

Automate

The Computrols Building Automation Newsletter

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Editor's Note

Welcome to Computrols' Automate. Automate is a free newsletter dedicated to bringing you the latest in building automation technology, with a focus on Computrols Building Automation Systems. In this newsletter, we will provide HVAC energy savings tips, a look back at NFMT, Computrols' feature in U.S. Builders Review, and catch you up on other Computrols news.

As we strive to make the Automate newsletter a useful and informative tool for all of our partners, customers, and contacts, we welcome any feedback you might have regarding its contents. If you enjoy reading Automate, we encourage you to forward it to your colleagues and clients so that they might subscribe as well.

Thank you,

Drew Mire

Chief Executive Officer

Computrols

Computrols Brings Building Automation Tech to NFMT

This past March, Computrols participated in the National Facilities Management & Technology (NFMT) Conference/Exposition as both an exhibitor and a speaker. The conference included 125 comprehensive conference sessions along with an extensive trade show floor featuring over 600 vendors offering anything and everything related to facility management.



Computrols' Bob Hand, Drew Mire, and Scott Holstein manned the trade show booth, showing off Computrols new expo kit. The kit provided attendees with a quick look into the simplicity and in-depth analytics highlighted in Computrols Building Automation Software (CBAS). The mini-system included an [8X Controller](#), a thermostat, a temperature/humidity sensor, variable speed fan and actuator.

The team also brought a little bit of New Orleans flare to the booth, giving out Computrols Mardi Gras beads. The beads were a big hit amongst attendees and could be found dangling from the necks of those in the Mardi Gras spirit.

D.C. Branch Manager, Bob Hand, said, "I think this was a really productive trade show for us between the new opportunities generated and the visibility it gave us to current and prospective customers."

Technology Trends in Building Automation

The highlight of the trip was Drew Mire's (CEO) presentation on Technology Trends Impacting Building Automation Systems in Commercial Real-Estate. Mire presented to a group of about 60 facility management professionals, covering technology trends such as machine learning, wireless communication, and connectivity. You can watch Drew's presentation on YouTube by [clicking here](#).

"Overall, I think it was a very successful show for Computrols," said Mire. "We made some great connections that I think will lead to new, mutually beneficial partnerships."



COMPLIMENTARY LUNCH & LEARN

Do you have a group of 10 or more interested in learning more about building automation?

Call **504-529-1413** to schedule a lunch and learn with Computrols' experts!

Dealers and Customers Participate in Computrols Level I CBAS Training



Nine participants, including Computrols' customers and [distribution partners](#), took part in a three-day training program outlining the basics of [Computrols Building Automation Software \(CBAS\)](#). The training sessions were guided by Director of Research & Development and the original creator of CBAS, Mike Donlon.

The training began Tuesday, March 14 with a high-level overview of the software. Some of the topics covered in the morning session were views (text, hardware, and graphics), point command and program screen, schedules, and control loops. In the afternoon, the group jumped into some hands-on exercises in which they did [basic programming](#) such as adding controllers and points. Technical Support Manager, George Hingle, joined the class to assist with this portion of the training.

Classes picked up the next day with a slightly more complex lecture and lab covering backing up and restoring a database, programming user/

passwords, and configuring workstations. The latter half of the day was focused on wiring, addressing, and programming Computrols' [UNI-B](#) and [VAV-B Controllers](#).

In the final day, participants were given a behind the scenes tour of Computrols headquarters and manufacturing facility. They also had the opportunity to speak with senior engineers and programmers who answered their specific questions. The culmination of the training classes came in the form of a CBAS Shootout in which attendees were organized into teams and challenged with a unique programming task. Each of the members of the winning team received Handhelds.

If you would like to join us for our next training course, please contact us at 504-529-1413 for more information.



US BUILDERS
R E V I E W

US Builders Review Magazine features Computrols as GreenBuild Editor's Choice. [>> Read the Full Article](#)

From Electrical Helper to CEO

You always hear about how hard work will eventually pay off, but in the case of [Computrols](#) CEO, Drew Mire, it really did.

Mire started his career at Computrols eight years ago as an Electrical Helper. His duties included running wire, bending conduit, wiring [VAV boxes](#), among a number of other tasks given to him by senior level technicians. During this time, he was also pursuing his degree from the University of New Orleans with a full-time course load.



With his father's background as an electrician and Mire's ambition, he was a quick study and was soon promoted to Technician. At this point in his career, he decided to start working full-time and to complete his degree on a part-time basis.

As a field technician for Computrols' control systems (HVAC, lighting, access control, and fire alarm systems), Drew got first-hand experience with Computrols' products and dealing with customers. "Technicians are the heartbeat of our organization," said Mire. "They are the ones on the front lines everyday, and they are a major part of how Computrols gained the sterling reputation it has today."

Drew was a tireless worker and enormous advocate of customer satisfaction in this role. Before he left a job each day, he would ask the chief engineer or manager on staff, "how was my service today?" If he received anything but an overwhelmingly positive response, he took it to heart. After about a year in this position, Drew was promoted again to a project management role.

This new role allowed him to leverage his hands-on skills as a technician and his excellent customer service background as he acted as the main point of contact for clients. Mire flourished in this position for two years, managing technicians and contractors and training new clients on [Computrols Building Automation Software \(CBAS\)](#).

At this point, an opportunity for a Branch Manager role came up at the company's Central Florida location.

Mire jumped at the offer and made the most of it. He did everything from installations to new business development, landing many accounts that Computrols still has to this day.

After a year developing the [Central Florida branch](#), Mire was called back to company headquarters to fill the role of Operations Assistant. It was in the position where he refined his process improvement and business development skills. While helping run the day to day operations from manufacturing to accounting, Mire was also an integral part of bringing in new business for the growing company. He regularly attended trade shows, took part in sales presentations, and networked at industry events.

