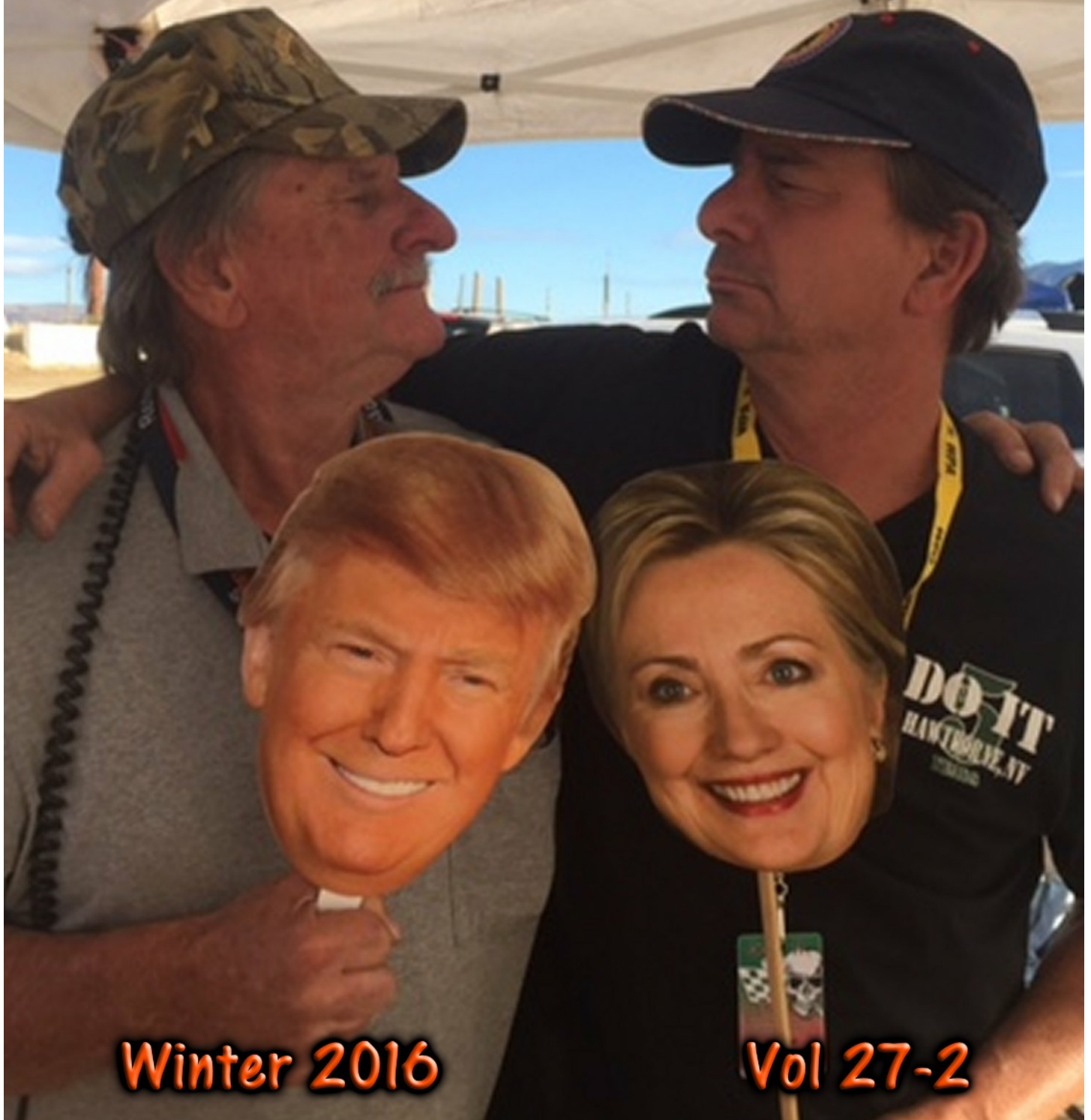


# Western Pyrotechnic Association Newsletter



Winter 2016

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## Elected Officers of the WPA

President	Chuck Eriksen
Vice President	Greg Dandurand
Communications	Pete Hand
Treasurer	Jane Anderson
Secretary	Dennis Miele

## THE SMALL PRINT

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 2012. All Rights Reserved by the Western Pyrotechnic Association, Inc., or the author(s), if so indicated, and is republished 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.



## FROM YOUR PRESIDENT, CHUCK ERIKSEN

I have just returned from my first "Do It" event and I have to say, "I was very impressed and enjoyed myself very much". I don't understand why I made all of the excuses for not attending the event in the past, but I know I will be coming back to Hawthorne many times in the future. If you have never made it to "Do It", start planning to attend next year. And a big thanks to all who made this event possible.

Coming soon, the board has authorized the purchase of "WPA Challenge Coins" for purchase by the members. The coins will be available at this coming Winter Blast. For those of you who are not familiar with the "challenge coin", the following explanation is offered.

A challenge coin is a small coin bearing an organization's insignia or emblem and carried by the organization's members. Challenge coins originated in the military as a means of identifying members of a specific military unit, such as flying squadrons. Traditionally, they are given to prove membership when challenged and to enhance morale.

The tradition of a challenge is the most common way to ensure that members are carrying their unit's coin. The rules of a challenge are not always formalized for a unit, and may vary between organizations. The challenge only applies to those members who have been given a coin formally by their unit. In our case, the members will purchase the coin as this is a way to generate funds for operations of the club.

The act of challenging is called a "Coin Check" and is usually loudly announced. The challenge, which can be made at any time, begins with the challenger drawing his/her coin, and slapping or placing the coin on the table or bar. Everyone being challenged must immediately produce the coin for their organization and anyone failing to do so must buy a round of drinks for the challenger and everyone else who has their challenge coin. However, should everyone challenged be able to produce their coin, the challenger must buy a round of drinks for the group.

