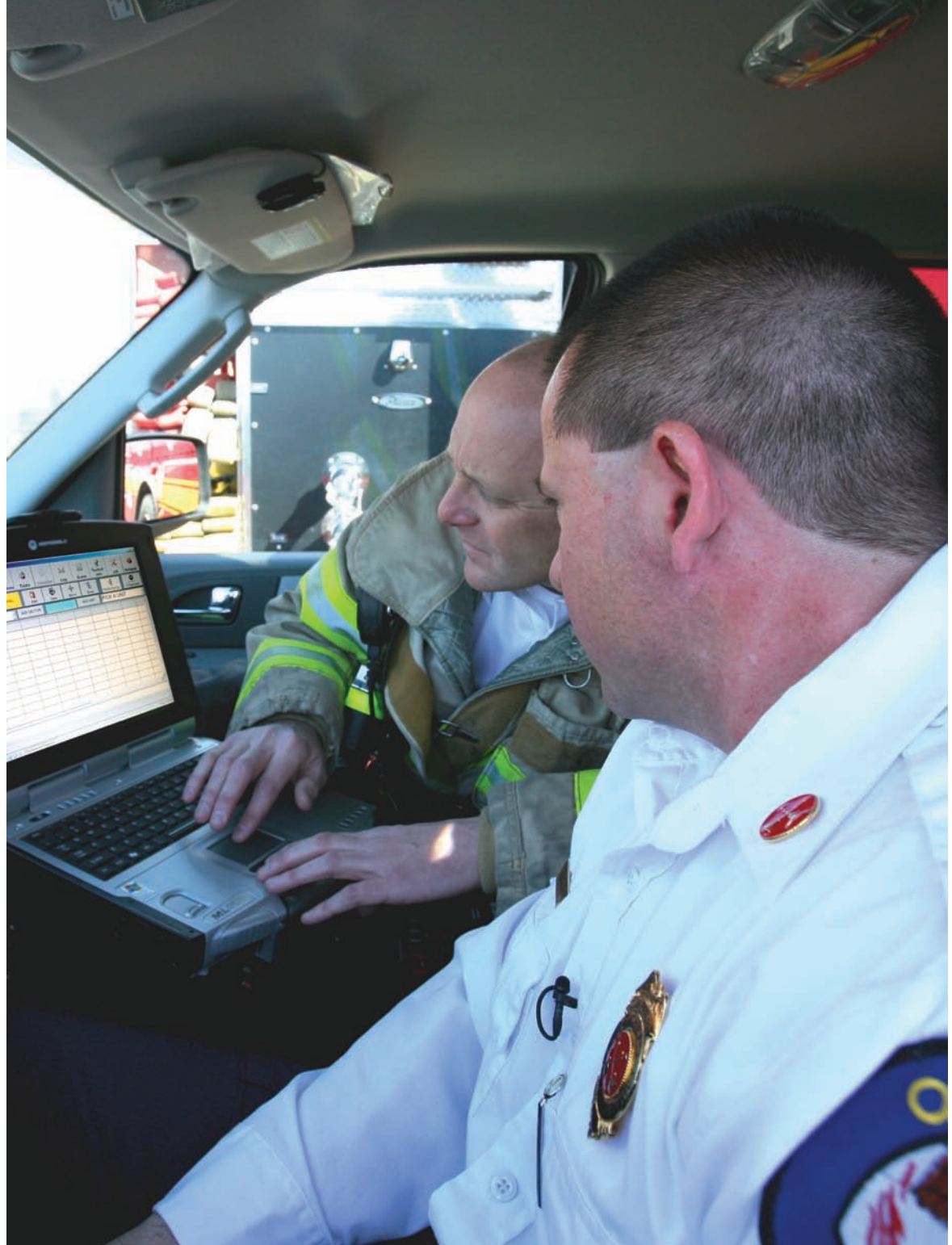


CASE STUDY: Orland Fire Protection District, Illinois

Fireground Communications System



“Communication is a firefighter’s lifeline. If they don’t have adequate communication, our first responders can’t do their job.”

*Cynthia Nelson-Katsenes,
Board of Trustees,
Treasurer*



“The safety of our firefighters is first and foremost. I always want to make sure we have state-of-the-art equipment for our firefighters.”

— CHIEF DONALD BETTENHAUSEN

Situation

The Orland Fire Protection District (OPFD) in suburban Chicago is one of the largest in Illinois, covering 33 square miles and 75,000+ residents. The district has large homes and retail buildings. “The construction is new so it’s very lightweight and because of that the fire will burn faster, hotter, quicker,” says firefighter paramedic Larry Wishba.