At this point, Mire had proven himself a valuable asset in a number of capacities. He was a skilled technician with a knack for customer service and a nose for sales.

While successfully executing his position as Operations Assistant, the position of VP of Operations came open and there was only one obvious choice. Although Mire was still a relatively young professional, he had proven himself up to the task in every challenge he had been given, including graduating with a degree in Business Management while working full-time.

As VP of Operations, Drew was the head of all day to day activities including manufacturing, engineering, purchasing, marketing, and accounting. He also became more involved in the company's long-term goals and vision. In his two years in this role, he grew the number of branches and [distribution partners](#), helped the company expand into international markets, and secured Computrols' foothold as a leader in the building automation industry.

Most recently, Drew was promoted to Chief Executive Officer of Computrols in February 2017. Having experience from the bottom up has given him a unique perspective that few CEOs have in today's world. He is now intimately involved in setting the strategy and direction of Computrols as well as the culture and values of the growing organization. Mire said, "I couldn't be happier to be a part of this great company and have the opportunity to guide our team through a very bright future."

Static pressure control and VAV operation



Article by Andrew Buchanan,
Computrols Senior Building
Automation Technician

Static pressure is a key ingredient in a successful [Variable Air Volume \(VAV\) system](#). It ensures that air flow will be available to enable the VAVs in a system to achieve their designed Cubic Feet per Minute (CFM) at maximum demand. [Simply put](#), the push of the air must be greater than the resistance to the flow or no

air will circulate through the ducts. Typically the setpoint for static pressure is determined through the course of the testing, adjusting, and balancing (TAB) at the end of a job.

Without proper TAB, problems such as condensation and undue stress on your HVAC system are bound to arise. During the TAB phase, the VAVs are set to their maximum cooling CFM setpoint after each VAV has been calibrated. A static setpoint is determined by driving the fan motor to the necessary static required for all VAVs to hit their maximum CFM target. This static pressure setpoint is what is known to be required to achieve maximum cooling airflow.

This is sometimes where the story ends. Maximum cooling can be achieved. The VAVs will modulate their air flow and be able to hit their maximum CFM requirements. As they meet their temperature setpoints, they will back down airflow and the static in the duct will go up. As the static goes up, the fan will slow down to hit the established static pressure setpoint from the TAB, saving fan energy.

This is not, however, the end to what can be done to promote optimum energy savings. At this point, we know we can achieve our maximum demand output. The fixed static setpoint will accommodate this. A floating static setpoint can be used instead to allow the system more flexibility and greater efficiency.

A reset schedule based on static setpoint can be used to allow the system to back off further when temperatures in the field are being met. It stands to reason that if we have one static pressure needed for the VAVs to hit their maximums, a lower static setpoint

would also allow the VAVs to hit their minimum CFM targets. These two numbers would be the range of a reset schedule for the static setpoint. There are many ways to establish what drives the reset schedule up and down.

Two of the ways to guide a system's static pressure reset schedule are face/bypass damper position and by monitoring the greatest of, or an average of each VAV's CFM deviation. The colder the air temperature required, the greater the cooling demand of the VAVs. The further under a VAV's CFM is from its target, the more static pressure is required for it to hit max.

In newer [DDC systems](#), the VAV's CFM deviation can be monitored and used to swing the air handling unit's (AHU) static setpoint reset schedule. As the system's VAVs go from lower to peak demand, their CFM deviations would increase. The static setpoint would then ramp up with the fan speed behind it. As the VAVs meet their temperature setpoints, the CFM target goes down, duct static increases and so on. This is a very direct way to maintain just the airflow needed for the VAVs to do their job. Throttling the leaving air temperature in similar fashion can be used to further promote energy efficiency.

In older systems, with pneumatic or stand alone VAV controls, being able to track the face/bypass damper position is another way to monitor cooling demand. As a face/bypass damper modulates higher and higher towards full open to cooling, it can be an indication that demand from the field is increasing. The higher the demand, the more fan or static is needed. A static reset schedule can be used to increase the static required as the face/bypass damper position goes to full cooling and back down as the dampers go closer to full bypass.

By utilizing these methods and applying these same principles to regulate the leaving AHU air temperature, your system can achieve greater efficiency. Applied building wide, this can lead to greater energy savings. This can allow a system to provide enough cooling potential to maintain comfort while at the same time, reducing energy consumption.

Building Automation System Project: Miami Tower

Our team is thrilled to announce that Computrols was recently awarded a project that will include integrating to the existing building automation system and installing a new fireman's override panel at Miami Tower.



Miami Tower is one of the most prestigious buildings in Miami's central business district, standing 37 stories tall, situated on top of 10 stories of parking and ground-level retail space.

Computrols' technicians will begin working on the initial interface in April of 2017, communicating to the existing field controllers for the HVAC system. Once installed, Computrols Building Automation Software (CBAS) will enable the facility managers to better regulate the energy usage of their HVAC system, while continuing to maintain a comfortable working environment for their tenants. To complete the integration, Computrols will also be supplying its flagship [X-line controllers](#) which carry the industry's only lifetime warranty on [DDC Controls](#).

The fireman's override panel in the building will also be replaced in the coming months. The new panel, along with Computrols' 32X-SC, will also integrate to the building's HVAC system as a means of smoke control/exhaust in the event of a fire.

For more information regarding Computrols integration capabilities and fire alarm systems, contact our global headquarters at 504-529-1413.

While these controls are not currently implemented into the lights, Computrols' R&D team intends to have them fully integrated in the near future. With the recent move to a new, larger facility, the company has gone to great lengths to ensure that the addition reflects the energy efficiency Computrols is known for, and the lighting is no exception.