The challenge coin can be carried in a pouch on a lanyard around your neck or in your pocket. Rules prohibit defacing the coin, especially if it makes it easier to carry at all times. If the challenge coin is attached to a belt buckle or key ring, or has had a hole drilled in it to be attached to a lanyard, it no longer qualifies as a challenge coin.

The coin is about 2 inches in diameter. It represents pride in the club and allows some fun too.



## Peep from the veep

Do-It is behind us, I want to thank all the people who make this happen. Joe Wright, DJ Dutra, Danny Dutra, Bill McGregor, Bill Ryan, Richard Haase, Jane Anderson, Maureen Dwinell, Victor and Gina Papini, and everyone else I forgot to name. This event is a lot of work, but we have a good time.

The BOD and your event chairs are hard at work on WWB for February. The club has a few surprises that all will enjoy. Please take a moment and think of where you can volunteer and help out. If all 500+ people who come to WWB gave 2 hours of their time over the 4 days, all our needs would be met. Also, if you are interested in a staff position, ask a staff person about it.

We are always willing to mentor up and coming talent. It is nice to work with the same staff each year, but nobody wants to do it forever. It would be nice to mentor and replace people before they burn out and have to be carted off to the rubber room.

I hope everyone has a safe holiday season and see you at WWB!

-- Greg Dandurand

## Meet the Mascot!



**The Board has created a mascot for the Club – quite nice don't you think? Well, this is our problem – the mascot needs a name. So, we are having a naming contest for the mascot. Send you ideas to [secretary@westernpyro.org](mailto:secretary@westernpyro.org).**

The winner will not only have named our new mascot, but will also receive some other goodies. The winning name will be announced at WinterBlast 28 during the General Business meeting.







# CONCERT FOR HEROES



By Dennis Miele

Did you know that Riverside National Cemetery is the Nation's second largest national cemetery? And that by the time the cemetery is at capacity 1.5 million veterans will call this cemetery home as their final resting place? Those are just two of the facts that I have learned over the past 12 performances that I have attended at Concert for Heroes. I have been attending these concerts along with a small crew to shoot the fireworks that accompany the concert. It's a small show – very small: the national anthem, and the at the end of the concert shooting to Stars and Stripes Forever (also known as the Sousa March). This free concert has been put on by the Riverside County Philharmonic Orchestra. Described by The Press-Enterprise, this is the only symphonic concert held in a national cemetery. It is also the only concert conducted in any cemetery that is sanctioned by the National Cemetery Association. Each year the attendance at this free event continues to grow. My first year shooting in 2003 there were about 2500 people attending; in 2016 there were 10,000!



*View of the shoot site from the audience/street side.*

As I mentioned, this is a small affair in terms of shows. However, this event means a lot to me as it is a small way to say thank you to all who have and are serving our country. Pyro Spectaculars, Inc., donates the product and my crew and I donate our time – and gladly so! Even though this is a small intimate venue, and the songs are always the same, there are challenges in putting on the show. First, since the product is donated I never know for sure what product I will get. There was the one year that all the cakes were red, white, and green! For a 4<sup>th</sup> of July show? Thank god I had an American Flag set piece! Arron Beargeon from Pyro has been great in helping with product. There was one season that I asked to talk to him about the product, and well, he wanted to talk to me as well. See, since this was donated show, Pyro wanted to reduce the amount of product, while I was asking for more product. The great people of Pyro Spectaculars gave me the additional product. See, the challenges with this show are two-fold.

First, the version of Starts and Stripes Forever is the standard military version (EXACTLY 3 minutes long). The one consistent has been getting the American Flag set piece every year (and I don't see that changing). So, the second challenge – but for the set piece – the remaining product is a guessing game as to what product will be substituted for what.



*My view of the amphitheater*

The shoot site is across from the cemetery's amphitheater. There is also a reflecting lake, so that is a great shoot site. At the shoot site, is an internment center so I have a built-in place to hang the set piece – over the wall, and reflecting off the lake. Off to the right by the rocks are where the comets, mines, and cakes are set up.

This is also a fun show to put on. My friend Linda always assists on this show. And we have a running joke about the show. We do the standard stuff for the national anthem – rockets' red glare, bombs bursting in air, and the something at the end. EVERY year, and I mean EVERY year, even though she knows it's coming Linda always jumps when I hit the first cue! One year, she jumped so high, Linda almost knocked over the table that had the shooting equipment.

Anyway, enough reminiscing. This show is generally held on the 3<sup>rd</sup> of July – sometimes the 5<sup>th</sup> of July. If you are ever in the Riverside/San Bernardino area and have nothing to do on the date of the concert please be sure to come by – oh, and bring all your veteran friends.





# Protecting our Identity

The Western Pyrotechnic Association has been around for many years – in fact, since 1989. The first WinterBlast was held in Mesquite, NV in 1990. We are heading into our 28 WinterBlast. Did you know the first WinterBlast with a theme was 1998 when the theme was “Smoke on the Water/Fire in the Sky”? *Did you also know that the Club didn't have any protection of our logos?*

Well, that has changed. During the summer, the Board worked to have our color and grayscale logos re-created so that we have print-ready artwork. With that print-ready artwork, we also now have something that we can submit to regulators to protect our identities.



Both logos have been registered with the State of Arizona as official trademarks of WPA. We have also applied for US Copyright protection of these same logos. And we have done the same with our new mascot. With the recognition from the State of Arizona and with the application to the US Copyright Office, we can now claim protected ownership of our logos and mascot. So, going forward any use of our logos or mascot is prohibited unless the Club grants explicit permission for others to use our logos.

Along these same lines, the Board is working on a WinterBlast logo, as well as looking at other items we can protect. As an example, the Club has purchased 'www.westernpyro.net' – with auto-redirect to our website [www.westernpyro.org](http://www.westernpyro.org). These are important steps to take to protect the identity of the Club as well as our signature events.



