

# COMMunity

Volume 4, Issue 3, Winter 2009

A News Bulletin from **WILLIAMS COMMUNICATIONS, INC.**

## OpenSky Radio Network Goes Live in Newton

*"I wanted to take a moment to express my appreciation for your generous support and sponsorship of the Florida Sheriffs Association 2008 Summer Conference. The commitment of Williams Communications, Inc. in this endeavor was invaluable in making it a huge success. I can't thank you enough."*

Kevin Beary  
Orange County Sheriff

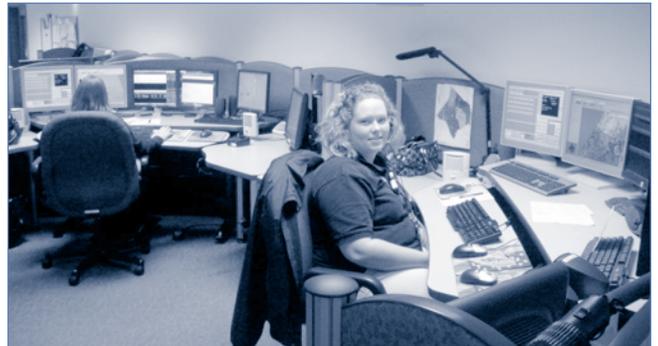
*"Your technicians were very professional on the Walton T-5 Radio installation, both in their technical abilities and in their dealings with the rest of our installation team as well as with the customer. In addition, when they did have problems, they stuck in there and worked through them. Considering that this was our first time working together, this was a very good – a truly stellar – collaboration. Thank you and I look forward to partnering with you in the future."*

K. Dale Finch  
Sales Engineer III  
Embarq

Tyco Electronics' OpenSky Radio Network went live on Nov. 19 in Newton County, Ga., providing communications among 600 users with an expected expansion to more than 1,300 terminals. The seven-site 700/800 MHz network solution provides the County's public safety and utility personnel with critical voice and data communications and interoperability between surrounding agencies.

Newton County is located 35 miles east of Atlanta with an estimated population of approximately 82,000. The OpenSky system will be utilized by the County's Fire, Sheriff, EMS and EMA Departments, as well as the Police and Fire Departments of the City of Covington, City of Oxford and City of Porterdale. The OpenSky system will eventually be used by County and City utility organizations.

"We are pleased to be using one of the most sophisticated and powerful systems available today with Tyco Electronics," said Mike Smith, Newton County 911 Director. "The OpenSky system not only meets our need for functionality, Please see **Newton, p. 3**



Covington-Newton County 911 Center

## Florida's SLERS: A Proven Solution

The Florida Statewide Law Enforcement Radio System (SLERS) has completed another successful year. Thousands of users have joined the system, allowing many more agencies the ability to communicate with one another. Interoperability has played a significant role in the successful apprehension of felons and in the safety of first responders. In the past year alone, Williams Communications, Inc. (WCI) has brought on a number of users to SLERS to improve radio communications in their area, as well as interoperability among participating agencies. Spanning over 59,000 square miles, SLERS' coverage area ranges from Pensacola to Key West, plus 25 miles offshore.

It is hard to believe that two years have passed since SLERS' last legacy phases were updated to fully meet M/A-COM standards. At that time,

many leaders, including Gov. Jeb Bush, M/A-COM Director Bill Tinsley, Department of Management Services Director Linda Fuchs and Department of Highway Safety and Motor Vehicles Executive Director Fred Dickinson gathered for a press conference to launch SLERS.

The SLERS system is the result of a unique public-private partnership between Tyco (M/A-COM) Electronics Wireless Systems and the State of Florida. It accommodates more than 6,500 users with 14,000 radios in patrol cars, boats, motorcycles and aircraft across the state.

The SLERS system has been tested and has performed unflinchingly during Florida's turbulent hurricane seasons. Local telecommunications and cell phone systems often fail at the height of storms, leaving law enforcement agencies who are not on the

Please see **SLERS, p. 2**



**Williams**  
Communications, Inc.

WIRELESS TECHNOLOGIES

5046 Tennessee Capital Blvd.  
Tallahassee, FL 32303

1-800-649-5783  
1-850-385-1121

www.wmscom.com

# Charging and Conditioning Your Batteries

There are many different battery charger options on the market today. It can be difficult to know which one to purchase. Here are some helpful tips when considering a battery charger:

- First, decide how many batteries at a time you need to charge. Charger options vary from a single bay charger to four and six bay chargers.
- Do you need a charger that conditions your batteries? Conditioners, when used properly, will enhance the life of your battery. Battery conditioners improve the reliability and extend the life of two-way radio batteries by reducing memory effect.
- Do you have a battery analyzer? A battery analyzer accurately determines and shows the capacity of the battery.

