination as that of a major fireworks display.

Works written as early as the year 1225 describe the art of pyrotechny. Since then fireworks have been a major part of victories, seasonal celebrations and numerous religious and regional festivities. In the United States, fireworks play an important role in the celebration of the Declaration of Independence. Remembrance of the fight for freedom and independence is captured in the National Anthem and in the tradition of private and public fireworks displays on the 4th of July every year. Some people's fondest childhood memories are of the splendor and beauty inspired by the oils of colored fire on the canvas of a midsummer night's sky.

From patriotic soldiers and next door neighbors to a quiet immigrant who took the pledge of allegiance, the simple beauty and majesty created by a fireworks display can echo the dreams, memories and aspirations of a lifetime for all who watch. Today that tradition faces greater opposition from government control and restriction than ever before. Unfortunately, the word 'regulation' has come to mean 'prohibition'. Totally banned in ten American States, the fireworks industry has come under direct and indirect attack. There are blame-driven, shark-like media feeding frenzies spawned at the mere mention of 'bomb' or 'explosive'. People are quick to pay close attention to such sound bites – especially after incidents like Oklahoma City, which are now a sad part of American history. Sensationalism sells, and the media capitalizes on it with wild abandon and complete disregard for the potential outcomes of such misinformed tirades.

Another blow is the present social condition, which is the direct result of an extended period of prosperity. For centuries, mankind has endured plagues, wars, and famine that have wiped out millions. Now, many of these things have been conquered by the growth of civilization and rapidly advancing technologies. As time marches on, there are fewer national emergencies and no calls to arms or duck-and-cover lessons to polarize the citizens. As a result, our society is searching for heroes. Perhaps this is why Hollywood paints such a grim picture of the future: futures where (insert some bad thing) happens and (insert a new, glamorous hero icon) saves the future of (insert what you wish to save) and the audiences go home happy for a few hours believing in some (insert hero type) hero.

This social condition has spawned a new generation of misdirected professionals that currently fight and argue for more legislation to protect and save the citizenry from itself. Among the targets of choice is freedom. The strategy used most often is the promised exchange of increased security in return for lost freedoms. It's a snowball that can't be stopped once put in motion. Interestingly, history shows that such governmental persuasions almost always start with an effort to disarm the citizens. What came next slowly destroyed the greatness of the society, and in many cases, ended up in civil war or world war.

One of the chief weapons used against fireworks is selective statistics, gathered from sources such as the National Electronic Injury Surveillance System (or NEISS). NEISS maintains a database of injuries categorized by type, cause and various other levels of detail. Proponents of anti-firework legislation lean heavily on the emotional and public appeal of injured children. Almost always this amounts to the frivolous display of blowing up watermelons or strapping huge, federally banned fireworks to plaster mannequins and

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blowing off their heads, hands, arms, legs or anything else that will shock and alarm parents. Looking into those same statistics shows a clear misrepresentation of the facts by anti-fireworks heroes.

The consumption of fireworks in the United State's centennial year, 1976, reached almost eighteen million pounds. In the first part of this decade, the consumption has increased from 67 million pounds in 1990 to 118 million pounds in 1996. While the consumption of fireworks material has greatly increased since the seventies, the injury rates per 100,000 pounds have significantly decreased. Figures published for the same years show that in 1990 there were 18.3 injuries per 100,000 pounds and steadily decreasing to 6.4 per 100,000 pounds in 1996. Closer inspection of the figures shows another very interesting fact: the chances of a fireworks-related injury are over 300% greater in states that have completely banned fireworks altogether!

While pundits play the dangers of consumer fireworks with media hype and traumatic displays of accidents, the real dangerous items are completely ignored. Using the same NEISS database, the following list, ranked by injuries caused by or during a given activity, is sorted by the number of emergency room visits per 100,000 youths aged 5-14 years.