# TOM MILLER



Tom (Doc) Miller passed away on September 13<sup>th</sup> 2016. He developed an interest in fireworks at about the age of ten and as a teenager started his own retail fireworks stand. He started a pyro supply distribution business and a military pyrotechnics manufacturing facility in Whitewater Colorado which he later sold to the Kosankes, who in turn sold the the pyrotechnic supply business to Harry Gilliam (Sky Lighter). He was a charter member of the PGI and WPA and rarely if ever missed any of their conventions. I first met him around 1991 when he joined the Utah Pyrotechnics Association(UPA) that organized biannual shoots at Knolls in the desert about 80 miles west of Salt Lake City, south of I-80. When the UPA lost their shoot site due to hassles with the BLM he wanted to start a licensed hobbyist manufacturing facility in northern Utah. I was curious about how that process worked and joined him in that effort along with Bob (Killer) Pierson. We obtained our type 20 BATF explosive manufacturing license in about 1998. He was always trying to educate BATF magazine inspectors about fireworks and some of them didn't appreciate too much education. He was instrumental in organizing the Grand Junction PGI conventions in 1976 and 1979 and sold pyro chemicals at those venues. With the UPA he set up the opening display at the 1992 Idaho Falls PGI convention where a parachute flare drifted about a half a mile onto a tree in a residential backyard that started a fire. In 2000 he helped Chuck Johnson in establishing a commercial display company in the Salt Lake area. After retiring from the Wyoming State Hospital around 2006 he began making fireworks for competition at the PGI convention. In both 2007 at Fargo and 2008 in Gillette he took the Grand Master trophies. I believe his survivors plan to send up some of his ashes in a fireworks shell. — Bruce Beck

# DIARY OF A MADMAN

TALES OF DO-IT, 2016.

Ryan Parks

Memory, prophecy, and fantasy -  
The past, the future, and the dreaming moment between -  
Are all in one country,  
Living one immortal day.

To know that is wisdom.

To use it is The Art.

-Clive Barker, Everville (1994).

The above quote is a juicy literary rock I have carried in my pocket for many years. I have stood by its meaning (at least my interpretation of it) in every artistic endeavor I have ever had; be it as an athlete, a writer, a musician, or a painter of skies. I have stepped on each rung of its ladder in my daily life; be it as a husband, a father, or a salesman. It is one of the few quotes I have been able to keep in my brain with age, and can recite when needed, and often have, as a way of communicating we are all connected in one way or another. We are all family. We all have purpose. We learn from our past, we learn from right now, we project into the future – and we create with all of it. Those with creativity in their head, their hands, their eyes and their hearts can flourish and have a long prosperous and entertaining life, within the span of a winking lid. And those that lack that certain quality of artistry can still walk along the trail created by the others, and observe, laugh, and cry at what wonderful works the world has to offer each other. Because, we are all one country, living one immortal day ...

I am happy to state this is my tenth year as a member of our pyrotechnic family, the WPA. In 2006 I attended my first event in Lake Havasu, alongside first year member David Roberson, and our good friends Paul (aka Kirk) Gustin & Bob Heredia. The memories (still living one immortal day) in those past ten years have been a constant strumming of musical notes in my head, as each illuminates and then disappears. I have since met so many other members, whom have become friends throughout the years – creating a symphonic score of pleasure on a reel of moving pictures. To ten years of the best and many more years of the future, I thank you all.



I have written several articles in the past for the WPA newsletter and was always told they were thoroughly enjoyed. Fact or bullshit, I do not know, for in the same vein, I know each article was wordy and long. It's who I am and what I do, so deal with it. My first piece was a diary of sorts describing a trip with my friend Kevin Nakamura to his first event (Do It, Lake Havasu, 2008 I think). My last piece was on the history of pyrotechnic literature (I'm a rare bookseller for those that do not know). Pete Hand asked if I would write something for this years Do It – I liked the diary style of before – so let's try that again. Ready? Go ...

## WEDNESDAY

My goal was to leave Los Angeles by 7:00 am – didn't happen. My wife Sandra and I hit the road at 8:30, yea that's brilliant in the zoo we down here call the 405 freeway. An hour and a half later (should have been 30 minutes) we cleared the 405 and hit the 5, lanes started to clear up and off we went. After the 5 we hit the 14 North – I like this highway, it's when we start to go back in time, when we start to see the little towns, run-down or hood rats that many might be, they give me pleasure in some way, a peacefulness of less population or more nostalgia then plastic bodies and gigantic billboards. Where the 14 turns onto the 6 North we always stop at a little used military surplus shop (I recommend it if you're ever in the area) and browse for antiques or items we can use at the event. This time, no real goodies to be had for WPA use, but I did score on a rare blue-ray dvd (Midnight Meat Train, adapted to film from our quote writer above, Clive Barker) for \$5.00.



6 highway is beautiful in its own way, not much to see – but again, it's peaceful for me, most of the stretch is farmland, and its green – a color we do not see much living in Los Angeles. We pass a farm called “Zack Ranch” each year, and we smile – our youngest son is named Zack, we smile bigger the past few trips, as he has been in the Army the last couple years, and will be for a few more, we miss him – so we smile, and think of him fondly.



The 395 is the big boy freeway for most of the rest of our trip. We stop at a little restaurant each year called Mt. Whitney Cafe in the little old town of Lone Pine. The food is always good, home-made Mama cooking at its finest. Prices are cheap, plates are plentiful, and the service is excellent. Bellies full, a smoke break for me and bathroom break for Sandra, and we're off to Bishop, CA. Once there I made a stop to check out a local “rare” book shop. It was false advertisement, I found nothing rare there. I did like the selection of books, and the prices were good – but no gold in them there hills of dead poets and overly produced top-ten modern writers. After the 395 we take the 360 to the 95, both barren stretches of desert with mountain-

side eye candy, and soon we drive into the destination of Hawthorne, Nevada. We arrived at the El Capitan at 3:45pm.