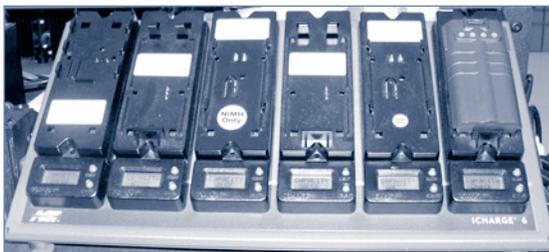
It is just as important to know how to charge your battery correctly:

- Always read the charger instructions before you begin charging your batteries. Different batteries have different charging instructions.
- Depending on the type of battery you have, be sure not to over charge it. Over charging batteries will accelerate the aging process, resulting in a shorter life span.

- When applicable, do not put your battery on the charger until it is completely drained. You do not want to affect the battery's memory by placing it on the charger before it has been fully depleted.
- Make sure the battery is completely charged before you take it off the charger.
- Always have a spare battery charged and ready to be used.

You can extend the life of your battery by taking the proper care.

*Take advantage of the Williams Communications, Inc. end-of-year sales on battery chargers/conditioners and analyzers. Call us today!*



## Newton

*(Continued from page 1)*

reliability, interoperability and price, it is also customized to fit the unique requirements of our first responders and other critical personnel. We now have the most effective communications tool at our disposal."

Newton County elected to implement the OpenSky network because of the system's ability to run voice and data applications on a single Internet Protocol (IP) network with only one radio in a vehicle and its unmatched scalability for meeting the County's future growth requirements.

"We are glad that Newton County went through an open bid process," said James Potter, Area Sales Manager of Tyco Electronics Wireless Systems. "As a result the County got a public safety communications system customized to their needs. We feel that there is a real partnership between Newton County and Tyco Electronics Wireless Systems and we are honored to provide the tools needed to help protect their residents."

At the "Go Live Ceremony," State Homeland Security Director Charlie English applauded local public safety personnel and elected officials for their long-term vision in approving the system, saying "It's a celebration for the state of Georgia."

## SLERS

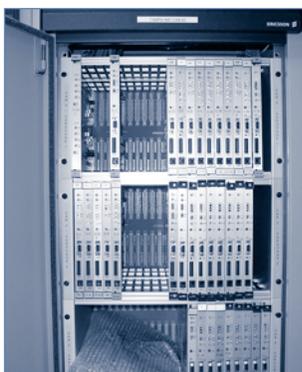
*(Continued from page 1)*

SLERS system unable to communicate. Fortunately, for those who do use the SLERS system, communication is uninterrupted and functions continuously during storms.

Hurricane season is always a time of concern for Floridians. Since 1990, Florida has been hit directly by 22 tropical storms and hurricanes. To name a few:

Σ The year 2004 was particularly active for storms and hurricanes in Florida. Tropical Storm Bonnie and Hurricanes Charley, Frances, Ivan and Jeanne all struck the Florida coast between August and September of that year.

Σ In 2005, Hurricane Katrina struck Miami,



Fla., as a Category 1 storm before strengthening to a Category 3 and striking the Louisiana-Mississippi-Alabama coast. The implementation of

SLERS creates a unique, cost effective opportunity for local governments to join a state-of-the-art, statewide radio system.



When considering becoming a SLERS user, keep in mind its many benefits:

- Capital Investment is Minimal
- Discounted State Contract Pricing is Available
- Financing is Optional
- Have the latest in secure, digital communication for a fraction of the cost required to install an independent system
- Expedited implementation plan
- 24/7 maintenance and technology refresh included
- Interoperability with State Agencies and Surrounding Counties
- Secure, Digital Voice and Data

# More Choices in Radio Batteries

For many years, users of two-way radios have had to rely on either nickel-metal or nickel-cadmium batteries. This is because the nickel-cadmium batteries were found to be the only suitable battery for portable equipment – from wireless communications to mobile computing. Although pioneer work with lithium batteries began back in 1912, it wasn't until the early 1970s that the first non-rechargeable lithium batteries became available to purchase. Then in the



early 1990s, the nickel-metal-hydride and the lithium-ion emerged. Today, lithium-ion is the fastest growing and most promising battery chemistry.

So, what are the differences between the four types of batteries?

**Nickel-cadmium batteries** have the advantage of maintaining steady high capacity and low internal resistance through most of their service life. Nickel-cadmium is one of the most rugged rechargeable battery chemistries, tolerating deep discharge for long periods. NiCd batteries offer the following benefits:

- They provide the highest number of charge/discharge cycles. A properly maintained NiCd battery can provide over 1,000 battery cycles.
- They can be stored for a relatively longer period in any state-of-charge.
- They are more economically priced in comparison to other battery chemistries like NiMH and Li-Ion. They have the lowest cost per battery cycle.

**Nickel-metal-hydride batteries** tend to start with good capacity and low internal resistance, but the resistance increases after a few hundred cycles. The three major benefits of the nickel-metal-hydride cells to designers of portable, electrical and electronic products are:

- Improved energy density (up to 40

percent greater than nickel-cadmium cells), which can be translated into either longer run times from existing batteries or reductions in the space necessary for the battery.

- Elimination of the constraints on cell manufacture, usage and disposal imposed because of concerns over cadmium toxicity.
- Simplified incorporation into products currently using nickel-cadmium cells because of the many design similarities between the two chemistries.

