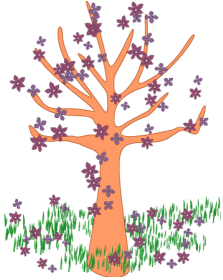
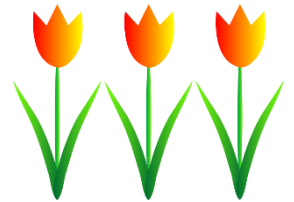


Division of Facilities



Newsletter



BUILDING AUTOMATION 101

By Gary Weishaar, Manager-Energy & Controls

*Building automation is the centralized control of a building's heating, ventilation and air conditioning, lighting, and other systems through a Building Management System or **Building Automation System (BAS)**. A building controlled by a **BAS** is often referred to as an intelligent building, or a "**smart building**".*



While there are many vendors that provide Building Automation Systems, K-State uses Honeywell's **Enterprise Buildings Integrator**, or **EBI**. Honeywell Inc. has been a presence at KSU since the mid 1980's and is now installed in virtually every building on our main campus. Because of the size and complexity of this modern system, K-State's Division of Facilities has a team of full-time technicians that manage this system in addition to the support provided by Honeywell.

In The Beginning

In its infancy, control systems were operated by a compressed air system, commonly known as pneumatics. While K-State still has several pneumatic applications on campus, technology has evolved over time into what is now known as **Direct Digital Control**, or **DDC**. DDC utilizes microprocessors and software programs (instead of compressed air) with greater precision and accuracy. Controls can be added to almost any mechanical or electrical device for control, monitoring, or scheduling. After initial installation, **Controls Technicians** can make modifications to how a device operates on desktops, iPads, or even smartphones. This kind of access allows users to view data and/or make adjustments from anywhere in the world.

Applications for Today

One example of a "smart building" on our campus is the new College of Business building. A lighting system with motion sensors can detect when people use a space and then sends a signal to the HVAC system to engage and respond accordingly. This type of interaction between building systems is regular and recurring in **over 65,000 points** being monitored and controlled in K-State buildings.

In addition to providing comfort and life safety needs of building occupants, Building Automation Systems can also dramatically improve operational and energy efficiencies in a building. All of our most recent new projects including Engineering Phase IV, College of Business, Seaton/Regnier Hall and the new Chiller Plant have new controls, "smart valves", and programming to allow better control and improved optimization. This has all played a major part in lowering the University's electrical usage in the last five years over 15% even though we've added over 600,000 square feet of additional building space.

A Bright Future

With this much change over the last 30 years, what does the future of Building Automation look like? While nobody really knows, it is safe to say that there will be dramatic changes and improvements in how buildings are controlled. It is not unreasonable to think that the end devices and field controllers will be smart enough to identify where they are and what system they should connect to. They could be self-learning systems that can sense the health of an entire building and adjust settings based on millions of variables. The systems may also be more cloud-based. This will allow us to analyze how buildings are operating with even more power and logic based on information accumulated from thousands of similar buildings. This data collection will allow the BAS to learn algorithms and patterns from buildings that are deemed to be well-run, which will in turn allow the system to start distinguishing what is "normal" and what could be an abnormality. This can help with preventative maintenance and other operational efficiencies.

Finally, we can expect to see an expansion of the "Internet of things" (IoT). While this may sound like a foreign language now, it will soon be as commonplace as the terms, "internet" and "Wi-Fi". Simply put, IoT is the concept of connecting any device with an on and off switch (i.e. cellphones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of) to the Internet...and to each other. The new rule for the future is going to be, "Anything that can be connected, will be connected." For now the best thing that we can do is stay tuned, learn what we can, and acknowledge that ever-advancing technology like Building Automation Systems will continue to impact how we work and live.



A Difficult Goodbye...

The Division of Facilities said a difficult goodbye to a dear friend and valued member of our Facilities Family. Robert "Bob" Crider passed away unexpectedly on Monday, February 19th. Bob was a member of the K-State family for many years and known by faculty, staff, & students as a kind-hearted, people person who "didn't know a stranger".

He was a motorcycle enthusiast and fan of Harley Davidson.

In addition to his motorcycle hobby, Bob enjoyed movies and live music. Whether at work, home, or church, he was known as a wonderful man and wonderful friend. His presence has been dearly missed and we share our most heart-felt sympathy with family and friends as we all continue to cope with this difficult loss.



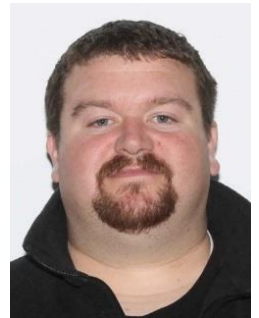
Welcome To Our TEAM!

The Division of Facilities is always excited to welcome new employees to our Facilities Team. It takes a lot of man-power (and women-power!) to keep our campus running smoothly so we are glad YOU'RE HERE!



John Burnett was hired as a Landscape Tech II for Grounds & Landscaping. He is working for Joe Myers.