For the last few years it seems to be kismet that when we open the doors and step into the lobby, on the other side of the room in walks Chris Kolina. For the last several trips Chris has checked into his room at the exact same time as Sandra and I. It's prophecy of the Art, perhaps the pyro gods are trying to tell me something about Mr. Kolina – they want me to make fountains. Our rooms were not ready and we were told they would be good to go in thirty minutes (which in reality meant 2 hours). We moved on over to the casino across the street.

I ordered a cold brew and Sandra ordered a kamikaze (an unusual choice for her, but hey we just started vacation, let's roll with it) and we sat at the bar and dropped some cash into the video poker. We said hello to our bartender "Sally", Paul had reminded of her name in a text earlier in the day. Sally was thrilled I remembered her name (thanks Paul) and she responded with a finger to her chin and "You guys are the pyro's, right? It's going to be a good week". Indeed, Sally.

I was actually winning some cash on the video poker and getting a few beers in my gut when our good friends Paul and Bob met up with us at the bar. Chris Kolina came in and sat with us, and we ordered more beer, and we caught up with jovial conversation. My good friend Lonny Ross entered the bar and took a small table next to us and joined the party. I started to lose on the machine, not paying much attention to what I was doing anymore and talking with my friends. The lovely Blue Parish came over and said hello and took up the chair next to me, we chatted and I lost more money. Blue and I talked pyro shop and then we talked horror films, an interest we both share, I thoroughly enjoyed that conversation. Much like my wife, any woman with hypnotic eyes and a passion for play-



ing with fire, should be paid attention. We found out at this time that others had been waiting for their rooms to be ready as well – Bob kept calling to check in and find out. After two hours at the bar, eventually losing all the money I had won along with my initial twenty bucks *[Note: that's why they kept you waiting - Ed]* the rooms were ready and we went to check in and get situated. The bar would be a target zone for the night, and we bid a short farewell.



To no surprise (the past) our room was not what it was supposed to be, we had two beds rather than one. Such is life. We ended up using them both anyway, Sandra tends to fall asleep before I do when we are on vacation, especially when “Afterglows” are each night. After our clothes and toiletries were put away I stepped outside to have a cigarette. Our next door neighbor happened to open their door and step out as well, behold my buddies Paul and Bob were rooming next to us, pyro gods be justified in your choices. We chatted more. My longtime friend Ernie Zepeda and his pal Martin showed up at our doorstep on the way to their rooms, as did Bob Deersnyder, Todd Hall, and Bill Ryan – we

had a little pow-wow on my non existent porch. I handed out several beers from my cooler, we talked and laughed, began our vacation and then headed back over to the El Cap for dinner and a movie (Passfire was to be shown in the conference room).

Paul and Bob, Chris and Lonny joined Sandra and I for dinner. It was decent. After that we headed to the conference room to watch the long awaited film Passfire, a documentary on pyrotechnics and its people. It was pretty darn good – though I must admit I only watched about half of it. My friends the Wohlieters (Tommy, Marsha, and Tommy Sr.) arrived and I struck conversation with them, and lost my attention span for the flick. I headed back out to the bar to have another beer and waste a few dollars on the machines. Sandra went to bed.

I saw our event chairmen Joe Wright and DJ Dutra sitting at a small table, exhausted from the extensive work they had been doing all day, both their heads in their hands, heavy on the table. In appreciation I bought them a round of drinks. I wasted some money in several slots and headed to my little home for the rest of the week.

I received a phone text from our best pyro-couple and dear friends Rich and Holly Whipple, they were on their way. The Whipples have become our manufacturing partners over the years, and more than that – our double dating friends at most all WPA events, as well as personal events outside of the club. They are kind, they are funny, they are intelligent, they are generous, and they make us feel overly welcome in any situation. The prophecy and future of our relationship with the Whipples is one of longevity and love. If you have yet to meet them, do so at the next event. With that text, I crashed in bed for the rest of the night.

## THURSDAY

- The weather sucked. So I won't bore you with lingering details of things that should have been done that couldn't be done due to wind and threats of rain.



I registered with Jane (our treasurer), a sweet lady and a perfect first person to get you on your feet and in the dirt ready for the event. I chatted with Greg Dandurand (head of security and VP of the club) and was thanked for taking up the job of making shirts again this year, in returned I thanked him for all he has done and would do at this event. I then made my way to the B bunker for my 11-12 daytime duty. Not much to do, only a few guys checking in and checking out, still early in the event. The winds started picking up.

I registered with Bill Ryan at manufacturing, gave a couple hellos to his little hairy friends (his dogs, not his rockets) and made my way to our production spot. There I met with Rich and Holly and we set up our canopies, turned on the I-pod jams and created a few shells. Plastic hemis, paper hemis, hot glue guns, razor blades, scissors, pvc couplings, stars and burst were set about the table and ready to be loaded into anything and everything we could get to fly into the sky. We bullshit about music while we worked and dirtied up our clothes (Saundra made some really cool pyro aprons specifically for manufacturing, but we never seem to use them, go figure). I talked shit about the band Rush to Rich (it is Rich's favorite), jokingly poking at his musical nerve (I like them as well, but they are not my regular rotation of tunes).



Rich and I talked shit about the Cranberries to Holly (the Irish yodeling to alternative guitars can be pleasant in short spurts but they kept creeping into the playlist more often than not). We talked about the masterpiece of Dark Side of the Moon by Pink Floyd. Rich and Holly were surprised to learn I like ABBA as they came onto the playlist, I also informed them I am a big fan of Neil Diamond as well (yes, this tattoo'd heavy metal guy likes just about everything). I gabbed about my recent Electric



Light Orchestra concert at the Hollywood Bowl, making Holly intensely jealous of not seeing one of her favorites.

