

# From The Backyard To The “Big Time”!



Pyrotechnic Artists left to right: Dave Bier, Joel Macarelli Jr., Wendell Yoder, Jay Teeter, Joe Porchakowsky, Mark Rolef, and Scott Miller.

## Submitted by Mark Rolef

My smart phone began chiming and vibrating one evening in January 2024. The display showed it was an *“incoming call from: Howard Fry”*. Howard is the president of the Pyrotechnic Artists club and also the NFA Safety Director so I immediately answered the call with a serious tone, “Yes, Mr. President”?

That got a chuckle from Howard and the conversation eventually turned to the main reason for his call. The Pyrotechnic Artists club was having it’s 30th Anniversary in 2024. To celebrate, the club leadership wanted to donate a pyro-musical display to the upcoming NFA convention. They planned for the display to open the evening’s product demos on September 11th. The NFA Board of Directors accepted the offer from the club to do this.

Howard intended the display to be an impressive pyro-musical featuring the National Anthem and a tribute to First Responders. Club members would be encouraged to participate in all phases of designing and setting up the show. We told him it was a great idea and we would like to be involved.

My lifetime background and experience using fireworks up to the moment of that phone call was mostly of the “Backyard Yahoo” nature. Over a span of about 25 years my wife Christine has helped me set up annual displays on July 4th. Each year there was more product, chain-fusing, and spectators. We added Cobra wireless firing modules as our shows became more complex.

We are hobbyists and don’t have a firework business or do shows for profit. We had never designed a pyro-musical before or had any familiarity with the equipment needed to produce one. Our backyard shows were never as large or sophisticated as this one would be. So of course, Howard said he thought it would be a good idea to put us in charge of it if we were willing.

I brought up all the points in the above paragraphs and when I finished Howard said, “You two will do fine. I know you can both do it”. So with that settled we briefly discussed how to get started in general and began working that night.



Howard Fry—Pyrotechnic Artists President & NFA Safety Director.

The first step we took was to choose a version of the National Anthem for the show. I suggested the one by Jimi Hendrix but Christine said “No”! That was followed up by watching YouTube videos of other anthems to see what types of effects we’d be interested in using in ours. The most eye-catching effect we saw was an American flag made from comets. We decided to have one in our presentation.

Other than producing the flag, the rest of the National Anthem’s pyrotechnics seemed obvious. The “*Rockets Red Glare...*” and “*The Bombs Bursting In Air...*” always get synchronized with fireworks. We’d look for ways to highlight other moments in the song as well to mix it up a little.



Pyrotechnic Artists Graylin Presbury & Andie Sheppard were too dedicated to their work to stop for a group photo.

The tribute to first responders would be a bigger challenge because we would have to make our own music track (instead of choosing one) and have it run for up to 8 minutes. We’d also have to come up with a way to use fireworks as a “media” to tell the story of 9/11.

A few weeks after Howard’s call, the club had a meeting and the “NFA Display” was one of the new topics. Howard explained why we were doing it. We told everyone there we were seeking help on all aspects of the project: creating music tracks, choosing & finding firework effects, designing a pyro-musical, and organizing a group of pyrotechnicians to pull it all off. The same message would also be posted on the club’s website and Facebook pages.



Pyrotechnic Artist & Executive Script Writer Christine Rolef.  
(She took all the pictures except this one)

After announcing our project and presenting some of our ideas to the crowd, I became nervous. I sat down and looked around the room aware that most of the people there were way more experienced than I was with everything that needed to be done. If Howard had asked for volunteers at the meeting to organize the club’s NFA display, I would have deferred to at least half the room and not raise my hand.

I shouldn't have worried. Members of the club sent lots of ideas and suggestions. Many offered to help at the shoot site and share their personal equipment. I was gaining confidence as the interest and support grew.



Pyrotechnic Artist George Griffith seemed to be everywhere at once (except for the group photo location).

Over the following months, the work continued. Christine reviewed hours of product videos and began making orders and I turned my attention to making our pyrotechnic flag.

The flag effect had been done at other shows and we were offered the script by some people who worked on it, but I wanted it made from scratch by Pyrotechnic Artists instead so it would truly be a club effort.

Dave Bier of "Here Comes The Boom" Pyrotechnics stepped up and put some "Pow!" into our progress. He used "Finale" software to design a few "virtual flags" and helped work on the music tracks. By May we had a "test script", 198 comets and 18 custom-made comet holders. Several club members helped us set it up for our first test Memorial Day weekend.

You had to know we were trying to make a flag to see it—heh. We didn't get discouraged. We made several necessary tweaks and had success on our second test!



The Display Team's first "Test Flag" - Memorial Day Weekend, 2024.

Dave Bier finalized the script for the flag and formatted the music for the audio system. He provided all the firing modules needed to pull it off so we decided the flag would be on its own script. We wanted Dave up in the press box to trigger it manually. He'd also be on hand at the control center if technical issues arose during the show.

At this point, we began finalizing the tribute to First Responders. It would start rolling immediately after the National Anthem. I wanted to start it with an airborne fireball and shock the spectators but didn't know how to do it.



The Display Team's second "Test Flag" - August 24, 2024

Howard advised me to look into lampare shells for this. These shells contain a “salute” and flammable liquid, creating stunning fireballs in the sky. We didn’t know where to find pyrotechnic items like that. However, when I think of fireballs, I think of Pyro Joe L.L.C.! Pyro Joe is the way to go! We called Joe Porchakowsky for help. We explained that we wanted the shells to represent the Twin Tower impacts and were also looking for gas mines to represent the ground impacts. Joe became our “Liquid Pyrotechnic Specialist” that very moment. He got the lampares we needed for the show and set up the gas mines using his own equipment.

Christine was able to find and order the rest of the fireworks we needed for the tribute. A large donation of cakes was given by Kneppy’s Fireworks as well so we added them in.



Pyrotechnic Artist & NFA Safety Team member Mitch Steffler.

Pyrotechnic Artist Mitch Steffler worked on one of our “wish-list” items. He was busy with his NFA Safety Team responsibilities all week but he found time to create and set up pyrotechnic numbers—911— that were fired off at the very beginning of the display. He also brought all the mortar racks we needed for the entire show.

Like Mitch, all the volunteers who would be there to set up the display Wednesday were bringing their own comet racks, slice holders, and Cobra modules for the club to use. They also brought their professional expertise to the shoot site and worked hard all day.

People had some questions like “Do we have more e-matches?”, but none on how to set things up. If Christine or I overlooked something on the diagrams, the crew did not get confused. They just figured it out on the spot and happily took care of it. I was beginning to think there was no phone signal by midmorning because no one was calling with questions.

The afternoon was coming to an end as the Display Team finished setting everything up. It was time to return to the staging area with the crew and clean up for dinner.

Once we finished eating, I got more and more nervous waiting for the show to start. Was everything going to work? What would the spectators think? A lot of them do large pyro-musical displays like this themselves all the time! I didn’t want to embarrass the club.

To add a little more pressure, Howard arranged for First Responders with all their equipment to be on the track during our display. He added a military Color Guard as well!

As the sun set, I looked out at all the product and equipment the Display Team set up on the track. I began to get overwhelmed by the thrill of doing my first pyro-musical ever at a NFA convention! I never pictured it happening so it felt like I was living a dream before I even had it!

Once again I shouldn't have worried. The show went well, the spectators cheered, and the Display Team enjoyed seeing the success of their hard work! From beginning to end, it was a thrill to work with everyone and be a part of this project!