Bicycles	978
Stairs, ramps	599
Baseball	321
Skateboards	158
Ice & Roller skating	152
ATV's, Mopeds & Minibikes	139
Fences	132
Fishing	55
Non-powder guns (BB's et al)	43
Fireworks	16

Written within a fact sheet from the National Conference of State Legislatures on "Injuries to Children Ages 5-14", the following is stated: "Fireworks is the ONLY category for which prohibition, instead of education and adult supervision, is often urged." Additionally, missing above, is the bulk of the cause of physical harm nation wide: motor driven vehicles, falls, and other sports-related injuries. These alone represent over sixty percent of approximately 70 million nonfatal injuries sustained by Americans each year.

Somewhere our educated doctors, highly trained lawyers, politicians, lawmakers and public officials have lost focus on the purpose of the celebrations. Instead of promoting regulated, inspected and commercially safe fireworks, efforts are made to demonize and intimidate those wishing to use them. The family tradition of mini backyard fireworks displays amid happy faces, food and fanfare are now made illegal and painted as a reckless endangerment to society. If these same heroes were really hero material, they would try to save America from the real injurious villains: in-line skating, skiing, football, baseball, basketball, running, hiking, swimming, camping, hunting, fishing, flying, yard work and driving. Yet the ultimate, most evil and injury inflicting demon of them all - the family kitchen stove goes untouched by the friendly, smiling media demonizers every year. Perhaps banning public holidays would be more productive exercise in reducing national injuries and deaths. Just look at the statistics for the mass human carnage for those days each year.

While the pervasive attitude of 'saving us from ourselves' continues to enjoy its presently heroic status, there will likely be more legislation, more 'regulation' to attempt to ban, control and manipulate the otherwise chancy, fickle and dangerous world around the inhabitants of society. It is not the fact that fireworks make a family outing, it is the root and underlying principle behind the freedom to possess and discharge them responsibly in celebration on special occasions without interference from government. It is a sad fact that some in this society increasingly seem to believe that personal responsibility should be replaced with more government.

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The diversion from personal accountability stems as a direct result from poor parenting, a lack of strong principles, a missing foundation of morals, and the lack of valuation and respect for personal freedoms.

Every year, fewer and less expensive displays are offered to the public. As the industry slowly collapses amid a dense core of heavy insurance, rising costs, media hysterics and red tape, an important part of America will die. With it, the same freedoms once purchased by fire - and the ability to express something beautiful in remembrance of those who purchased the freedoms for us - will also die. Robert Leo said it quite aptly; "An America without fireworks would be like the flag without stars." Perhaps this country no longer deserves either.

Works Cited:

Leo Robert, "What Can We Outlaw Next?"
American Fireworks News, #166 (July 1995).

Tom Perigrin, "Just How Dangerous are Commercial Pyrotechnics?" From the Internet (http://mercury.alchem.arizona.edu/~tip/safety/just_how.html)

John M. Drewes, "Media Dump on Fireworks"
American Fireworks News #71 (August 1987).

National Council on Fireworks Safety, Inc.
From the Internet (http://fireworksafety.com/laws.html)

National Electronic Injury Surveillance System
U.S. Consumer Product Safety Commission, Washington D.C.

Summary of Trade and Tariff Information - Fireworks (TSUS # 755.15)
U.S. International Trade Commission Washington D.C.

Miscellaneous:

Associated Press; Beloit Daily News - Thursday July 3, 1997.

American Academy of Pediatrics
(http://www.aap.org/advocacy/archives/fireweb.htm)

Consumer Product Safety Commission (http://www.productsafety.com/)

News from the San Diego Section

by Thomas Olson & Frank J. Feher

After numerous fits and starts, the San Diego section finally met in Holtville, CA, to do what pyro clubs are supposed to do. Saturday, December 11, was a fairly windy morning – too windy, in fact, to work outside. Thus, most activities took place inside a cozy assembly shed. As you can see from the accompanying photograph, the group wasted no time getting to work. In fact, the group managed to build several 4-inch and 6-inch Italian-style shells with whistles and reports while discussing its plans for the future. WWB XI is approaching rapidly, but the group is determined to display its work at WPA and PGI events on a regular basis.



