In Pierce County, Washington, a local fire & rescue department serves a population of more than 75,000. With 12 stations, six staffed and six volunteer, the district covers approximately 142 square miles and provides residents with a seamless response to emergency situations.

**Challenge**

Replace paper records systems with more reliable mobile tablet PC solution

The department sought to replace time-intensive, error-prone paper and manual entry processes. The goal was to eliminate the unnecessary duplication of information, increase the accuracy of reports, save time and improve the overall quality of patient care. The combination fire district decided to make the transition from paper-based records to an electronic patient care reporting (ePCR) solution deployed on tablet PCs.

**Solution**

ePCR software from ESO Solutions and Zebra F5 rugged tablet PCs* on primary EMS vehicles

The combination fire district implemented ePCR software from ESO Solutions and began the search for a tablet PC that was durable enough to withstand the conditions out in the field as well as provide optimal computing power. After researching a variety of mobile devices, the department chose to implement Wi-Fi and Bluetooth®-enabled rugged tablet computers from Zebra Technologies, complete with mobile docking stations in each of its primary EMS vehicles.

“We needed a tablet that was lightweight and ergonomic since the medics already bring several pieces of equipment on every call,” said the East Pierce Fire & Rescue information systems manager. “We also needed a device that provided a stylus for electronic signatures, was easy to clean and maintain and was rugged enough to work in the harshest of rescue environments – everything from pouring rain to bright sunlight.”

*Zebra Technologies acquired Xplore Technologies in 2018, and the F5 rugged tablet series is now part of the Zebra portfolio.
SUCCESS STORY
EAST PIERCE FIRE & RESCUE

Once on the scene, the medics use the rugged tablets for everything from entering patient information and capturing photo documentation to importing vital signs, such as heart rate, blood pressure and oxygen levels, from other medical devices. All necessary information is captured on the tablet and either printed in the EMS vehicle or electronically faxed to the hospital to ensure that the patient is seamlessly transitioned from the medics’ care to the hospital for treatment.

“After the patient is in the hospital’s care, the medics are required to provide a paper copy patient report, which the medics are able to complete by using the F5’s Bluetooth keyboard and printer,” said the information systems manager. “From prepopulating some of the information taken during the 911 call through the ESO software to transferring the necessary data to the billing company on the backend, we are pleased with how the F5 has been able to support the entire emergency process.”

Another advantage is the F5’s hot-swap battery feature, which enables the medics to replace an existing battery with a charged battery while the tablet is operating, without needing to shut down the device or even put it on standby. “We needed a tablet with substantial battery life, since we are often dispatched to back-to-back calls without any time to stop at the station,” said a firefighter/medic. “The hot-swap feature is essential to have, and we are confident that our F5s will maintain power and mobility while out in the field.”

Results

The F5 eliminated the department’s reliance on paper processes, saved significant resources, created efficiencies, and improved the quality of patient care.

Since the implementation, the combination fire district eliminated its reliance on time-consuming and error-prone paper processes. This saved significant resources, introduced new efficiencies and improve the quality of patient care. “Now, the reports are more legible and complete,” said the information systems manager. “We also don’t have to re-enter patient or billing information, which saves enormous amounts of time and effort.”

“The F5 provides us the ability to be more flexible on the job site.”

Information System Manager, East Pierce Fire & Rescue
“Not only can we input more information into the ePCR with the rugged tablets, but we are now prompted to complete all fields before closing out the report. This increases the accuracy of our records,” said a firefighter/medic. “The reports are also much easier to access later, since we can now pull them up electronically. We no longer have to sift through huge stacks of paper. The department now benefits from on-demand access to all of its recent reports, which are stored in a computerized database, increasing the atabase, which improves both quality management and data security.

What’s Next
Tablet PC use by fire marshals for building and code inspections

Looking to the future, the combination fire district plans on including the F5 rugged tablets as part of its building inspection process. “We’re formulating a program that will enable our deputy fire marshals to use the tablets to store, process and sign off on new building and code inspections,” said the information systems manager. “We are always on the lookout for new ways to implement the tablets to streamline and improve our procedures to better serve the residents in our district.”

“We needed a tablet that was lightweight and ergonomic, since the medics already bring several pieces of equipment on every call,” said the information systems manager. “We also needed a device that provided a stylus for electronic signatures, was easy to clean and maintain and was rugged enough to work in the harshest of rescue environments — everything from pouring rain to bright sunlight.”

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For more information on Zebra Tablets, visit [www.zebra.com/tablets](http://www.zebra.com/tablets)