

Performance Spanning The Decades

Moments - Profiles - Reactions



President's Corner



William H. Epp, P.E., S.E.
President

To all of our clients, prospective clients, vendors, subconsultants, prime consultants and associates that are receiving this newsletter, I would like to say "Thank You" for your business or for helping us to serve our clients.

This time of year we are winding down our fiscal year here at LONCO and we are also entering the holiday season. Both events allow me to look back on this past year and reflect on what went well, and what we have to be thankful for, as well as take a quick look to the future. Although we now know, that the recession which started in December of 2007 officially ended this past summer, the "recovery" has been agonizingly slow in creating jobs and turning around both the private and public sectors. Recently, I read several publications about September 2010 economic indicators, and I discovered that the S & P 500 rose 9%, retail sales went up 2.5-3%, the jobless claims fell to the lowest level in 3 months, fixed-rate mortgages reached their lowest level since 1971, and gold prices hit another high, all indicators of a strong recovery. Similarly, several of our clients are now talking about dusting off long shelved expansion plans to their industrial and manufacturing facilities and continue to talk about future transportation initiatives throughout the country.

LONCO has remained strong through the past year by providing services in our core competencies, namely the transportation and the structure renovation/rehabilitation sectors. We have been fortunate to work on several "Stimulus" funded transportation and bridge projects and several energy related projects.

This past year we completed an important strategic planning exercise for the company that will help to guide us in the coming years to expand both technically and geographically. We are streamlining many of our internal procedures to make us more efficient. We are also implementing new internal and external training initiatives to the benefit of our employees and clients and to ensure that we remain aware of technological advances in the industry as well as improved construction techniques and materials. This year we expanded the clients we work with to include CONTECH Construction Products, DigitalGlobe, US Bancorp, Lingle Design Group, Defilippis and Associates, and dcb Construction Company, Inc. to name just a few.

Let me close by thanking you for associating yourself with LONCO and I look forward to working with you on future projects and initiatives.



Three New Bridges



Eagle CR 301 Bridge

As reported in our previous newsletter, LONCO designed three major bridges that were under construction this summer. All three bridges are now completed and open to traffic. The new 47th Avenue Bridge, for the City of Denver was designed to replace an existing,

deteriorating structure. The new structure is better able to handle traffic as well as the potentially large flows in Sand Creek below. The second bridge is the Caley Drive Bridge over Piney Creek, which was designed and constructed for the Southeast Metro Stormwater Authority. This new bridge creates another long-needed access into a residential community in Centennial, CO. The third bridge is the Eagle County Road 301 Bridge over the Colorado River, which replaced an aging single-lane bridge with a new two-lane bridge that meets current design standards. Dan Bechtold, Mark McDonald, and Sally Doles can all take pride in their work. Construction went smoothly on all three bridges.



47th Avenue Bridge

Solar Farm Support System Design

Wisconsin Green Limited of Pewaukee, WI selected LONCO, Inc. for its structural engineering expertise in the power/energy industry. LONCO designed the support system for the "Suns Strut" solar collection system manufactured by Aerotecture International. SunStrut is the name of Aerotecture International's 12 panel Photo Voltaic (PV) support system. Each SunStrut holds 12 - 175 Watt solar electric collector panels and is typically installed on flat roof of buildings. The particular installation required LONCO, working in partnership with Aerotecture International, to investigate the existing roof structure capacity as well as the design of the support of four solar base structures each containing 12 PV panels, for a total of 48 PV Panels producing 8,400 watts of energy.



Typical Suns Strut Photo Voltaic Installation



Continuing Education:

LONCO Hosts Bridge Deck Seminar



LONCO, Inc. provides our clients, professional associates and in-house staff the opportunity to achieve Professional Development Hours (PDH's) through a wide variety of seminars in LONCO's offices in Colorado and Illinois. Seminar topics vary widely as do our speakers who are topic experts from the industry and our own staff.

LONCO, Inc. in Naperville, Illinois recently hosted a seminar titled "Bridge Deck: Inspection, Maintenance and Repair" on September 21, 2010. The seminar provided extensive information and 5 PDH's regarding Bridge Deck: inspection, rehabilitation, restoration, preservation, maintenance, repair and strengthening with a wide variety of solutions. Case studies were presented from all over the world. The audience, consisting of mainly State, County and Municipal Transportation Engineers and our staff, received information on cost effective techniques to increase the life of their existing bridges and restore the structures back to acceptable condition.

William H. Epp, P.E., S.E. began the presentation with a general overview of LONCO's engineering services, followed by Mark Hamouz, P.E., Vice President of LONCO giving his presentation highlighting the importance of inspection, maintenance, and repair of bridge decks. Mark's thirty years of inspection experience across the country has taught him that the primary goal is to maintain and inspect the bridge regularly, thus avoiding a costly replacement. Mark included examples of existing bridges, their varied reasons for failure and how it could have been avoided, through design, environment, construction, surface life, load capacity, etc. Our guest speakers who followed Bill and Mark's presentations elaborated on different methods of repair which depend on bridge type and conditions.