“We want to provide quality service to the people and make sure our firefighters are safe in doing so,” says Battalion Chief Bryant Krizik. “Instant accountability is certainly one of those components. So is a strong incident command system. That allows the firefighters to focus on their job as opposed to worrying about their safety.”

Solution

The OPFD used to rely on a Passport system to track personnel at the scene. Today, they use Motorola’s Fireground Communications System with XTS 5000 portable radios, Incident Command Software from Fieldsoft, Inc., a ruggedized command terminal, and enhanced digital RF modem.

“We had several challenges that we’re trying to solve with this program,” says Battalion Chief Krizik. “One was that not all of our firefighters had a portable radio. Second was to standardize our accountability procedures. By giving the incident commander and the firefighters one central system, we were able to resolve that issue.”

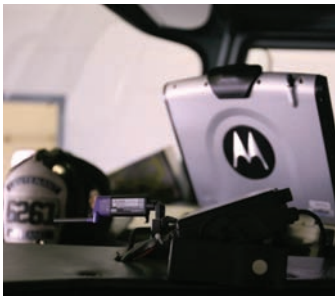
Result

“We know that by having a portable radio on each of our firefighters that it’s a safer operation,” Battalion Chief Krizik says. “We also know that our firefighters are being tracked automatically at every incident.”

“One of the biggest areas where it has been of assistance is accountability of our firefighters: knowing where they are,” says Chief Donald Bettenhausen. “We’re looking forward to this system expanding and building on its future.”



Emergency calls and evacuation tones



"The chief's on our shoulder like our guardian"

"With the radio, wherever you are, whatever goes on, you have access to people who can help you," says Wishba. "The chief, he's on our shoulder like our guardian. If he can't see us, he can still watch over us through the radio system."

"The emergency button is very helpful for us," says Lt. Dan Smith. "A press of that button indicates a call for help from one of our firefighters received by the incident commander. The commander is able to see by name and number who has activated that signal."

"Everybody was able to evacuate in a timely fashion"

"In December we had a house fire," says Battalion Chief Steve Smith. "It was a single-family one-story slab construction building. Companies arrived; we had a fire in one room and looked like it was starting to travel in the attic. As they were going in, the smoke conditions were getting worse and worse. The guys had trouble reaching the seat of the fire because it was in the furnace room and the only way in was through the rear of the building."

"As smoke conditions deteriorated, I changed from aggressive attack to defensive. I hit the evacuation button and everybody was able to hear it and evacuate in a timely fashion. At our critique, a lot of the guys said that the reason they heard and evacuated so quickly was the button feature that we have on the radios."

*“There are humans behind those radios...
it all comes back to accountability and safety”*

