With as many booth aisles and technological avenues that the International Association for Chiefs of Police (IACP) can cover it’s inconceivable to cover it all. My steps on the floor brought me past the latest models from Ford, Dodge, and helicopters from Airbus and Bell, as well as the line running out from the AXON booth. All reliable mainstays at any major law enforcement tradeshow. You’ll also find the latest handheld products, high-tech software, and training technologies.

IACP is great at putting the high-tech devices available for officers on duty front and center. Where else better to start than on the road, inside the patrol car, using the products aimed at making patrol work that much more intuitive, efficient, and ultimately safer.

Handheld products
With Alexa and Siri becoming more culturally accepted in the consumer market, the adoption of voice recognition in law enforcement won’t be too far away. Nuance allowed attendees to try out their Dragon Law Enforcement software. They like to say that wherever you have a cursor, you can use Dragon. It sounds simplistic, but it actually is that straightforward. Dictating keeps your face out of the screen and back into the world enhancing your situational awareness.
And report writing improves as well in speed and detail. Psychologically, Nuance claims that describing events allows you to be more descriptive. With some practice, “the window was broken” can turn into “the south window was broken from the outside. Glass was found both inside and out on the grass below.” It’s not tied only to the patrol car though, take this inside and work at your desk. Currently, the noise-canceling microphone works for one voice at a time although development is being done to make the technology be effective for the interview room.

Speaking of taking technology in and out of the patrol vehicle, Samsung announced their new XCover Field Pro rugged smartphone. With a purposeful design for first responders, they placed an easy to use PTT button on the side as well as a “man down” emergency button on top. These are red and fairly easy to index with your finger. Additional features include a CJIS-standard fingerprint reader pad, three flashbulbs on the back to offer a redundant source of light for photos. It may sound mundane, but one of the biggest standouts for me was that Samsung is including a spare battery with purchase.

Now, with your new phone – imagine not using a “mobile” version of your CAD/RMS but using your smartphone as your core computer system. Samsung’s DeX basically turns your Android smartphone into your mobile data terminal with the software you would need installed. Use a larger monitor in a rugged mount to keep computer work easier on the eye. Likewise, take the smartphone out and bring it to your desk in the office. Same software, all you need is a rugged enough of a device to survive police work.

But officers need not only smartphones and tablets, companies are also working hard on making presumptive tests more convenient and user-friendly each year. Traditional test kits have a few inherent faults in their design: fragility and the potential of disturbing the substance. A handful of companies had their handheld test kits on display – each with varying degrees of technology but all of them alleviate a significant amount of guesswork.

On the higher end of tech, Abbott’s SoToxa roadside screening handheld device is small, lightweight, and very user-friendly to operate. It works by inserting the specially designed swab stick into an enclosed cartridge – protecting the officer from a potentially harmful substance. The SoToxa handheld scans the test
and displays easy-to-read digital results in five minutes or less. Results are captured and saved. Officers can then safely discharge the cartridge and discard as the sample is sealed inside. The device itself has a small footprint and takes very little room in a patrol vehicle or motorcycle.

DetectaChem’s system consists of one-time use pouches but uses your smartphone with an app. Officers would swipe the sample onto the patch and scan it with the smartphone’s camera which is processed by the MobileDetect app. Each pouch is a one-time use and weigh merely ounces (if that). Just before the show, DetectaChem announced their THC/CBD pouch, reporting that their test can provide “presumptive determination of THC content above the federal 0.3% limit.”

With zero tech at all, SwabTek’s solution is similar to the litmus tests you may remember from high school chemistry. The SwabTek narcotics field test is basically of two parts: one a paper strip with dry reagent test zones and second, pre-treated swabs. This conveniently avoids the reagent dropper bottles, breakable ampules or pressurized spray cans—officers simply swipe the swab to the paper. SwabTek currently has field test kits available for cannabis, amphetamines, cocaine, heroin, dry explosives, and wet explosives. Fentanyl and nicotine kits will be available soon.

Training

The concept of a training sim has been around for decades. IACP had options from one screen, two, three, four, five, and—with the gaining acceptance of virtual reality—none. Various booths used the simulator to grab attendee’s attention. Microsoft featured its Forza Horizon 4 driving/racing sim. And even Panasonic and Kustom Signals both featured a driving sim allowing attendees to take the wheel. (See Hilary Romig’s IACP 2019 account for more info.) These always gather plenty of attention and certainly add to the full sim training experience if they were paired with a second set up to let you drive to the scene and continue.