I took a break from manufacturing to get Sandra from the hotel. Holly took a break as well and went back to her room. Rich continued to get ahead of the game before the weather got any worse, and made some preparatory work for the upcoming days. After an hour or so we went to the WPA safety meeting (hot dogs were an extra bonus provided by Gina and Victor, whom also cooked chicken dinner later for Afterglow). After its conclusion I struck up a conversation with first time attendee Jarod Spangler, we hit it off and I invited to come by our tent the next day and learn to make a shell (he did).

Holly, Sandra, and I went to dinner after a long day. Rich continued on in manufacturing. We ate at Molly's (previously, the Refinery) and it was really good. I believe word of mouth over the next few days made this place the hot spot for all other members to eat, we saw many familiar faces. The service was good, plates were plentiful, and food was delicious. If you didn't get a chance to go there, do it next year. You will not be disappointed.

After dinner, and in the thralls of high speed winds, we decided to call it a night. I kicked off my boots, laid on the bed and watched Star Wars, the Force Awakens on the television until Kylo Ren kicked my ass into sleep.



## FRIDAY

- A couple of cups of El Cap coffee, a cigarette, a shower, a kiss on the forehead of my wife (let the other half sleep if they are not ready yet, my friends) and a stop at the local Mickey D's, and I was at the Hawthorne track. Rich, Holly and I dug right into the motions and starting building. Six inch shells, four inch shells, rockets, special sauce, funny inserts (spinners, crackers, spiders, and hoosker do's and hoosker don't's). Jarod came over and began building right alongside us, a smile from ear to ear. Rich is a great teacher and took Jarod through the building motions as I threw out some extra do's and don'ts and Holly chimed in with her experiences as well. Jarod was on his way into pyro oblivion (and his first shell was absolutely beautiful, a six inch willow that was perfectly symmetrical at the line later that night).



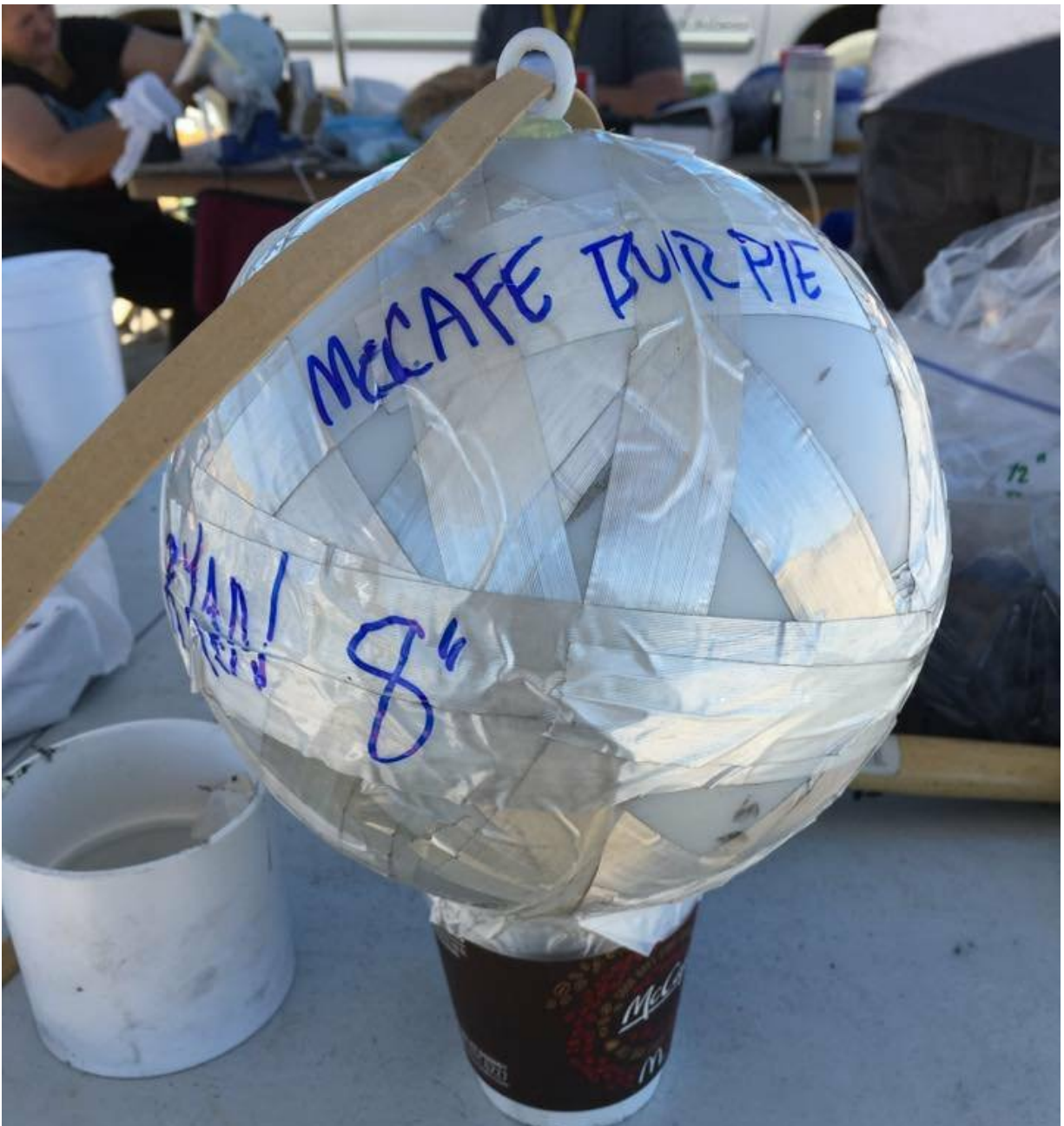
A couple hours later I picked up Sandra and she immediately got to work making a couple six inch shells, with some beautiful purple and green peony stars we bought from our product host, Flying Phoenix (thanks as always guys). We kept our eyes on the prize and manufactured like Oompa Loompa's in the chocolate factory, savoring every sweet nugget of candy in our hands. Such delicious morsels of sugar our fireworks can be to those of us that attend Do It, the diehards with a sweet tooth and hungry maws.

