



2014 Engineers Week Report from the South Dakota Engineering Society Central Chapter

by Steve Pirner, PE, Secretary/Treasurer

ENGINEER WEEK BLOOD DRIVE - The Central Chapter of the South Dakota Engineering Society (SDES) kicked off its 2014 Engineers Week activities by sponsoring a “Be a Hero” Blood Drive on February 18 in the Matthew Environmental Training and Conference Center. Patrick Wellner organized the event which went from 11:00 am to 4:15 pm. Patrick, Kayla Fawcett, Jeanne Goodman, and Tim Schaal brought treats for the donors while Patrick and Tim manned the sign-in table during the event. 37 units of blood were successfully collected by the United Blood Services.

ENGINEER WEEK BANQUET AND AWARDS - Those who donated blood were encouraged to eat a hearty supper, so 20 SDES Central Chapter members (sign-up sheet is enclosed) then made the trek that evening out to the Cattlemen’s Club for the Annual SDES Central Chapter Engineers Week and Awards Banquet. After drinks at 6:00 pm, chapter members enjoyed tasty entrees at 7:00 that included sirloin steaks, shrimp, or prime rib. After dinner, Kent Woodmansey presented Central Chapter Engineering Awards to:

Al Berreth, PE, who served 28 years with the U.S. Indian Health Service in various challenging capacities in South Dakota, Minnesota, New Mexico, and Arizona, received the **2013 Engineer of the Year Award**. Al is currently serving as a Central Chapter State Director.



Brady Bertam, EIT, who is a 2010 M.S. graduate of SDSM&T in Civil Engineering, received the **2013 Young Engineer of the Year Award**. Brady was the lead design engineer for Brosz Engineering on the development of a 17-acre site for the future building of Menards that included site grading, underground utilities, drainage, surfacing, and two retaining walls.

John Childs, PE, and Adam Bruscher, EIT, accepted the **2013 Engineering Achievement Award for the City of Pierre and Interstate Engineering for the Pierre Lincoln Avenue Flood Mitigation Project**. This project was a high priority for Pierre as the Lincoln storm sewer drains 287 acres of Pierre and assists in draining an additional 160 acres, but it was extensively damaged during the 2011 Missouri River flood. The system was redesigned to handle future major flood events and protect roughly \$20 million of properties by replacing the 66 inch RCP that directly discharged into the Missouri River with 1,872 feet of 66 inch RCP with gaskets and then rerouting all existing drop inlets into a neighboring 30 inch RCP line that extends 3,215 feet to the Lincoln Avenue Gate House and Pump House. From the pump house the storm sewer is discharged over articulated concrete mattresses and into the Missouri River. The outlet of the pipe is fitted with a Tideflex check valve to prevent backflow in high water conditions. This design separates the low lying areas of southeast Pierre from the fluctuating water levels of the Missouri River that may surcharge the 66 inch line. Construction was complex due to digging deep trenches in sandy soils with a high water table along the banks of the Missouri River, but the project was completed on schedule. The Engineering Achievement Award was also presented to representatives of the city, Interstate Engineering, and Morris, Inc., the project contractor, at the February 25th City Commission meeting.



Following the awards, Brian Gustafson ran the drawings for door prizes that were donated by Mike Perkovich on behalf of the SDSM&T Alumni Association and Adam Brusher on behalf of Interstate Engineering. Then, President Andrew Bruels introduced and showed the recent remake of DOT's 1968 award winning documentary video of the design and construction of the "The Keystone Wye Bridge," which is truly a legacy project of DOT. As Dean Hyde said, "South Dakota DOT's Bridge Office is second to none."

Engineer Week Free Day at the South Dakota Discovery Center - President Andrew Bruels led the Chapter into the final Engineers Week activity on Saturday, February 22, which was our Annual Free Day at the South Dakota Discovery Center. The following Central Chapter members and spouses took turns manning several engineering related exhibits, such as making chocolate asphalt cookies, making electrical currents, activating the basketball pendulum, making full bottles float in



the air, and demonstrating Bernoulli air blowers: Andrew and Stacy Bruels, Dave Coley, Kent Woodmansey, Jeanne Goodman, Tim Bjornberg, Laurie Schultz, Mark Mayer, Jim Oehlerking, Al and Marsha Berreth, Margo

McDowell, Brian Gustafson, Kathleen Grigg, Steve Pirner, Mike and Phyllis Perkovich, and Kevin Goeden. A new record of 240 kids took advantage of the Free Day and brought along more than 200 parents. Special thanks go to

the following sponsors who provided "prizes" for the kid's bags: Happy Meal Toys and Ice Cream Cone coupons from McDonald's, coupons from Pizza Ranch for free pizzas, and coupons for free tacos from Taco Johns.



----- A Special Thanks to the Following Sponsors -----



Engineer Week Donation to the First Technical Challenge Robotics Team - Thanks also go to the First Technical Challenge Robotics team from Pierre who demonstrated their robot during the Free Day at the Discovery Center. In appreciation, President Bruels presented them with a \$200 donation from the Central Chapter to help the team with travel expenses when they compete at Nationals in Sacramento, CA. Pictured from left to right are team members Nathan Remmich, Samuel Ryckman, Haley Ketteler, Matt Darnall, SDES Central Chapter President Andrew Bruels, Zayn Snyder, and Seth Snyder. Not pictured is team member Austin Lentsch.



End of 2014 Engineers Week - Engineers Week activities finally concluded after the Free Day at the Discovery Center with a gathering of Central Chapter members at Bob's, where the end of the 2014 Engineers Week was celebrated with several pitchers of cold brew. **Thank you one and all for helping to make our communities of Pierre and Ft. Pierre more aware of the engineering profession with another successful Engineer Week!**