Regardless of whether the group's work is first showcased this year or next, the San Diego Section is "building" for the future. The group plans to have regular outings during the year, and it has started a web page for their activities. This web page, which currently includes the beginnings of a "photo album" and an "assembly room" area for actively involved local members, can be found at: http://www.moters.org/wpaswd/

If you are interested in participating in the San Diego Section's activities, please talk to the Area Vice President (Rudy Schaffner) during the Winterblast or contact Frank Feher (ffeher@uci.edu), who is currently serving as Secretary/Organizer for the group.

WWB XI Update

WINTERBLAST IS COMING! Yes, it's that time of year again to prepare once again to smell smoke with your pyro buds. In spite of the late arrival of your registration forms, Winterblast 2000 should be another bang up affair (pun intended). After last year's successful four-day event, we have decided to maintain this new tradition and present another four-day extravaganza!

This year we will be using a split site in order to let our public display operators set up the display without worrying about rockets and shells bursting above and around them. Our public display will be presented by Fireworks America at Spectator Point. For those new to the Winterblast, this is the dirt area next to the Nautical Inn. Chairs and sound will be provided and only Winterblast participants will be allowed on the site. This will truly be our public display this year! With Salutathon 2000 as a finale, this years public display will not be for the squeamish... gentlemen: hold on to your hairpieces, and ladies, hold on to your skirts as this finale is sure to thump us as never before!

Another change this year is our new food vendor, Chef Joseph, an award-winning chef from Riverside, CA, and the Louisiana Bayou. After many years of BBQ, and the desire to find less expensive meals, we decided to try something new for Winterblast. Chef Joseph catered our *Do It by the River* event in October, 1999, and his meals were a great success. With a choice of two homemade entrees each night, his meals are sure to satisfy. In response to the need for more than cookies and candy bars after dinner, Chef Joseph will keep the grill and sandwich bar open all night. Those in the know will be lining up to sample his homemade Cajun hot links as an after dinner snack! See you at WWB XI

Flotsam and Jetsam

Small ads and other info are published as a service to members of the WPA, and the space here is made available to members on a first-come, first-served basis. All submissions should be ≤60 words and submitted by e-mail to the Communications VP along with your name, address, and evening phone number. Longer ads will be considered if there is sufficient space. Ads or info appearing in this section are neither endorsed nor verified by the Newsletter Staff or other members of the WPA.

LOST at *Do It By the River*: Steve Majdali lost a full set of 1# rocket tooling at *Do It*. If you happened to find Steve's tooling, please contact him at steve@pyrotechnics.org or (310) 534-1706 (evenings).

Grinding Media Available: "The Container Guy" (Bob Sarson), who will be attending his first WWB, has ceramic grinding media (90% alumina) available for purchase. Sizes are 50 mm round, 25 mm X 25 mm cylinder, 3/4" round and mixed sizes of 11/16" to 1/2" rounded-edge cylinder. The 2 latter sizes are used but still perfect for smaller ball mills. For more info contact Bob at bobhanabi@aol.com.

Bumper Stickers: "Honk, if you like big bottom shots". For more information, contact: Mary44DD@aol.com

Merlin 2000 Fireworks Kaleidascope™ See beautiful colored, white and silver kaleidoscope shell effects burst and spread toward you as you are bombarded with the sound of recorded fireworks! Built-in phone jacks available for stereo headsets. Even without the headset, the *realistic* sound is awsome. You can even watch and listen in the dark! Cutting-edge microchip technology; 11" long and 4" at the widest ball end; two AA batteries and an extra light bulb included with this unique instrument. Factory warranty. THIS IS A MUST SEE! Proceeds from all sales go to the Ohio Pyrotechnic Art Guild for insurance. Only $29.95 + $5 shpg. Money order, MC or Visa. Contact: O.P.A.G c/o Gene Koch, 1627 NE River Rd., Lake Milton, Ohio 44429. Phone: (330) 538-2526. E-mail: SKYFIRE@Prodigy.net