When I am asked what sets us apart from other organizations, my response is simple and immediate, “the people.”

Our success in Physical Facilities is a result of the outstanding job each of you does. This campus is consistently ranked as one of the best in the world and each of you are part of that success and recognition. This well deserved recognition comes, in part, because people at every level in every department are always willing to give their best in their individual job assignments.

In my 28 years of service, I have never encountered a single employee who, when needed, wasn’t willing to step up. When floods, fires, or other emergencies have occurred, I have watched many of you drop everything to help at a moment’s notice. Many of you willingly perform overtime responsibilities when called upon, and many of you willingly work on difficult shifts outside of normal working hours.

So, as you go about your own job assignments, remember that while each individual task you perform may seem routine to you, it is an important part of the mix that makes us great.

May I pass on my personal thanks for the remarkable job each of you do to make BYU so outstanding in the eyes of the world.

You truly do provide “Service With Excellence.”

Jim Dain

The BYU Broadcasting Building (BYUB) is one of the most complex and technical buildings ever built on the BYU campus. Construction began in the spring of 2009 and was completed only 20 months later in December 2010. This new state-of-the-art broadcast facility offers the latest in acoustical design providing a distortion and noise-free broadcasting environment. Rooms in the radio and HD TV production studios have been structurally isolated from the rest of the building using a dual wall system to eliminate sound transmission. Each room features acoustical Styrofoam insulation sandwiched between a double floor. All this is necessary to produce high quality radio and television programs that compete with any broadcast studio worldwide.

When a television production is underway, another challenging condition needs to be overcome. The high-powered HD TV lighting generates a significant amount of heat in the studio. To combat this, a stand-alone mechanical air conditioning system circulates massive amounts of air without a sound. This is accomplished using large diameter, high-volume, low-velocity ducts and diffusers that are specifically designed to move air without any hint of mechanical noise. Even in the unlikely event of a power failure, two large locomotive-size, emergency power generators are located outside of the building and are on stand-by 24/7 to ensure continued broadcasting for more than a week, if necessary.

At the northeast corner of the building a large truck storage bay houses BYU HD TV Broadcast trucks. A below-grade snow-melting grid is installed under the north-facing driveway. Warm air is moved through multiple large diameter plastic pipes located just below the concrete. This parking/storage area is isolated from the adjoining building and its studios by a five-foot thick multiple wall separation, ensuring that no truck or construction noise enters the studios during a broadcast. Even the roof structure is designed to minimize sound transmission and guarantee uninterrupted broadcast capability. The satellite dish farm on the building’s top west side is supported by an elevated steel framework allowing roof maintenance to occur without affecting transmission or other use of the dishes.

Finally, in order to facilitate the laying, replacement, repair and maintenance of broadcast and other cables throughout the BYUB, thousands of square feet of raised flooring cover more than 85 miles of cable. With the completion of this newest addition to the BYU campus, BYU Broadcasting has now been able to consolidate their production studios into a single location. It is an amazing new home for BYU Broadcasting that now allows them to broadcast in HD TV to a worldwide audience.
In general, most of us are wary of change. Whenever a new leader, new program, reorganization or anything else new comes along we all wonder, “What does this mean for me?” Over the years I have seen leaders of organizations make changes for a number of reasons. Some do it simply because they like to stir things up. They openly admit that, in their opinion, it makes people stretch. Others want to make changes as an indicator that times have changed... old things are out, new things are in. But the changes I have observed to be the most meaningful were the ones that helped people and organizations grow in their abilities and capacity, and that have helped people to rise up and be better. After all...isn’t that our ultimate goal?

It was this last concept that motivated me to make the changes we experienced at the end of December. After much study, analysis, and observation I realized our Physical Facilities organization could be even better with some adaptations.

For those who are not aware of all the changes, permit me to list them in a simplified form:

- Scott Briggs was given a new assignment as Assistant to the Vice President for Physical Facilities and is coordinating our new liaison program, this newsletter, and other assignments.
- Ray Bernier received the Engineering, Utilities, A/C, Heating Plant, and Construction operations. The new, larger organization is now called Planning & Construction.
- Jim Dain was named Managing Director over Building Services, Grounds, and Transportation. As part of the change, he also received the Electrical and Mechanical shop operations.
- JB Ostlund received the Learning Management System (LMS) Training Module development (computer-assisted learning) and Compliance operations.
- Recently a number of the “Supervisors” that manage our shops and other operations were given a job title change to “Manager.”

I would like to thank each of you for your dedication to BYU and your desire to do your very best each day. It is because of your positive approach to our work that I see such great results coming forward. I never cease to be amazed at how many of you strive to give your very best every day and use your God-given talents to bless all of BYU. Thank you for continuing to render “Service with Excellence.”

With the cold weather of this past winter season drawing to a close, it seems appropriate to review how the cozy environments of our interior spaces on campus are made possible.

Our Central Heating Plant humbly evolved from a wood structure on the south hillside in 1911. It housed a hand-fired coal boiler that supplied steam for three upper campus buildings. Then, in 1934/35, the original wood structure was replaced with a concrete facility equipped with an automated coal feeder. With the passing of time, the plant eventually lost the race against continual campus growth and the necessity for a new, larger facility was realized.

