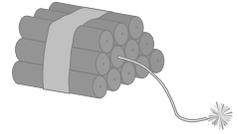


The Primer



Newsletter of the Golden West Chapter, International Society of Explosives Engineers
Alpha Explosives, P.O. Box 310, Lincoln, CA 95648

Volume 27

Winter 2016

Issue 4

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President's Message...

Hey Members, Guests & Supporters,

Wow, wasn't that a great battle between two opponents? It was an epic battle that's for sure! Two strong fronts going at each other with confidence and tenacity!! **Those Cubbies were awesome weren't they?** What did you think I was talking about? We have time to discuss other battles & events one on one on the 28th of January if you wish.

What's happening on the 28th you might ask? It's the annual Golden West Chapter business meeting and Crab feed, of course! Hopefully, the crabs will cooperate this year and our chef will prepare a great feast for our meeting. We have two positions up for grabs this year. The first one is the treasurer and the second position up for election is a board member. The way our election works is we hand out ballots to all the members and then the President asks for nominations for each open seat. Once we agree on the nominations we conduct our vote. At least, that's how it's supposed to work. If you like the way the chapter is being run and you would like to see things stay the way they are for now, so be it.

Current board members and officers are:

President- Mike Chiurato

Treasurer- -Gerald "Jerry" Fulgum

Secretary- Dannielle Edwards.

Board member/Website Master –Wes bender

Board Member/Newsletter Editor-Mike Burneson

continued on next page

The Primer

Presidents Message continued...

We have a special treat for all of you this year. Not one but two speakers to share some history of the California Gold Rush.

First, local San Franciscan historian Angus Macfarlane will share with us some EXPLOSIVE FACTS beginning with the “Explosives Oil” explosion (a precursor to Dynamite) in 1865 and the evolution of explosives manufacturing in the Bay area that soon followed.

Following Mr. Angus Macfarlane’s presentation, we have Mr. Mike Miller from the Sixteen To One Mine located in Alleghany California who will give a presentation on the history of a California Gold Mine that has been active since 1896.

See the flyer on page three with the details on what time and where the meeting will take place.

I hope to see all of you on the 28th!
Until then, Happy Holidays!! And be safe!

Be Safe!
Your President,
Mike Chiurato



Golden West Chapter
Of the
International Society of Explosives Engineers
P.O. Box 310, Lincoln, CA 95648



Annual Business Meeting

Members, Family, Friends and Interested Parties,

The Golden West Chapter Annual Business Meeting is just around the corner. We have Michael Miller, the CEO from the Original 16:1 mine and Angus Macfarlane, a local historian of the San Francisco Gold Rush era, scheduled to present. So come one, come all, to a great night of fun and merriment (and business!). We hope to see everyone there!

When: Saturday, January 28th, 2017

Where: Mt. Pleasant Hall
3333 Mt. Pleasant Road
Lincoln, CA 95648

Cost: Members and Guests: \$30.00
New Members – Free (\$25.00 dues are payable upon joining)

Registration: Please make your reservations with Mike Chiurato at (916) 645-3377 or by email at mchiurato@alphaexplosives.com

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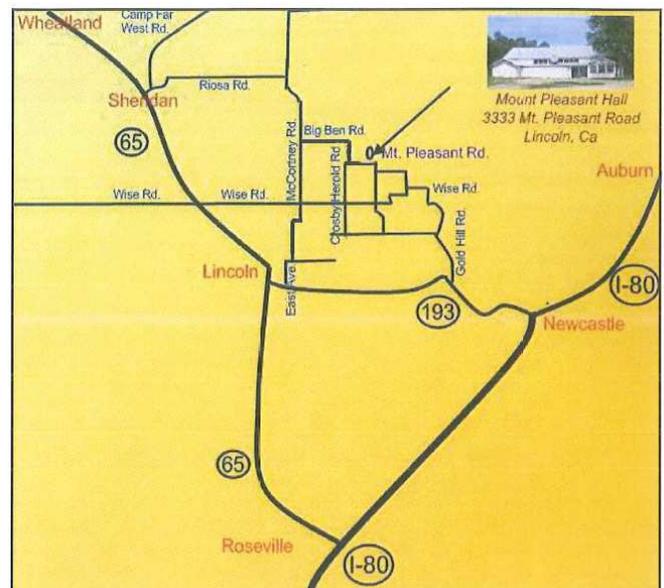
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Agenda: 4:00pm – Social Hour
5:00pm – Dinner
6:30pm – Business Meeting/Election
8:00pm – Raffles!

