

Talk Group

ADCOMM Engineering Company

Bridging the Gap Between Operations and Technology®

Specialists in Public Safety Communications Since 1979

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ADCOMM is 40 Years Old!

—Joe P. Blaschka, Jr., P.E.

ADCOMM Engineering Company is 40 years old this year. We thank our clients, current and past staff, and friends we have worked with over the years. Here are some of my reflections on the last 40 years.

ADCOMM was started in 1979, because I wanted to work in communications system engineering without moving to Schaumburg, Lynchburg, or some other “burg” other than the Seattle area. There were not many opportunities in Seattle back in the 1970s. Boeing had significantly reduced in size, computers still filled a room, and communications were still primarily mobile telephone systems, pagers, 2-way radio, and the telephone. The industry certainly has come a long way. I worked for Motorola earlier in the 70s and then worked for a small telephone equipment manufacturer in Kirkland. Communications engineering was in my DNA. So, I started doing consulting engineering. I ran into Col. Dick Quantz, from the Washington State Patrol. He was retiring (back in those days the WSP had a mandatory retirement age at 60), but he wanted to continue working. I originally met Dick when I was working for Motorola. I told him I was starting a consulting company and asked if he would like to join. He did and continued to work for me for about 15 years or a bit longer.



Dick was one of the first of my many mentors. I was lucky. I found people to hire who had retired from jobs such as Dick's where they had significantly more experience than I did. If one never makes mistakes, then they are not exploring or learning new things. I also realized one never lives long enough to learn from their own mistakes so they should learn from the mistakes of others. Hiring people older and wiser than me was a great way to learn. The lessons were not only just about technology and craftsmanship, but also about politics, interpersonal interaction, how groups and boards worked, and a whole raft of life experiences. These lessons were not only from people I hired, but also people I worked with. Some, like Dick Quantz, have passed on, but many are still around. I would list them here but I am afraid I would leave someone's name off. I can say our staff is great and dedicated to our clients. Regardless, learning is something one needs to do their entire life. I remember Dick learning to use personal computers when they came out. He was not afraid to adapt to new technology and often pushed both technical and political boundaries.

One of my early goals was to build a company by leveraging technology instead of office space. I felt I could get better staff and not be geographically restricted if I built a company based on the idea everyone would work from home. Remember, this was 1979 not 2009. We started using fax machines and the telephone to work together along

Industry News ...

ADCOMM

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with getting together at a library or coffee shop from time to time. This was before PCs were available—no PC word processors or sending files around either. As time has gone on, we have continually adapted to other forms of technology to improve



the ability to work together remotely. We have focused on hiring some of the best people in the industry who are self-motivated and can work from home. I see this same approach carrying ADCOMM into the future. It helps maintain a better work-life balance and gives ADCOMM staff the opportunity to participate in their kids' or grandkids' school and sports activities and gives them back all those commuting hours. It also helps to lower our carbon footprint. We were green before being green was cool!

ADCOMM has helped our clients push the limits of technology, at least as it is used in public safety. Here in the Northwest, ADCOMM engineered the first public safety 800 MHz simulcast trunked system, the first SmartZone system (which was also the first system to ever go through the Motorola CCSI process), the first P25 public safety system, the 800 MHz system implemented for the 2000 Olympics that resulted in the Utah statewide sys-

tem, and several large-scale conventional simulcast county-wide VHF and UHF systems. ADCOMM has been part of the technical integration and design for almost 50 dispatch centers ranging from small three-position centers to larger than 50-position regional centers. When 9-1-1 was just being deployed in Oregon and Washington, ADCOMM wrote scores of county plans for implementing 9-1-1. ADCOMM wrote the Enhanced 9-1-1 statewide plan for Washington resulting in the successful implementation of Enhanced 9-1-1 statewide.

ADCOMM volunteered and was a key part of an APCO team in the early standards writing for wireless (cellular) and Enhanced 9-1-1 interfaces. While not perfect given all of the technology involved, these standards paved the way for widespread deployment of location technologies and the infrastructure to support getting this information to the 9-1-1 center. This is now moving towards even more integration of location technology as well as video and texting.