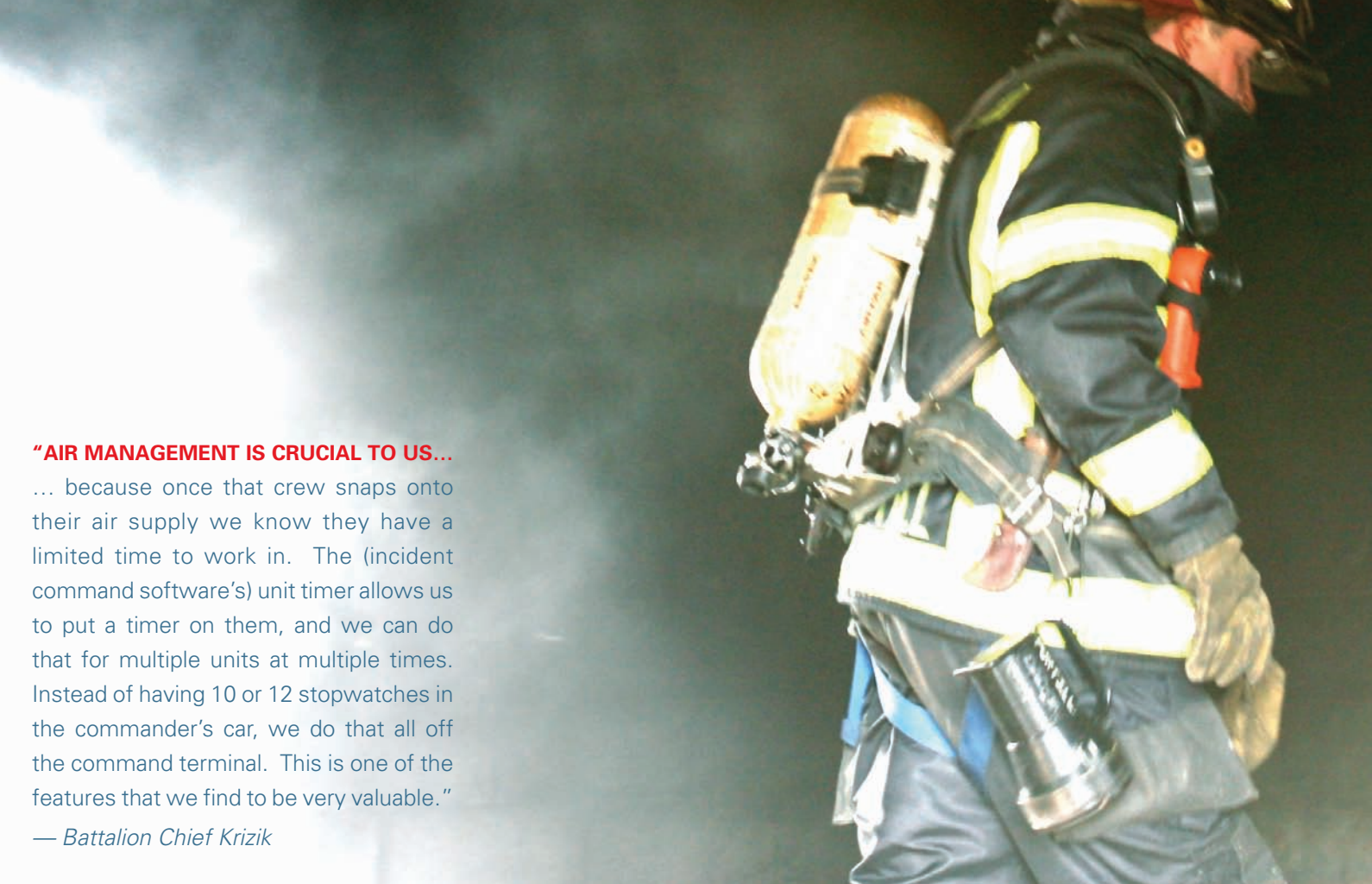
“Anytime we have a multi-unit response, firefighters switch their radios from the dispatch channel to a fireground channel,” says Battalion Chief Krizik. Immediately, each firefighter’s name and apparatus appear on the commander’s mobile computer screen and the system begins tracking his/her division assignment.

“The commander continues to run his operation the same as he always has. He just has this system right next to him that helps him account for the personnel that we have on the scene. The commander can also

use the electronic tactical worksheet to set benchmarks and file incident action plans and standardize that across three shifts independent of who the incident commander is that day.”

“What has improved the most comes down to organization,” says Chief Bettenhausen. “There are humans behind those radios and sometimes they forget. Having this upgraded technology reminds us of things we may have forgotten about. I think it all comes back to accountability and safety on the fire ground.”





“AIR MANAGEMENT IS CRUCIAL TO US...

... because once that crew snaps onto their air supply we know they have a limited time to work in. The (incident command software’s) unit timer allows us to put a timer on them, and we can do that for multiple units at multiple times. Instead of having 10 or 12 stopwatches in the commander’s car, we do that all off the command terminal. This is one of the features that we find to be very valuable.”

— Battalion Chief Krizik

INCIDENT COMMAND SOFTWARE

Making competent decisions

“I oversee 33 firefighter paramedics within six stations,” says Battalion Chief Nick Cinquepalmi. “The Fireground Communication System has improved the safety of our men by allowing me to keep track of them visibly on a screen. That has come a long way since pen and paper.”

“This morning we responded to a four-story multifamily dwelling. Companies arrived and we switched to Fireground White channel, which implemented our system.” Instantly, the name and apparatus of each firefighter appeared on Battalion Chief Cinquepalmi’s mobile computer. The software provided task lists and objective lists to guide the chief in making assignments.

“I’m keeping better track of my personnel when I put this program into motion, says Cinquepalmi.”

ACCOUNTABILITY

“You’re not just a nametag on a Velcro® board”

“In the morning you check out your radio and make sure it’s functioning properly and you know now that you are a proactive part of the accountability system,” says Jerry Bohne, IT manager and an engineer with the OFPD. “You’re not just a nametag on a Velcro board. It’s an added level of comfort knowing that you’ve done your part to make sure you’re going to be safe.”