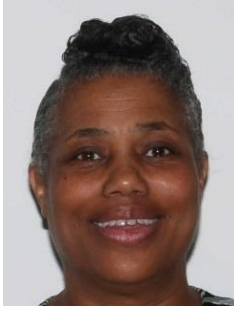
Samuel Marsh was hired as a Maintenance & Repair Tech II for Zone 5. He is working for Troy Bronaugh.



Sandra Emme was hired as a Custodial Specialist for Facilities Services. She is working for Steve Greinke.

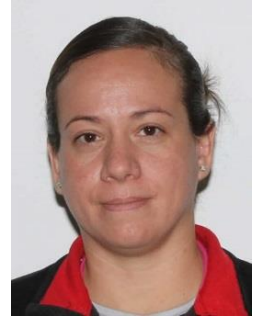
Byron Wilson was hired as a Custodial Specialist for Facilities Services. He is working for Patrick Lancaster.





Bernita Rawlins was hired as a Custodial Specialist for Facilities Services. She will be working for Beverly Price.

Silvia Cortez was hired as a Custodial Specialist for Facilities Services. She will be working for Quentin Rawlins.



On The Move!



Congratulations to **Patrick Standlee** who was promoted to Landscape Tech II in Grounds & Landscaping. He is working for Joe Myers.



Congratulations to **Charles Jackson** who was hired as an Office Specialist II in Customer Service & Event Scheduling. He is working for Loleta Sump.



KUDOS!..

...to **CHRIS SLATTERY**, Custodial Specialist for receiving the “**ABOVE & BEYOND**” AWARD FROM THE Career Center!



“I am inspired daily by the work that Chris does for our Berney Family Welcome Center facility. He works so incredibly hard. I’m sure it is not always fun or easy work but rather physical and detailed. I know that when we invite guests, our facility is always ready to greet whomever might come through the doors (and we have A LOT of guests). Chris not only keeps the public sides of our space looking great but also cleans the back of house very thoroughly as well. I have no idea how he does everything in a week, but I’m so

glad he works here and takes his job very seriously. He is also very personable, greets everyone with a smile, and asks how we are doing. It could be challenging to navigate cleaning spaces while people are using them, but Chris does it with a smile. He also puts lots of smiles on our faces as he comes through. For these reasons and more, he is very deserving of the **ABOVE & BEYOND** Award! Thank you, **Chris**, for all you do!”



-**Dana Nordyke**, Sr. Assistant Director, K-State Career Center



...to **CHEYANNE BRUNNER** (daughter of **Tim Brunner**) for being selected as 1 of the 12 finalists for Kansas State University’s **Presidential Scholarship** (see right). Twelve finalists were chosen out of 282 applicants. (**right**: Cheyanne is in the back row, second from the right.)



In addition, **Cheyanne** was also selected as 1 of the 5 finalists for the **Vanier Family Business Administration Best of Kansas Presidential Scholarship**.

(**left**: Cheyanne is second from the right)

What's New

Pump Alignment Training

Members of our Power Plant team received a two-day training in order to use a new alignment tool. Proper alignment improves reliability and longevity of machinery used in our Power Plant to keep campus buildings at correct temperatures.



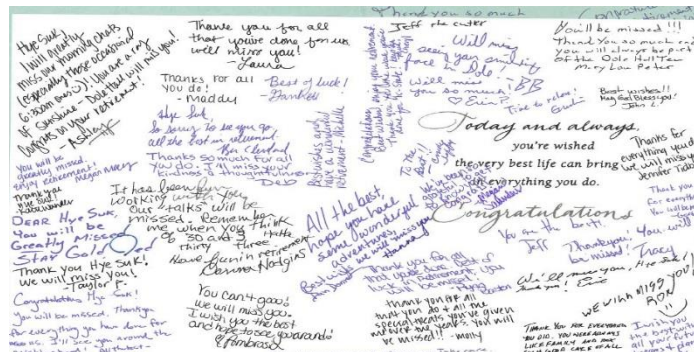
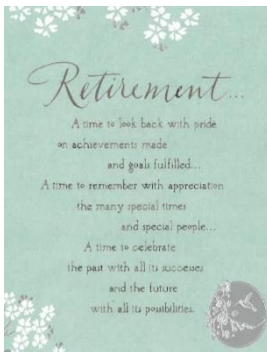
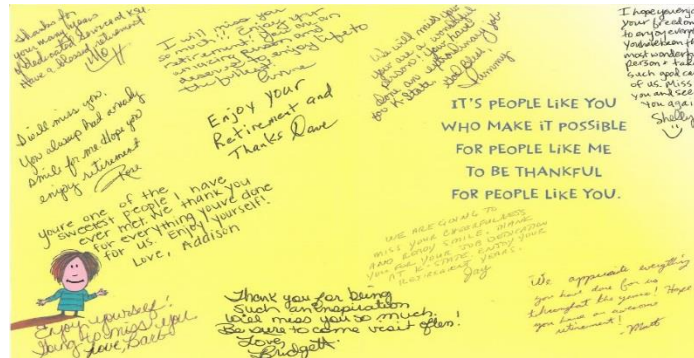
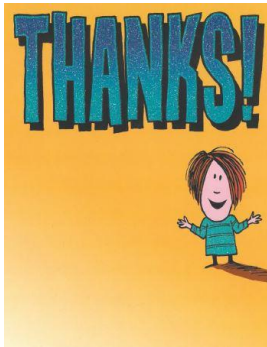
IPad Training with Zones

Our building maintenance zones employees went through training with an Apple Inc. representative on Thursday, April 5th in order to begin using iPads in the field. Utilizing this technology will significantly improve our ability to process work orders with greater efficiency and precision.