Walt Philips, second year member and Rich's good buddy came into town and made his way over to our tent. Set down right away, and began to build. He's a funny guy – whimsical and witty, I enjoy



his memories with Rich and Holly and his tendency to have something crazy to say about anything and everything someone else might talk about. Sandra made jokes this time about the Cranberries on the playlist, Rich, Walt and I laughed. Holly professed her Irish pride and told us all to stuff it where the sun don't shine. Bill Ryan came over to see how things were going, jumped into the conversation of music and we talked about the band Journey, and again about Pink Floyd. Bill told us some stories of hanging out with Journey and knowing the bass player in the band. He also gave up the information that the first song he ever heard that got him hooked on music, and rock n roll in general was "Yakety Yak" by the Coasters in 1958. Yea, Bill is that old.

Sandra and Holly went and got us lunch from a local deli. I don't recall the name of the place but it was good food – we got sandwiches, hot pretzels with cheese, and huge M&M chocolate chip cookies. I thank you ladies, and my belly thanks you as well. We ate and we built, and we talked and we laughed. I love this event. I love the people that attend, the members and the staff. It makes my pyro heart flutter writing these words, thinking of the memory, future, and prophecy of the WPA and its years to come.





After manufacturing for the day Sandra and I headed back to our room to unwind before open shooting began. Have a snack, get a drink, and take a shower. I received a phone text from my very good friend Bob Weaver who happened to be driving through town on his way farther north into Nevada. “Ryan, are you at Do It?” If you do not know who Bob Weaver is, you are probably not that familiar with consumer fireworks, he is the king of firework reviews and consumer firework credibility. He has worked with, and for, some of the leading companies in the country including Victory Fireworks, Phantom Fireworks, and Alamo Fireworks. He introduced many pyro enthusiasts into the world of fireworks with his famous “A-Z of Fireworks” books throughout the years. I am proud to call him friend. I met up with him at the El Capitan to have a beer and catch up with him since last we met (this past summer). Bob now owns a local firework shop in Goldfield, Nevada called Goldfield Fireworks. He just recently bought a home out there – and travels between that home and his home in San Diego, CA throughout the year. If ever in Goldfield, stop by his shop.



Our crew gathered at nightfall and went to the B-Line promptly to shoot our shells. All of them were successful, a feat we well know, is hard to come by as inventive pyrotechs producing mystery shells and testing scientific theories in little balls and stick rockets. Sandra made a beautiful purple peony six inch but tripped up her ankle on the line walking back to the blast shields, this would be a problem later. She also made a very nice green peony six inch that was a beauty off the line. I made a six inch half & half red/silver peony with some extra sauce, and a couple of six inch purples and greens. A little too much lift on my shells, otherwise all successful. Rich and Holly put up several nice shells including Holly’s annual “Unicorn Fart” - a garbage shell that has always been pleasing to the eye, she doesn’t seem to fail at capturing firework gold when she gets creative. Rich had some great shells as well, but unfortunately somebody at the B-line took advantage of their shooting privilege and shot two of Rich’s experimental shells containing amber stars Rich made from scratch. It was a pisser. Folks, don’t shoot someone else’s product. It’s unfair and it’s unkind. If you brought 4 shells up to the line, don’t shoot six. If a shell sticking out of a gun has a piece of tape on its fuse leader, and you didn’t put a piece of tape on your own, well then – it’s not yours. I hope the pyro gods returned the favor on whomever shot Rich’s shells.

After our shooting was over we went over to the annual “Afterglow” party and grubbed on some delicious carne asada tacos, beans, and pineapple salsa (with complimentary thanks to Steve Wilson, the Mathers, Blue, Roberto & Todd). Maureen Dwindell (aka “Spike”) was, as always, the hostess with the mostest. I sat and feasted with our group; Rich, Holly, Sandra, Lonny, Ernie, Martin, Chris, Walt and Jarod. A couple cold beers added to a perfect meal for a long days work. I was happy to see my buddy George Cacillas at the event. We exchanged shits and giggles and had enjoyable conversation, as most do at Afterglow. George is a well known guy in the consumer firework industry, and I’m happy to say a previous client of my book & collectibles store (he bought an autographed James Earl Jones photo as Darth Vader photo from me recently, thanks George). Bellies full, we went home for the night.



## **SATURDAY (final day)**

### **- 5:30 am – SIRENS ... STROBES ... HELL ON EARTH ... AN AIR RAID IN OUR ROOM...**

What the holy hell? I jumped out of my bed as if my ass was on fire and the ceiling was a water fountain. Sandra later said the words that came out of my mouth from a dead sleep were “What the f\*ck is that?” The fire alarm went off in our room. My first thoughts, we’re on fire, our room is on fire, something is terribly wrong. I ran around the room looking for fire, looking for smoke, looking for a way to turn that god damn alarm off. I have never in my life heard something so ear-piercing, so



dreadfully painful to the ears. Our hearts were rapid, our ears were on the verge of leaking blood and a furious strobe light kept blinking on and off like a giant beacon flashing from our wall. I went to our phone to call the front desk but couldn't get through (I assume others were doing the same thing). We then made our way outside the door – and about 10 other people had gathered outside, all of them with the same sense of surprise, terror, and anguish we were feeling. Yes, “what the f\*ck is that?” was appropriate. This siren and its strobes lasted at least five minutes. FIVE MINUTES OR MORE – in reality that is a very long time, especially to endure something so gut wrenching awful, be it sound and strobes, or someone bashing your knee cap with a hammer, it is terrible. Finally, it ceased. Everybody tried to go back to bed. Yea, sure. This horrific monster kicked Sandra in the head and gave her an instant migraine, one that never went away the rest of the day (or night). And for that, I was truly upset. The reason behind the alarm? Some a-hole burned a toaster while preparing toast in his room. Once again, I summoned the pyro gods to do their bidding and unleash the hell hounds of fire on whomever that person might be. Sandra took a migraine pill and a xanax and crashed for the rest of the day, her ankle had swollen up from the trip at the B-line the previous night, so she was in pain and the fire alarm had triggered a migraine from hell. She was down for the count. I let her sleep.