Lt. Smith says, “I definitely feel safer knowing that my battalion chief is monitoring me as soon as I turn my

radio to a Fireground channel. I know that I’m on his screen and I know that it’s not just the failure of a person to go around and collect the tags or my failure to take the tags to the incident commander or the safety officer. I have instant accountability.”

Battalion Chief Smith says from the incident commander’s perspective: “It’s really easy to use. In the morning I program the computer with everybody’s name and what company they’re on, so when I get to the fire I can just hit ‘accountability’ and it pops right up.”

“We were able to adapt the system”

Multiple radio channels allow departments to assign different channels for different tasks: interior, search, ventilation, etc. OFPD tried this approach but it didn't work for them. “We found that once our firefighters set the channel it didn't get changed,” says Lt. Smith. “We re-evaluated. Now radios are assigned to a station and the firefighter uses the channel selector to indicate what apparatus he's riding on. So we were able to adapt the system to what we felt comfortable with.”

Radios designed for firefighters

“When Motorola came out with the XTS 5000 they asked firefighters about features and they've designed them into their products,” says Lt. Smith. “The radios have a channel announcement so when we change the channel it gives us a voice announcement so we don't have to fumble in the dark and look for a number on the channel selector. We've got the volume control on the outside of our coats so we don't have to dig inside of our coats. We can change the channels and adjust the volume, which are the two most important things that we do on the fire ground.”



“Every year Orland firefighters go down to the University of Illinois Fire Training Institute and help train the engineers and other personnel from Motorola in how we operate on the fireground. We found that to be beneficial on both the Motorola side and the Orland Fire District side.”

— Battalion Chief Bryant Krzik



"It is very important that we as elected officials do all we can to enhance firefighter safety because that in turn enhances our community's safety."

"Our funding is very, very limited," says Cynthia Nelson-Katsenes. "Does the cost outweigh the benefits? We've seen time and time again throughout the country what happens when you don't have that communication: nobody is really safe. So for us as a Board, it was a very easy decision. If a fireman isn't safe our residents aren't safe. That was a huge priority and it was well worth every penny."

The OFPD obtained a grant that covered most of the initial costs of the system. "One of the keys to obtaining funding would be to follow the directions in the program," says Battalion Chief Krizik. "The other is that you have a project that coincides with what the grant is written for. The grant program was written to improve firefighter safety, and in our proposal we emphasized firefighter safety."

"Even a firefighter can do it"

"You have to mentally prepare for changes in radio communications," says Chief Bettenhausen. "From my standpoint as the chief officer, I have to say as new technology comes out there's a little resistance. Once it's implemented and it's properly trained on, then they're more comfortable with it."

"We got them training on the radios right away," says Bohne. "Once they saw the benefits of the radios, they quickly wanted to get onboard with this system. We let the firefighters see exactly what was happening at the commander's laptop so they could see how the accountability system worked. We also

explained that we would like their input and we would make changes to make it work better for our department. When we've gotten new ideas, we implement them and that brings the guys closer to using the radios to their full potential."

Lt. Smith adds, "We enlisted the help of people who did have a working knowledge of computers and portable radios to get them to work with those firefighters who didn't have as much knowledge, as a one-on-one basis as part of their crew, so everyone becomes more comfortable with the radios and computers."

“Motorola has been a strong deliverer of communications equipment – something we’ve counted on over the years. We continue to look forward to them improving their equipment to meet our needs. We hope their standards stay high as that’s what we’ve come to expect from Motorola.”

— CHIEF DONALD BETTENHAUSEN

Over 70 years understanding the needs of public safety

In today’s world you need a partner who understands what mission critical is all about: the lives and well-being of your fire service professionals and the citizens they protect. That’s why Motorola is a leading provider of interoperable communications systems for public safety and first responders. Our experience in the public sector, along with our skills, people, partnerships and alliances, allow us to build innovative, fully integrated technologies that help organizations like yours share vital information with ease and confidence. We’ve been doing it for over 70 years, and we’ll be standing by our customers for years to come.

We can help you introduce new technologies in a way that does not disrupt your existing operations and allows you to continue leveraging prior investments. We are committed to bringing all of our knowledge and technical expertise together so you can focus on what you do best... to serve and protect the public.

Learn more about Motorola Fireground Communications Solutions

Visit www.motorola.com/missioncritical or call 1-800-367-2346.



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