

CASE STUDY

Badger[®] GALAXY[®]

Fixed Network System



Badger[®] GALAXY[®] antenna mounted to the top of the Oostburg, Wisconsin water tower.

Badger[®] GALAXY[®] Brings High Levels of Efficiency to Oostburg, Wisconsin

By Ted Schaar

Oostburg, Wisconsin, was founded by Dutch immigrants in the 1840s and named after a town in the Netherlands. It is located near Lake Michigan, about 50 miles north of Milwaukee.

Network Installation

The highest point in Oostburg is the safety railing atop the community's elevated water tower. "The tower looks like a golf ball on a tee," said Director of Public Works Roger Oonk. With its bird's-eye view of the area, the railing is home to a repeater that is part of the village's new Badger GALAXY fixed network radio frequency meter-reading system. Sharing the location are aviation warning lights, cell and wireless equipment.

Transmitters connected to the community's more than 1,100 water meters send data to the T-shaped Badger GALAXY repeater, which re-transmits the data to a collector housed in the municipal garage. The data is then relayed to a PC in Clerk-Treasurer Jill Ludens' office.

Billing and reading improvements

"GALAXY is a huge change for the better," Ludens said. "I love it!" Ludens is responsible for billing, and previously spent many hours compiling readings and preparing invoices.

"It was practically a two-week job every quarter," she recalled. "Now, thanks to GALAXY and the Workhorse Software billing application we've been using, the entire process takes less than a day. Eventually, I think I will be able to prepare and mail the bills in no more than six hours."

The Badger GALAXY system replaces a system that required readers to visit every customer and record numbers displayed on a remote register affixed to the exterior of the house or building. "It was great in its day," Oonk said, "because it eliminated the need to enter residences and businesses, which saved a lot of time. Nevertheless, it still took three workers about 12 hours each to collect readings on a quarterly basis."

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OOSTBURG CASE



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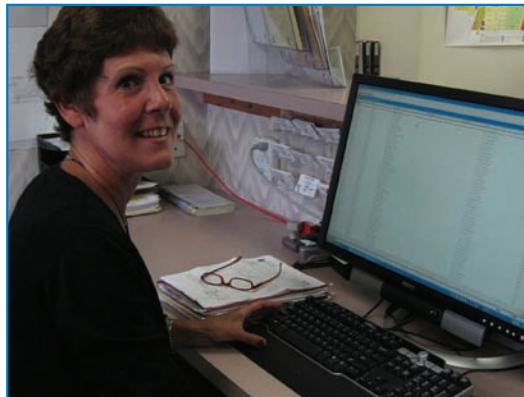
In addition, human errors meant multiple re-reads were usually needed, increasing labor hours. Added Ludens, “We also had to send someone out to get final readings when residents or businesses moved. Now I get those right at my desk.”

Transition began at a trade show

Village President Jack Hoffman was instrumental in Oostburg’s transition to the state-of-the-art Badger GALAXY system. The process began, Oonk remembered, when he and Hoffman attended a trade show at Chicago’s McCormick Place and saw an AMR demonstration. “Jack was impressed and said that we needed to work toward such a system for Oostburg.” The effort came to fruition in 2007 when the village looked into replacing existing technology.

“We did a cost-benefit analysis based on the amount of labor dollars we would save and other efficiencies and were able to justify the expenditure pretty easily,” Oonk recalled. The Badger GALAXY system proposal was approved by the village board in July of that year and installation began in September. “For all its sophistication,” Oonk continued, “GALAXY is straightforward and easy-to-use, and we were able to install it ourselves.”

A major challenge was access to the meter. “We kicked off the effort by getting publicity for the new system and the installation process in the Lakeshore Weekly, a local paper,” Oonk said. “That helped.”



Pictured above is Clerk-Treasurer Jill Ludens and Director of Public Works Roger Oonk of the Village of Oostburg, Wisconsin.

Two-person crews performed the meter modifications, going door-to-door wearing special jackets and badges to ease residents’ apprehensions. “In most cases, we just added the GALAXY transmitter,” Oonk explained, “and kept the existing meter; older meters were replaced as necessary.”

Tags in bright, fluorescent colors were attached to the doors of individuals who weren’t home to let them know they needed to schedule a time to admit the crew. “All and all, the installation went very smoothly,” said Oonk.

Two additional objectives

Along with reducing the time employees spend gathering readings and processing bills, Ludens pointed out that the Badger GALAXY system is helping the department achieve two additional objectives. “First, we are transitioning from quarterly to monthly billing to improve cash flow; second, we now have a timely way of letting customers know when they have leaks that are sending water and money down the drain.”

Before the Badger GALAXY system, leaks could go undetected for as long as three months and result in substantial water bills. “Some were as high as \$500 when a water softener got stuck in regeneration mode,” Oonk remembered.

Badger GALAXY helps quickly identify leaks by allowing Ludens to run a report every morning that shows abnormal usage. “Customers appreciate us sending someone out to alert them of leaks before a lot of water is wasted and the charges build up,” she said.

Oonk mentioned that he has worked with Badger Meter since he started with the department in 1974. He has enjoyed “a very good relationship with the company, all the way through, and GALAXY’s meeting our expectations, too.” ■