Directions: The easiest route to the Mt. Pleasant Hall location is to come in from Highway 65, and turn EAST on West Wise Road. Continue for about 4 miles and turn North onto Garden Bar Road. Continue straight when Garden Bar Road and Mt. Pleasant Road merges. Follow the road with the sharp left turn, and the Hall will be on the Right



Early Days at Alpha Hardware Co.

(continued from the previous issue)

by Wes Bender

I was witness to numerous incidents while employed at Alpha, some were humorous while others were lessons from which one could learn. It's always been my philosophy that, if you can't enjoy something, then go find something more enjoyable to do. Obviously, my staying at Alpha for 14 years indicates that I mostly enjoyed the experience.

One humorous incident (where I maybe contributed a little) was when a customer from Auburn called and ordered 50 each 12 ft Hercules Millidet Caps, delays 0 through 13. We normally only carried those caps through delay number 12 and I advised him that I would have to special order the 13s if he had to have them. He said not to bother. He would wrap the wires of a 12 around a nail a couple of turns and that would delay it sufficiently to be a 13. I suggested that he not try it because the method wasn't reliable. I told him that we had already tested that theory by wrapping the wires of a #6 delay cap around a 25 lb keg of track spikes out in the warehouse and it didn't detonate for two weeks.

We sold explosives in small quantities to many of the little mines around the Nevada City, Alleghany and Sierra City areas. This was the reason for keeping our Sunset Magazine in place as long as we did. One particular fellow came in and asked if we had anything he could use to light fuses. I indicated that we had Ignitacord and Ignitacord Connectors that were intended for that purpose. I asked what he had been using and why he wanted to change. It turned out that he had been using a cigarette lighter to light his fuse, but was now quite a ways underground and there wasn't enough oxygen to keep the lighter flame lit. I tried to explain that, if the lighter wouldn't stay lit, there wasn't really sufficient oxygen to support life either and that he had better get some ventilation in there. He didn't seem too worried about it though. A week or two later his wife came in for some mine supplies and I gave her the same advice (hoping that she wouldn't suddenly become a miner's widow.) I don't know if he ever added sufficient ventilation or not. On hindsight, I guess I could have sold him a canary.

Jim McCann was one of the Hercules technical reps in our territory. He used to call on a quarry in one of the foothill communities that was owned by a fellow we'll call Spike. Spike's quarry was located within the town limits. All of his holes were dry and he used AN/FO for almost all of his blasting. Spike's main complaint was the cost of the cast boosters that he needed to initiate the AN/FO. One day he asked Jim why he couldn't just bunch up some detonating cord and use it instead of the boosters.

Jim told him that, while it might initiate the AN/FO, it wouldn't do so reliably. He added that the boosters were initiating the AN/FO at full strength at the bottom of the holes and that's where you need the most energy to get good fragmentation.

Spike thought it over and decided to conduct an experiment on his own. He really wanted to get away from the expensive cast boosters. He took a 50 lb sack of AN/FO, laid it on the quarry floor and ran a piece of detonating cord across it. From a safe distance he detonated the cord. As one might expect, it ripped the sack open and scattered a small amount of AN/FO, but failed to detonate it. After analyzing the results, he modified the test, stringing several lengths of detonating cord together across the sack of AN/FO and then placing another 50 lb sack on top.

This time when he detonated the cord, he got a low order detonation of most of the 100 lbs of AN/FO, breaking windows in the vicinity of the quarry and also in a few of the town's businesses. This resulted in the town pulling his permit. He later tried to claim that Jim had told him that detonating cord wouldn't shoot AN/FO, but Jim wouldn't have any of that. I don't know if he was ever able to reopen his quarry.

When a contract was let to build two dams in the foothills east of Madera, a subcontractor was engaged to quarry the necessary rock for both dams. Hercules and Alpha made a concerted effort to obtain the explosives business for the quarry. In the process, they offered the free use of an old surplus AN/FO mix truck and an overhead bin for ammonium nitrate, figuring that this would be the most cost effective way to conduct the blasting and just might obtain the business. Hercules and Alpha were successful and the truck and bin were delivered and set up. At the time, AN/FO was selling for \$5.25/cwt in 50 lb bags and 40,000 lb shipments. The sub-contractor's quarry superintendent was a fellow we'll call Harvey. Harvey preferred using bagged AN/FO rather than using the bulk truck and, after the initial delivery of ammonium nitrate, ordered only 40,000 lb shipments of the bagged pre-mixed product. He seemed to delight in calling me at 4:00 or 4:30 in the afternoon, wanting a 40,000 lb shipment by 7:00 the next morning. Eventually I worked out a deal with our trucking company to have a drop trailer standing by at the plant to alleviate the panic a bit. At the time, Alpha's largest truck was a bobtail.