I met up with Rich, Holly, and Walt first thing in the morning and we started building. Shortly after our new friend Jarod joined us and built as well (we hooked him, I'm sure). I built an eight inch shell with brocade stars and a double-pedal with purple peony. I also built several six inch willows. Holly



made another “Unicorn Fart” and dedicated it to Sandra. Walt built his first rocket (with four motors on it, so it surely lifted off the ground), Jarod built another shell, and Rich built some beauties with crossettes and more hooker do's and hoosker don'ts. At lunch time we took a break and had some tri-tip sandwiches provided by Ernie, they were a perfect snack to hold us over for the rest of the day. We continued to build through the day.

I went back to the room just before nightfall to check on my wife and she was feeling a little better, thankfully – but still not up to shooting par, or adventuring into the night in the desert. Her ankle was still hurting and that racetrack dirt wasn't going to play nice. I went back to the track at 5:00pm and did my hour of safety duty, afterwards I went back to the hotel to pick up Sandra for dinner.

We all decided to have dinner at Maggie's. Rich, Holly, Walt, Sandra and I had a very nice meal and even better conversation. We talked about the previous days work, the people and passions of the



WPA, and we talked about that damn alarm. An hour or so later, I dropped Sandra back at the hotel and the rest of us went out to shoot for the last night of the event.



We met Jarod at the main tent (he asked to tag along again with us, he was having fun and learning a lot from our crew, and we welcomed him with open arms). Then as a group we all headed to the infamous Rocket line, Bill Ryan's funhouse and circus of amusement. We watched the Jackalopes launch several awesome girandola's with vibrant neon colors and golden sparks and top-breaks to boot – most successful, a couple not so much – but all of them entertaining nonetheless. You find out there is a reason for our "blast shields" when you are down at the Rocket Line, this is no lie. We watched Kief Adler try and launch his pyro-wheel machine on the ground...two wheels with multiple effects strapped down to it, and a long fuse (it was a good thing it had a long fuse). He put it on the ground and lit it up – I don't think it moved an inch, but it sure as hell went off. Sparks and colors and bangs blew about all over the place. We laughed, and just when we thought it was done, it blew up, and we laughed again. Without a little danger, and the possibility of failure, what fun would firework manufacturing be? We watched one of the Jackalopes launch a pinata of a donkey on a rocket, it was amazing. It flew straight up, took a left, and left in its trail a golden fart spray of fairy dust. Then it blew up into the stars.

From the Rocket line we headed over to the E-Fire B-line, Greg Dandurand's hidey hole of wonders. Once there we waited while the big guns were loaded. Tommy Wohlhieter and some friends put some of the biggest shells of the week in the guns and we sat back and waited for the stars to fall on



our heads, much like a fantastical background to a nursery rhyme dream. Only we were awake and standing right there, eyes wide open. Up went Tommy's sixteen inch, a glorious ball of brocade with a colorful centerpiece, sheer beauty. Following Tommy were a twelve and some eights and some tens. All of them wonderful pieces of pyrotechnic bliss. Now it was our turn. Rich and I (along with Jarod, as we wanted to show him how to load at the E-fire line with bog boy shells) loaded up our guns and headed back to the firing machine, to unleash our beasts of the night. And so we did, all three of them up and away, and successful. My eight inch double-pedal broke without fault and made my entire week. Rich and Holly's shells were just as fine, we could be happy for the rest of the night.





We headed to the B-line for the last stint of our shooting and we shot our shells. All six inchers, all of them successful. With sweat in our helmets, dust in our safety-glasses, and smiles on our dirty mugs, we made our way back to the main tent. On our way back we were witness to a 55-gallon mine blast, just another amazing creation of wonder produced by our fellow pyro-nut family. Did I mention, I love this club?



At the main tent Rich and I sat with Dave Ferguson and learned about rockets, real deal, big ass (or should I say BFR) into outer space rockets. Dave is a great guy. Local to Hawthorne, extremely intelligent, and an inspiration to others. I tip my hat to you, sir. We also chatted up some more with George, and Kevin Mather, and Todd Hall, and then we took our seats with Lonny and my friend (master of the camera) Tom Calderwood, and we talked about the nearby ghost town of Bodie (Bob Weaver also told me about this place the day before, guess I should check it out). Tom showed us some amazing photographs he took while there and described it well, with information plentiful. Tom works with a buddy of mine I have known since childhood, it's a small world, and a wonderful one at that. Living one immortal day...

Shooting ceased, and the crowd had gathered, one last cornucopia of the Western Pyrotechnic Association event "Do It", where the diehards come to meet and make muse of the four elements; earth, wind, air and most importantly fire. The last Afterglow was at full capacity and we were gifted with pizzas (provided by Flying Phoenix) and salad, ice cream and cake. How can you not love this club? Our event co-chair DJ Dutra made a speech thanking all cast members in our play of madness, mostly BOD members, but also Spike, our chefs, and even myself (for making the event shirts). DJ also hosted shenanigans with his Dad, as it was his 60<sup>th</sup> birthday. We sang "Happy Birthday" and he blew out a little chocolate cake with candles on it. Spike bought little muffin cakes to hand out to





everybody as well. Again I say, sugar morsels for the sweet tooth, whether it be friends, fireworks, or food – we digest it all with a hunger for pleasure and a belly full of well-deserved joy. It's really all about the camaraderie and friendship, the sharing of a unique fascination with pyrotechnics. Let's face it, we're crazy sons-of-a-bitches. But you know what? We're a family of them.