Construction of our Central Heating Plant in its present location began in 1946, with numerous expansions and upgrades since. In 1956, the need for a major change to the plant was required and a conversion from steam to high temperature hot water began. High temperature hot water (HTHW) technology migrated to the US from Germany just after WWII. Water in a HTHW system is heated to 400°F at a pressure of 300 psi. Over eight miles of piping circulates 400,000 gallons of HTHW throughout campus.

By 1958, three 50 million Btu coal-fired boilers were added. By 1965, two additional 100 million Btu coal-fired boilers and the chimney were installed in an effort to meet the demands of a rapidly growing campus.

Revisions to Utah’s air quality control standards required yet another significant change in the Central Heating Plant operation in 1991. Two coal-fired boilers were removed and replaced with the two 150 million Btu gas-fired boilers plus a bag house was installed for coal-fired particulate filtering. Natural gas is now the fuel source for a four-month winter period and coal is the source for the remaining eight months each year.

The large coal truck on campus delivers coal each day during the coal-burning season from a mine near Scofield, Utah.
Congratulations to our SAERA Award Recipients — 2011

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Brian Decker has worked for BYU Custodial in the Joseph F. Smith Building (JFSB) for four years. He is from Gallup, New Mexico and is married to Chelsea Nelson Decker. Brian is a Student Assistant, supervising ten custodians and gives his best by working hard, having a positive attitude, and volunteering for the dirtiest of jobs. He is a great example and appreciated by all.

Fernando Carroll has been at BYU for six years. He is an Instrument and Controls Technician at the Central Heating Plant. His job involves boiler controls and the automation of heat exchangers. Several times a year he climbs the smokestack for routine maintenance. He has a degree in Electrical Automation from Utah Valley University. He and his wife, Tahira, live in Provo and have two children. Fernando enjoys fly fishing and soccer.

Taft Kaze has lived in Provo all of his life and has three girls, one boy, and twelve grandchildren. He began his career at BYU in 1984 in Custodial and is now the Manager of Moving Services. His father was a General Contractor and together they helped build the Tennis Court Building (TCB) on campus. He is a great asset to Physical Facilities and we really appreciate him.

Kevin Powell has been at BYU for five years as an Electrical Engineer in the Utilities Maintenance and Engineering department. His job includes specifying electrical equipment and project management for electrical systems projects. He has a Bachelor’s degree in Electrical Engineering from BYU. He and his wife, Sandy, live in Orem and have eight children and nine grandchildren.

We would like to extend a warm welcome to three new full-time employees that have recently transferred from Student Auxiliary Services to our Physical Facilities Division. Craig Giles and Mitch Curtis have joined our Access Support Shop (Locksmith) and Roger Ollerton has joined our Paint Shop. They are a great addition to our team and we hope everyone here will make them feel at home.
Physical Facilities Division
201 BRWB
Provo, Utah  84602

Student Appreciation Luncheon
Games and Prizes
14 April 2011
12:00 to 1:30 p.m.
South Field

Welcome New Employees
We extend a warm welcome to all the new full-time employees listed below who have recently joined our Physical Facilities Division team. We’re all striving to keep our campus the best it can be, so please feel free to share new ideas, thoughts, or suggestions you may have.

Brian Scott / ES Shop
Eliza Jenks / Custodial
Sidney Smart / Custodial
Timothy Wilda / Custodial
Matthew Erwin / Custodial
Michael Patterson / Grounds
Duwayne Chestnut / Air Cond.
Shaeli Ellis / Planning & Const.

Shop Spotlight
“Electrical Systems Shop”

Electrical systems on campus are wide, varied, and complicated. Electricity is delivered to BYU’s two campus substations at 47,000 volts and our four substation transformers lower the voltage to approximately 15,000 volts, which is distributed to all BYU and MTC facilities. Upon reaching each campus destination, the electricity is again reduced, lowering it to 480v, 208v and/or 120v as it supplies power to mechanical equipment, appliances, computers, lighting and all other electrical devices required for offices, classrooms, and labs. The Electrical Systems (ES) Shop measures the power used by each campus facility for consumption and billing purposes. As an added service, the ES Shop also provides temporary power for departmental functions and events sponsored by student activity associations and other campus organizations. The BYU campus has 40 emergency generators supplying power for critical needs and any emergency evacuation of buildings. In addition, the shop maintains 14 large UPS systems to ensure the delivery of uninterrupted power where continuous operations are crucial. Other systems supported by the ES Shop are scoreboards, clocks, bells, and timers, in addition to the 102+ campus elevators. Certified elevator technicians in our ES Shop ensure each elevator continues to run efficiently and safely. Some additional responsibilities of the ES Shop staff are fire and security alarm systems in every building including thousands of smoke detectors, horns and strobes, access control card readers, motion detectors, duress alarms, agent release alarms, medical alarms and more. The ES Shop also maintains all outside lighting across campus such as sidewalk area lighting, parking lot lights, traffic control lights, and field lighting for sporting activities.

The ES Shop has 20 full-time employees and 25 to 30 student employees who are assigned to work with our full-time employees in accomplishing daily tasks. Future plans under consideration include a conversion to LED lighting, energy efficient fluorescent lighting ballasts, and room controlled lighting systems that will rise and lower the light level as needed. New technologies continue to offer opportunities to become even more energy efficient.