I remember when we felt happy getting 14.4 or 19.2 kbps through a mobile data terminal and now live video is possible. All this technology has been moving forward at lightning speed. The processes and policies to support this deluge of technology and information often fall behind. Keeping the human and organizational aspects in sync with the technology is a major challenge. It used to be public safety implemented advanced technology before the private sector and certainly before private citizens. Now it is just the op-



posite. This is already one of the major issues confronting policy makers and those allocating budgets. How do you keep up?

ADCOMM believes in training, not only its own staff which participates in hundreds of hours of training each year, but also sponsoring training events for our public safety clients. We sponsor through both time and dollars the Oregon and Washington APCO/NENA chapters and provide training at the IWCE Conference. ADCOMM staff have volunteered many hours in support of these organizations over the years.

Looking back should be for lessons learned and maybe think about the "good ole' days," but time only moves forward. ADCOMM will continue to help our clients advance their adoption and management of technology. I see the future as full of opportunities and challenges to conquer. Thank you to all of those who have made this journey with us during these first 40 years. We are looking forward to working with you for the next 40!

Farewell, Gary!

Earlier this year, ADCOMM celebrated the retirement of Gary Lancaster. Ten years ago, Gary was persuaded to come out of retirement from the Salt Lake Valley Emergency Communications Center in Utah to work on King County's rebanding project. While working with King County, Gary also became involved with managing many other ADCOMM projects, including Kitsap Transit, Spokane County, the North Slope Borough, Douglas County, and most recently the City of Salem and



Deschutes County. Gary's contribution to ADCOMM will be missed. His clients appreciated his attention to detail and his ability to communicate effectively and concisely. Gary's career spanned more than 50 years in the public safety services industry. Retirement the second time around promises lots of traveling with his wife and visiting his children and grandchildren all over the world.

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Is your address correct? Do you know someone who may be interested in receiving this newsletter? Please let us know! Send additions and corrections to Susan Seefeld at s.seefeld@adcomm911.com.

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Can You Find the Problem Here?

The first person to email me (j.blaschka@adcomm911.com) with the correct answer gets a \$10 Starbucks card.

Congratulations to **Dan Apperson** for being the first to respond to our "Can You Find the Problem Here?" photo from our November 2017 TalkGroup newsletter.



THE LAST BYTE

—Joe P. Blaschka, Jr., P.E.

Where will FirstNet fit into the overall communications picture? Data services are a no brainer. Cellular has been used for data services for a decade or two now. FirstNet having access to dedicated spectrum and providing priority access will make cellular mobile data even better. What about voice services? Mission critical PTT seems to be the Holy Grail everyone is looking for. Will it really happen? Many urban areas have recently spent millions of dollars upgrading their existing LMR infrastructure to the latest trunking technology and P25 digital. Many utilities have also upgraded their systems to trunking and digital as well. Will these entities scrap the millions spent in the next few years and move to FirstNet PTT? I think likely not.

Many rural areas are experiencing a significant funding and radio system

crisis. Their systems are often 10 to 20 years old and VHF systems are their mainstay. These systems need to be upgraded and replaced as their equipment is no longer supported. The growth in the rural and suburban towns has often resulted in the need for additional channels, which at VHF are hard to come by. In addition, the ever increasing RF noise at VHF has caused significant coverage reductions in these same areas. This increases the need for more VHF sites and channels to serve the towns and freeways in these otherwise rural and remote areas. Many of these areas do not have the capital funding to undertake a major system upgrade. What solutions are available?

The solution may well be in using FirstNet in the towns and along the freeways and continuing to use VHF for the rural areas and wildland fires. Manufacturers now have multi-band radios that look and operate like the portable radio we all know and love but have an LTE radio built in. An LTE and VHF radio where

the user talks on the LTE network when in the towns and along freeways where there is good LTE coverage and then switches to VHF for the very rural and remote areas could meet the needs of many rural areas. The VHF network in the remote and rural areas would not need to have as many channels or be as robust since the usage would generally be significantly less. At the very least, fewer sites would be needed because the more urban/suburban areas would be covered by LTE. To the user, the radio would work the same. Knob position 1 could be an LTE talkgroup and position 2 could be a VHF channel.

The difficulty is in integrating conventional consoles and FirstNet together in a way that works operationally for the rural areas. I am betting it will happen primarily because there will not be the funding to build and own new systems in the more rural areas. It will be interesting to see how this technology develops.