VirTra announced an ultra-high-definition 300-degree simulator using five laser-based 4K projectors. The company’s Chairman and CEO Bob Ferris is quoted saying, “Training to correctly handle potentially dangerous individuals in a high-stress, realistic, and dynamic environment is particularly difficult but extremely valuable for law enforcement and military agencies. Research has demonstrated that the more accurately training simulations can reproduce lifelike situations, the more effective that training becomes. This advancement ushers in a new era of simulation realism for both judgmental use-of-force and marksmanship training.” The first to receive the new simulator system, VirTra announced the U.S. Department of Homeland Security’s Federal Law Enforcement Centers during the show.

Removing the screen altogether or merely moving the screen much closer to your eye, various companies are using virtual reality (VR) for training. In this writer’s opinion, the technology hasn’t reached maturity quite yet. However, if you’re looking to push immersion just that much further, the benefits are clear as day. Earlier this year, Axon announced they’ve produced a VR training system for officers to experience the effects of and their interaction with people with a mental illness—a creative utilization of the technology stepping away from the excepted shooting range and target concept.
On the floor, both NSENA and Apex Officer had live demos where attendees were invited to jump into the virtual experience. Both utilize the commercial off-the-shelf Vive VR headset system, though Apex’s system includes a backpack on the user for haptic feedback. Much like training sims from companies like VirTra and MILO (Meggitt Training Systems), each scenario is controlled by the training officer selecting the reactions of the programmed characters. After-action review debrief software details out the actions and analytics on the trainee. For example, NSENA explained that their latest version of the Vive headset included some eye-tracking software. Trainers can then inquire why officers were looking at the one place while they should have been focusing elsewhere.

The headset is one thing, what’s in an officer’s hands for training is another. You can’t just use a keyboard and mouse or XBox console controller. But traditional consumer VR controllers can be bulky, the Playstation’s look like flashlights with large spheres. Not exactly the realistic experience for law enforcement training. New VR systems now incorporate models of commonly used weapons such as GLOCKs, Axon Tasers, and more. While Apex also offers AR and shotgun models and accessories like a flashlight, baton and OC spray, NSENA created a conversion kit to allow you to use your own rifle and shotgun.

The biggest drawback? You are wearing a helmet. It’s something you can forgive while in session as the immersion takes over your senses, but one you won’t forget.

High-tech software
Using their experience in RMS and case management software, CrimeCenter Software built a web (or cloud)-based case management system as a subscription solution. The solution includes the features one would expect out of a CMS in 2019: incident response and reporting, investigation management, intelligence management, analytics, assignment management, use of force and OIS management, crime scene management, lead management and property, and evidence management. In an effort to assist in police to community communication, CrimeCenter’s Citizen Portal easily allows law enforcement to create a webpage to collect tips, publish wanted posters, gather complaints and commendations, as well as register civilian surveillance cameras.

The company provided a basic package of their software for free during the show and until the end of the 2019 year.

Genetec’s Citigraf coordination response tool takes this to the next step proving crime data for strategic decision support centers – a clever name dubbed by the Chicago PD. Their software combines sensor and historical data associated with an address. With a few easy clicks, investigators would be able to see trends and any other related actionable items from crimes to information from the digital evidence management system. This improves situational awareness and response time.

Genetec also wants to help analysts. A criminal investigation tool, Valcri gathers data from RMS, CAD as well as other systems to assist in mapping a case, analyze data collected,
help find leads. Where the typical analyst would take three to five days, Genetec reports that Valcri can bring it down to two to three hours. Their ultimate goal: 20 minutes.

With a company that’s been around for 20+ years, also providing investigators with the tools they need, LexisNexis Risk Solutions’ Accurint Virtual Crime Center connects law enforcement with 10,000 public records as well as all connected agencies’ data. Claiming a 99.95% accuracy rate, each person in the system is assigned to a unique LexID number. An algorithm confirms that each person is the correct individual – so the “John Dye” you’re searching for in Southern California is the same suspect from someplace else. Their demo basically sets you down a rabbit-hole of information where leads can be found instantly, collected, and analyzed.

Picture it like a “Google” for case investigation where the longer it takes in information the more data it has; the more efficient analysts can be. It’s only a three-year-old product, but a long-time solution. It already includes 700,00 reports and one million identifiers. It’s this longevity that is the key to the Accurint Virtual Crime Center.

If you’re looking for a conference that highlights the high-tech side of law enforcement, keep IACP as one of your choices. It may not be the massive events like tactical shows in Las Vegas, but there are aisles and aisles of value.

IACP is also one of the few shows today that travel around the country – cutting down travel for some agencies that may not have the budget to send a team of officers. Next year, they’re revisiting New Orleans, hopefully, we’ll see you there!