Rich and I gobbled up our slices of pizza, I threw back a couple beers, and we got up from our seats and made our rounds of "good-byes". The worse part of the event, is leaving the event. The worse part of friendship is being apart from your friend. You people, are all my friends.

**To know that is wisdom. To use it is The Art.**



Kevin Mather salamis

How does he find the time to make these? They would take me a week each.









Above: some of Chris Kolina's fountains.



Right and below: Mike Lee and company





## Photon Blue Stars

The most difficult stars to get right, it seems, are blue stars. If they're bright, they look too pale. If they're a deep blue, they're too dim. I've tried so many different formulae, with different chemistry - copper oxide, copper oxychloride, Paris Green (copper acetoarsenate). One of the better blues, the one I make most often, is Robert Veline's blue, using copper oxide. However, move over Veline Blue, there's a new kid in town, and it uses *actual native copper*.

Steve Cardwell, the creator, writes: *This is a formula I developed from other existing blue compositions. Basically you are burning copper in a reducing and high-chlorine environment to produce the proper spectra. This is a stunning, bright blue that is almost equal to ammonium perchlorate blues. I used 200 to 325 mesh copper powder.*

Now I know what you're thinking - Where the heck can you get copper powder. Well, Ebay, of course. The pyro suppliers seem not to have caught on yet. Ebay seller **chaochas4211** is currently listing 325 mesh pure copper powder for \$10.98 a pound at the time of writing - this is the least expensive I could find, but there are other Ebay sellers too.

Formula	
Potassium Perchlorate	60%
Copper powder, 200-325 mesh	13%
Parlon	13%
Sulfur	8%
Red Gum	6%

This formula is for a Parlon screen cut star. I have not tried rolling it - that would require a little added dextrin and water binding, but it should work. Screen cut stars, also known as rubber stars, are very quick to make. I've made them at Do It. They dry in hours and can be shot the same day. They can actually be test fired immediately, before they're even dry (but do this *well away* from where you're making them). You will work out of doors, naturally. In addition to the star chemicals, you need:

- Nitrile gloves
- Waxed paper
- Acetone
- ¼ inch wood dowels
- Broom handle size wood dowel
- A stout 3 mesh or 2 mesh screen
- Large, strong freezer grade plastic bags
- Star prime (see below)

You can make the screen yourself. McMaster Carr sells welded stainless steel mesh in the right sizes for about \$17 a square foot. Alternatively, Skylighter sells the same thing for about twice the price, or

framed for thrice the price. The Skylighter search term is “star making screen”. If you make your own frame, make it 2 inches deep, strong, and use the welded stainless screen. You are going to put a lot of pressure on it. Cheap hardware cloth will only be good for one use.

First make the prime. Almost any prime will do. A very simple hot prime - the one I use all the time - is Hardt Silicon Prime. You can use meal powder or mill dust. Screen the prime together and set it handy. Make about 4 ounces of prime per pound of stars.

Hardt Hot Silicon Prime	
Meal powder	40%
Potassium Nitrate	40%
Silicon Powder	20%
Dextrin	+5%

Make about a half pound of stars at a time. Don't make too much, because the acetone evaporates very quickly and you can run out of time. Screen the chemicals together several times, then transfer the powder to a stout plastic freezer bag. Add about 22% acetone (by weight) to the powder in the bag, pat the air out and seal the top. 22% acetone is 3.5 ounces per pound.

Put on the gloves and knead the bag in your hands until the Parlon softens in the acetone. When it's done it will be smooth and the consistency of soft dough. Work it down into the end of the bag. Then lay the bag between the two ¼ inch dowels and roll it with the large dowel until it forms a flat patty of uniform thickness. Remove the dowels, then with a sharp razor blade slice the bag down both sides and the top and peel the top back. Dust the top of the patty very liberally with prime. Then lay a sheet of wax paper over it and very quickly flip the whole lot over - bag, patty and wax paper - so that the wax paper is underneath and the split bag is on top. The prime goes everywhere, so it's messy. Peel back the bag from the patty and put it in a trash bag for burning later. Dust the new exposed top of the patty liberally with prime, and pat it gently down with your gloved hand so that it sticks. **Work quickly.** The acetone won't hang about while you take a bathroom break.

Now set a new piece of wax paper on the work surface and invert the star cutting screen over it, so that the screen mesh is at least an inch above the paper - 2 inches is better. Pick up the patty on the bottom sheet of wax paper and invert it quickly onto the screen. With your gloved hands, start working the patty down through the screen. Work from the edges, because you don't want the patty to spread and get thin. When all the composition has gone through and you are rubbing on the screen through the wax paper, peel the paper away and rub any remaining composition through with a rag. Then lift the screen away, spoon more prime onto the new stars and roll them around on the paper to separate them and coat them. Then take the screen and rub it vigorously with the rag until it's clean. *Do it now.* In five minutes it will be too late and you'll never get it clean. Set the stars out to dry. In a few minutes they'll start to firm up, and they'll be rock hard in two or three hours.

Your first reaction will probably be that these are the ugliest, most misshapen stars you've ever seen, and for sure they aren't the regular cubes you generally look for. After about 15-30 minutes you can tip them into a bowl with the rest of the prime and swirl them, which will separate them and knock the corners off and make them look better and more regular. When they are dry and hard you can spray them with water to activate the dextrin in the prime and swirl them in more prime.

**Blackfinger**