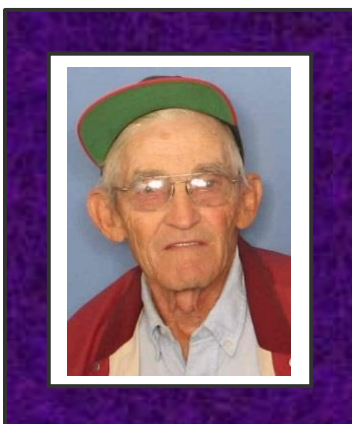
Many Thanks!

The many customers of **Hye Suk Stoddard** would like to say a big “THANK YOU” for all of her faithful years of keeping the buildings of our campus looking great. She will be missed!



Happy Retirement!

Congratulations to several members of our Facilities Family who have recently reached that beautiful season of life called, “retirement”! We are grateful for your valued years of service and we wish you all the best as you begin this next chapter in your life!



Marvin Heck, Custodial Specialist

Marvin Heck worked at K-State for 5 years in Custodial Service. He made a big impression in a short amount of time as a friendly presence. His co-workers described him as a great joke teller and always kept them laughing. Although he enjoyed the lighter side of life, he was a quiet and dedicated worker. He was known as someone you could count on in an emergency or when extra volunteers were needed for a job. He loved working for the students and occupants of the buildings he maintained.

Clifford Williams, Custodial Supervisor Senior

Clifford worked at K-State a total of 29 years and worked for Custodial Services 27 years. Although Clifford did not intend to stay long-term within the Custodial department, he found it to be a very fulfilling career he really enjoyed. His own experience led him to encourage his crew to “stick with it” and consider a career within Facilities Services. His smile, generous spirit, and friendly personality will be missed by all of us!



Mark George, Project Manager

Mark worked in K-State's department of Campus Planning for 8 years. He managed several projects including the Engineering Phase IV Expansion, which received the **AWARD OF EXCELLENCE** from **Associated General Contractors of Kansas, Inc.** in 2017.

Mark is described by his colleagues as detail-oriented and an “outside the box” thinker. He was often able to present truly unique solutions to various problems. We wish him all the best as he begins a much-deserved retirement!



Sue Maloney, Custodial Specialist

Sue worked for K-State a total of 13 years and worked for Custodial Services 11 years. She is described by her colleagues as an amazing employee who was very friendly and always had a big smile on her face! She was well-loved by her co-workers and the occupants of buildings she maintained. She will be greatly missed!



Hye Suk Stoddard, Custodial Specialist

Hye Suk worked a total of 28 years at K-State in Custodial Services and Vet Med Custodial Services. Hye Suk was known for her generosity, amazing work ethic, and ability to problem-solve. In addition, she loved helping out co-workers that may be falling behind. Her building occupants would tell you she always went “Above & Beyond”.

APRIL BIRTHDAYS

APRIL 3RD – ROBERT ODLE

APRIL 5TH – KEVIN SCHINDLBECK

APRIL 10TH – LARRY MELTON

APRIL 12TH – LOLITA COLLADO & HEATH LARSON

APRIL 13TH – WENDY SCHLESNER

APRIL 14TH – JAMES UKENA

APRIL 16TH – MIKE SCHOOLER & KI SUH

**APRIL 18TH – JUSTIN BAUER, ZUNILDA DOMINGUEZ,
& CORY DAVIS**

APRIL 26TH – JOSEPH ALTER & NATHANIEL SETTLE

APRIL 28TH – LARRY GLINIECKI

APRIL 29TH – ART SIAS

APRIL 30TH – CHARITA FALLEY



MAY BIRTHDAYS

**MAY 1ST – MARY WILLOUGHBY, GLORIA LOBERG,
& PARKER DEAN**

MAY 3RD – GARY KILNER

MAY 4TH – NATHANIEL HARSTINE



**MAY 5TH – SUNNY SMITH, JOHN CHRISTIE, &
GALEN HAGEMAN**

MAY 6TH – BRENT KOLTERMAN

**MAY 11TH – PAMELA NEWMAN, CRYSTAL STEWART,
& MATTHEW KOCH**

MAY 12TH – RICHARD SMITH

**MAY 16TH – MAXIMILLIAN COLLADO, JAY REYNARD,
PAT BOSS, & RANDALL HOBBS**

MAY 19TH – TINA WILLIAMS

MAY 21ST – RANDALL LINDSTROM

**MAY 22ND – MARK LOBERG, DIANA HUTCHISON,
& TANNER JOHNSON**

MAY 26TH – LARRY MCCOY & JOHN LEHMER