Notes from a TSC7 beta tester

For surveyor Scott Lyttle, a consistently well-performing controller is the right-hand tool that helps him manage the diverse tasks and environments of land surveying.

With an eye toward new ways to improve workflows as he leads survey crews for Flatirons Inc., Lyttle agreed to test Trimble's new TSC7 Controller and Trimble Access 2018 software.

Flatirons, a provider of surveying services based in Boulder, CO., uses a wide range of Trimble products and software for its work spanning the Front Range of Colorado and neighboring states. As senior survey crew chief for Flatirons, Lyttle keeps in his truck a Trimble S5 Total Station, R10 and R8 GNSS receivers, and a TDL 450.

"For a data collector, I always have the TSC3, the previous model, with me," said Lyttle, who has worked in surveying for eight years, starting with his schooling in New Zealand. "Essentially all data acquisition is done through that."

Lyttle has served as a beta tester using the TSC7 and Trimble Access 2018 since late 2017, putting the solution through the paces in his daily work in a variety of jobs and settings, and giving feedback and suggestions to Trimble's development teams as they prepared to go to market.

"I've been staking out roadways and sanitary sewer lines, putting in new water lines and setting out buildings," Lyttle said. "I've done a fair bit in terms of construction, boundary or topographic design or residential surveys, and have set out subdivisions as well."

First impression: Bigger Screen
When Lyttle first saw the TSC7, the 7-inch touch screen stood out as the biggest difference from its predecessor TSC3, which has a 4.2-inch display.

The TSC7's sunlight-readable touchscreen supports pinch, tap and slide gestures for intuitive actions like map zoom, pan and item selection. With front and rear-facing cameras, users also can video conference their office from the field and take high definition videos and images to give clients context on their projects.

"You can compare it to phones in many ways," Lyttle said. "You had the flip screens and then these large touch screens. Now you can't live without that big screen, can you? To me, it's the same with this data collector. Having that big screen adds so much more and makes it much clearer, bigger, brighter and easier to use."

Look and feel
The TSC7 is bigger in size and similar in weight to the TSC3, but Lyttle believes users will adapt quickly. "It's pretty cool how big it is," he said. "It sits in your hand really well."

He believes when surveyors discover the efficiencies the new controller brings to the field, especially the ability to use it as a split screen, they won't want to go back to the previous technology.

"You have your normal measurement or working screen up," Lyttle explained, "but you also have a map so you can see where you are. It just gives you a reference for everything and gives you more spatial awareness."

The TSC7 integrates a tablet experience with a physical keyboard and includes Windows® 10 Professional, which enables users to look up information and send and receive files, eliminating the need for a separate device or going back to the office to handle those tasks.

Lyttle hadn't yet used the TSC7's SIM card function but looks forward to being able to connect to the internet.

"For a lot of people who work remotely," Lyttle said, "obviously that will be a big benefit."

Software: "You won't be lost"
Lyttle was able to test the TSC7 with a beta version of Trimble Access 2018 software for about two weeks and quickly adapted to the familiar ecosystem, which features a new user interface and powerful graphics capabilities.

"It's the same, but better in terms of being a lot easier to use," he said. "It's still very user intuitive. If you've used the previous version of Trimble Access with the TSC3 data collector, you won't be lost in what you're doing with the TSC7."

The biggest difference, Lyttle said, is the opening screens in Access, in that the software starts with Projects and then goes into Jobs. "It is significantly quicker and easier to set these up, and the same goes for navigating between your existing projects and jobs," he said. "It's also a lot simpler to add additional information to the project when setting it up, such as descriptions, references, locations and images."

This additional functionality saves time when he returns to the office to process the data.

"It's basically very close to what it was before, but different," he said. "Once you figure out the new setup, it's a far, far better way of doing it."

He is looking forward to using the TSC7 with the SX10 Scanning Total Station, which he is currently using with the Trimble Tablet. The combination of the SX10 and the TSC7, he said, "is going to be a game-changer."

Top Benefit: Personalization
In terms of operating the TSC7 and Trimble Access 2018, users will find more function keys to customize their workflows.

"The thing I'm really starting to enjoy is how personalized you can make it," Lyttle said. "You set it up how you want it. It has six function keys, and you can assign whatever action you want to each function key. Once you've done that, it is literally one button and you are straight to where you want to go instead of backing out of everything."

Saving a couple of keystrokes doesn't seem like much, but it saves a lot of frustration. "Sometimes you lose track of the total station and having those functions on hand immediately saves time and energy," Lyttle said, "so it definitely improves workflow."

Other members of his crew are a bit jealous of his access to Trimble's new flagship field solution. "First, I need to convince the boss to get me one," he said. "I'm not looking forward to going back to my TSC3, because the TSC7 just streamlines everything."