**Lithium Polymer batteries** are widely used in laptop computers, cellular phones, and other personal electronics. When handled and used properly, Lithium Polymer batteries can be quite safe. They also offer a number of distinct advantages over other sources of stored electrical potential, including the following:

- High Energy Density – Lithium Polymer batteries are capable of storing a proportionately high amount of energy compared to older technologies, such as those found in NiCd and NiMH batteries. In many cases, they offer over four times the energy capacity for their weight.
- Flat Voltage Curve – Lithium Polymer cells are fully charged at 4.2 volts and are considered fully discharged at 3.0 volts. This allows for a relatively flat voltage discharge curve, providing solid performance throughout the discharge cycle.
- No Memory Effect – Lithium Polymer cells do not develop a memory effect from being only partially discharged and then charged again (such as that experienced by NiCd cells). The cells may be partially charged and discharged without damaging their performance so long as they are kept within their normal operating voltage parameters.
- Low Self Discharge – Unlike NiMH and NiCd batteries, Lithium Polymer cells experience a very low rate of self-discharge when not in use. Lithium Polymer cells experience a self-discharge rate of approximately 5% per month, compared with over 30% per month and

20% per month in NiMH batteries and NiCd batteries, respectively. This means that users can now fully charge their Lithium Polymer batteries one day and then use them weeks later, at which time they will still have nearly a full charge.

**Lithium-Ion batteries** are a low maintenance battery and no periodic discharge is needed. Charging can be done at random, because the battery does not need to be fully depleted before recharge. A recharge on a partially charged battery does not cause memory, because there is no memory. The major benefits of lithium-ion batteries are:

- High energy density potential for higher capacities.
- Does not need prolonged priming when new. One regular charge is all that's needed.
- Relatively low self-discharge; it is less than half that of nickel-based batteries.
- Low maintenance is required because no periodic discharge is needed; there is no memory.
- Specialty cells can provide very high current to applications such as power tools.

Contact Williams Communications, Inc. today to fulfill your battery needs.



## Users Group Hosts Successful Conference

Each year, Southeast M/A-COM users gather to preview new products and technologies, attend training classes and network at the Florida M/A-COM Users Group Conference. The conference provides users with the opportunity to interact with M/A-COM personnel, learn about future products and technologies and get the latest information on radio communication technologies.



WCI's conference team (left to right): Dan Dominguez, Jennifer Hirst, Dave Stowe, Susan Marchese, Bryan Kocher, Hilarie Gerald and Gavin Lasater

This year's annual meeting was held November 3 – 5 at the Hilton Daytona Beach Ocean Walk Village in Daytona Beach, Fla. Presentation topics included:

- Terminal Product Review & Feature/Options Training Class for Users
- Rebanding 101: Lessons Learned for Technical Users
- Migration From EDACS
- Terminal & Trunking
- Data Choices
- Grants & Funding Updates

In addition, roundtable sessions provided opportunities for the M/A-COM group to identify and prioritize system issues and address other needed improvements. Staff from Williams Communications, Inc. also were on hand to display products and service options in the vendor exhibit hall.

During the conference, the following members were named to the new Users Group Board of Directors:

- Vic Cullars, State of Florida - President
- John Daly, Collier County - Past President
- Dennis Fodi, Pasco County Communications - President Elect
- Russ Bass, Florida Highway Patrol - Vice President
- Jennifer Hirst, Williams Communications - Secretary
- Debbie Smith, Volusia County Sheriff's Office - Treasurer
- Greg Coleman, M/A-Com - Vendor Liaison
- Steve Litschauer - Lifetime member



*Happy Holidays and Best Wishes for a Safe & Happy New Year from your team at Williams Communications, Inc.*



## Williams Communications, Inc.

WIRELESS TECHNOLOGIES

**HEADQUARTERS:**  
5046 Tennessee Capital Blvd.  
Tallahassee, FL 32303  
1-800-649-5783  
1-850-385-1121

**TALLAHASSEE OFFICE:**  
1215 West Tharpe Street  
Tallahassee, FL 32303  
(850) 205-2337

**JACKSONVILLE OFFICE:**  
7029-6 Commonwealth Avenue  
Jacksonville, FL 32220  
(904) 378-0054

**CRESTVIEW OFFICE:**  
701 Ashley Drive  
Crestview, FL 32536  
(850) 689-6651

**NEW YORK OFFICE:**  
7 Washington Square  
Albany, NY 12205  
1-800-649-5783

PRSR STD  
US POSTAGE  
PAID  
TALLAHASSEE FL  
PERMIT NO 904

[www.wmscom.com](http://www.wmscom.com)

**Tyco Electronics**

M/A-COM Wireless Solutions

### In This Issue

- *OpenSky Radio Network Goes Live in Newton*
- *Florida's SLERS: A Proven Solution*
- *Charging and Conditioning Your Batteries*
- *More Choices in Radio Batteries*
- *Users Group Hosts Successful Conference*