Several incidents that happened during this project bear telling. For whatever reason, they seemed to get a fair amount of oversize rock out of the top of the shots and had to do quite a bit of secondary blasting. Rather than drilling one or two holes in the oversize boulders, Harvey would stack a few sacks of AN/FO on one side of a boulder and set it off with a stick of dynamite. The flyrock that was spalled off of the opposite side was pretty fierce. In one instance it totally demolished a porta-potty that was located nearby. Luckily nobody was using it at the time. You can imagine the look on the face of the guy when he came to service the unit and all he found was a pile of green fiberglass.

One day I got an urgent phone call from Harvey, asking if ammonium nitrate could detonate if it was on fire. I told him that absolutely it could and was going to relate the incident at Texas City to him, but before I could do so he hung up. Apparently it was a very urgent situation on his end. Eventually we found out what had happened. Since they hadn't used the ammonium nitrate that we had delivered to the overhead bin, Harvey decided to sell it to some local farmers and was using the mix truck to deliver it. Somehow the truck caught fire en route. The truck was destroyed but luckily the load didn't detonate. I suspect that Hercules' insurance covered the loss of the truck. I don't know if Harvey's employer ever found out about his private AN sales efforts.

Auburn dam was on the drawing boards and the Bureau of Reclamation was doing research on the intended site of the new dam. There were several supposedly inactive faults near the project, so they had seismic monitoring equipment set up to see if there was any seismic activity in the vicinity. They thought they had all the local sources of large scale blasting identified. They had visited Alpha to learn where local quarries, mines, etc. were operating.

After a couple of months of seismic monitoring (sensitive earthquake instruments, not blasting seismographs), they started recording some fairly large events that appeared to be occurring up near Foresthill. They called me to see if anyone had opened a quarry up there or if there were any large construction projects up in that area that were blasting. I didn't know of any. A few weeks after their call, Leo Lorang, a logger from Colfax, came in to Alpha's warehouse to purchase some chokers and order some more AN/FO. I saw him come in and went over to say hello. I asked where he was working. He said up near Foresthill. I asked if he was doing any blasting and he said that he had to blow quite a few stumps on the future site of a new development. I mentioned the Bureau of Reclamation's inquiry and he said that he might be the possible source of the events on their instruments. He said that when he had a large stump to blow, he would stack a couple hundred pounds of AN/FO up against the side of the stump, push dirt up over it with a Cat, move to a safe location and shoot it. I suggested that he could use a lot less AN/FO if he dug out under the stump and then placed a smaller amount of explosive there. Leo said that was too much work and, in any case, he wanted the stumps clear off the property.

One of the more interesting characters who lived in Nevada City was Luthena "Alleghany Lu" Casten. She had a company named San Francisco Treasure Box, Inc. and operated the San Francisco mine up near the little town of Washington on the South Fork of the Yuba River. It was a very small operation, consisting of Lu herself and maybe one other employee. Lu had gold fever bad. She was always sure that a major gold strike was just a round or two further into the mountain.

Lu had obviously been a strikingly pretty woman in her younger years and her bearing led you to believe that she was from a good family and was well educated. She came to California from Montana in the '30s. I heard the story that she once won a beauty contest in Reno, but they disqualified her when they found out she was married. Lu came to Nevada City and worked as a waitress in the National Hotel where she met some of the miners who came down from the mines in Alleghany. Eventually she wound up in Alleghany where she and a partner operated the Seven Aces mine. That's where she picked up the nickname Alleghany Lu. She lost control of the Seven Aces mine in the late '50s over some legal matters. Eventually she purchased the San Francisco mine in the little town of Washington.

Lu always seemed to be a little short of cash with which to operate the mine. Unfortunately, she couldn't get credit anywhere in the area and everything was cash only. She bought what powder and accessories she needed from Alpha. I felt a little sorry for her and always managed to give her a bit of a price break on what little explosive she bought.

When she would run out of money, Lu would pack her bags and go to San Francisco to meet with some of her financial backers. She would always come back with enough money to operate the mine for a while longer. On occasion, some of her backers would come to Nevada City. On a couple of occasions when Claudia and I went out to dinner, Lu was there with one or two of her financiers. She would immediately call out to me to come over to the table, where she'd introduce me to her gentlemen friends as "my powder man". It was a bit embarrassing on my part. Of course, I wasn't her powder man per se, maybe her powder supplier, but I didn't try to correct her in front of her gentleman friends.

Eventually Lu's health began to fail and she was forced to close the San Francisco mine. She had it up for sale and she passed away at some point after I left Nevada City. Lu never struck the big gold vein that she just knew was nearby. I liked Lu. She was larger than life. You always knew when she was in the room.

There were many, many other characters around the Nevada City/Grass Valley area back then and more than a few humorous incidents, but space prevents me from listing them all. (People like Ray Dallugge who owned the Crazy Horse Saloon behind Alpha. Ray advertised "the coldest beer in Nevada City". And it was too, until the lines from the kegs froze one day.)

I hope you've enjoyed reading about some of the history of Alpha and Alpha Explosives. It was a large part of my life and gave me a start along my way toward my next career as a consultant in the explosives industry.

The Primer

Editor's Notes...

When I read the President's message the first time, I thought he was talking about the Warriors and Cavaliers. Then I was thinking Hillary and Trump. I have to tell you I did not remember the Cubs won the World Series. Who would have ever thought that would happen. In this issue I hope you took the time to read the article by Wes Bender. This was part three of the Early Days at Alpha Hardware Co. I really enjoyed the history and appreciate the grand story told by Wes. Thank you Mr. Bender. Please plan on attending our Dinner Business meeting at Mount Pleasant Hall on January 28th. We really do have a very special evening planned. I promise a great meal at a great price. The crab have been large sweet and full of meat. We will have some really great raffle prizes and don't forget we have two speakers lined up for our business dinner with very interesting topics. I would like to thank our Secretary Danniell Edwards for the great job on the flyer in this addition of the Primer. I really appreciate the hard work done by our president Mike Chiurato lining up the two speakers. I am very excited to hear the presentations by Mr. Angus Macfarlane and Mr. Michael Miller. I really wanted to attend the 43rd Annual Conference on Explosives and Blasting Technique presented by the International Society of Explosive Engineers in Orlando Florida on January 29-February 1, 2017 but, who would fix dinner on the 28th. I did attend the Mine Expo 2016 in Las Vegas. The event was very well attended. About 400,000 people from more than 130 countries were in attendance.

continued on next page

Editor's Notes...



The 794 Caterpillar Rock Truck is rated at 320 Tons.

I had never attended a Mine Expo prior to this year. The equipment that was displayed was much larger than the equipment we use in our operation.

The Primer



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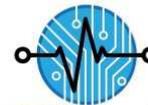
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The Primer

Fire in the Hole...

Adult Truths

1. I think part of a best friend's job should be to immediately clear your computer history if you die.
2. Nothing sucks more than that moment during an argument when you realize you're wrong.
3. I totally take back all those times I didn't want to nap when I was younger.
4. There is great need for a sarcasm font in Word.
5. How the hell are you supposed to fold a fitted sheet?
6. Was learning cursive really necessary?
7. Map Quest really needs to start their directions on # 5. I'm pretty sure I know how to get out of my own neighborhood.
8. Obituaries would be a lot more interesting if they told you how the person died.
9. I can't remember the last time I wasn't at least kind of tired.
10. Bad decisions make good stories.
11. You never know when it will strike, but there comes a moment at work when you know that you just aren't going to do anything productive for the rest of the day.
12. Can we all just agree to ignore whatever comes after Blue Ray? I don't want to have to restart my collection. Again.

Fire in the Hole...

13. I'm always worried when I exit out of Word and it asks me if I want to save any changes to my ten-page technical report that I swear I did not make any changes to.
 14. I keep some people's phone numbers in my phone just so I know not to answer when they call.
 15. I think the freezer deserves a light as well.
 16. I disagree with Kay Jewelers. I would bet on any given Friday or Saturday night more kisses begin with Budweiser than Kay.
 17. I have a hard time deciphering the fine line between boredom and hunger.
 18. How many times is it appropriate to say "What?" before you just nod and smile because you still didn't hear or understand a damn word they said?
 19. I love the sense of camaraderie when an entire line of cars team up to prevent a jerk from cutting in at the front. Stay strong, brothers and sisters!
 20. Shirts get dirty. Underwear gets dirty. Pants? Pants never get dirty, and you can wear them forever.
 21. Sometimes I'll look down at my watch 3 times and still not know what time it is.
 22. Even under ideal conditions people have trouble locating their car keys in a pocket, finding their cell phone, and Pinning the Tail on the Donkey - but I'd bet everyone can find and push the snooze button from 3 feet away, in about 1.7 seconds, eyes closed, first time, every time.
 23. The first testicular guard, the "Cup," was used in Hockey in 1874 and the first helmet was used in 1974. That means it only took 100 years for men to realize that their brain is also important.
-