Kurt Moehlmann, BASF, presented on the application of deck sealers, including Mythacrolates and Silanes, and the appropriate surface preparation required to increase the life of a bridge deck. By applying Mythacrolates and Silanes (two products that are approved protection methods from the Illinois Department of Transportation) to a bridge deck can help avoid costly replacements by adding 10 years or more to the life of the deck.

Carlton Olson, CTL, is an expert on the subject of a variety of testing methods such as: Visual Inspection, Chain Drag, Hammer Sounding, NDT Core Removal, Corrosion Testing, Infrared Thermography (IR), Laboratory analysis, Ground Penetrating Radar (GPR) surveys and Galvanostatic Pulse Testing. Specifically, Carlton covered the advantages and limitations of IR and it's appropriate applications.

Scott Wyatt, P.E., S.E. also from CTL, used past case studies of various bridge decks with deterioration to explain the evaluation process that is successful in identifying problems and providing the proper solution. Throughout the presentation, Scott revealed imperative lessons he has learned through years of experience on projects involving concrete cracking, surface scaling, overstress, and extreme events.

John Taylor, Regional Sales & Marketing Manager - POLY-CARB, Inc. concluded the seminar with a presentation on the FLEXOGRID System. POLY-CARB's FLEXOGRID polymer bridge deck overlay system is a high-performance, lightweight, 3/8" polymer overlay, which is twice as strong as concrete with long-term friction numbers in excess of 50. The system's sophisticated polymer chemistry provides long-term protection from water and chloride ion infiltration. It's high-friction surface is great for enhancing safety.



Employee News:

Supporting our Troops



Staff Sergeant Andrew Brown is a vertical construction specialist assigned to the 802nd Facility Engineer Detachment based out of Denver, Colorado. His two main areas of responsibility are training and inspections. Andrew was ordered to Fort Hunter Liggett, California, for annual training this year from July 27th through August 15th in support of Castle IRC. While there, he spent time working directly with the Department of Public Works to gather and maintain survey data for future troop construction, and he worked with the Environmental Protection Agency to ensure that any projects performed would not impact any of the five endangered species of plants and/or animals that call Fort Hunter Liggett their home. Andrew has spent the majority of his time with numerous Army construction units (all of which had various experience levels) from around the U.S. working with soldiers. Because a majority of these soldiers have had little to no construction experience, his job was to help teach and train them to complete a variety of missions, such as; site layouts, excavating, hauling fill material, and building a road to the building guard towers, bunkers, and entry-control points. He also helped train the newer medics with a few different life-saving exercises and scenarios.

LONCO, Inc. Presents at 2010 APWA International Congress

On August 18, 2010, Carol Ksiazek, LONCO's Business Development Director, hosted a presentation on the Engineering Mentorship Program for the 2010 APWA International Congress in Boston, Massachusetts. Carol Ksiazek, along with Bill Dinchak, P.E., Business Development Manager from the APWA Chicago Metro Chapter, Fox Valley Branch, started the pilot program 2½ years ago. Pre-engineering students benefit greatly from the panel discussions. Each panel consists of four experienced Professional Engineers, speaking about their successful educational and career choices. Nine colleges and universities have participated in the semi-annual panel discussions. The Engineering Mentorship Program receives publicity in magazine articles in the APWA Reporter, talk radio shows, presentations, and webinars. The main goal for the program is to mentor the college pre-engineering students by answering their education/career questions, allowing contact after panel discussion, assisting with internships, job shadowing and/or job placement opportunities and networking opportunities through APWA Student Membership.



Future Engineers of LONCO!



Andrei Serge Turanov
October 1, 2010



Alexander Jack Adkison
September 6, 2010



Joshua James McDonald
July 18, 2010

Kevin Gamalier Rivera-Soto
May 11, 2010



Newly Licensed Engineers



Mamta Patel, P.E.

Structural Design Engineer, Ms. Mamta Patel, received her B.S. and her M.S. in Civil Engineering from the University of Illinois in Chicago, IL.



Steve Vaicik, P.E.

Structural Design Engineer, Mr. Steve Vaicik, received his B.S. in Civil Engineering and his M.S. in Structural Engineering from Southern Illinois University in Carbondale, IL.



Columbine Equestrian Center

In 2008, LONCO, Inc. was contacted by Colorado Master Builders and Architects (CMBA) to provide structural consultation on a major repair and renovation project on the Columbine Equestrian Center in Littleton, CO. The Equestrian Center campus includes two large barns used as arenas, a number of barns for horse stalls and wash bays, and some office and lobby areas for staff and guests. The goal of the project, set forth by the owner, was to transform the old buildings of the equestrian center into a high-class modern polo arena facility.

LONCO engineers Allison Wainwright and J.P. Illes began by analyzing the existing timber agricultural buildings for structural integrity and possible damage from the presence of horses and equipment. The first project involved the renovation of the Dynasty Arena from a simple barn into a polished polo arena. Viewing platforms inside, a patio and roof awning were added to the front face, which featured many architectural enhancements. Collier Arena involved similar additions to create a 200-ft.-long indoor/outdoor viewing area. The opposite side of the building was gutted as well to create an entirely new two-story office, lobby, and dormitory space. These major renovations required removing structural walls and replacing them with steel frames, new timber framing on both footings, and helical pier foundations, and reinforcing of old log walls. In order to maintain the original log cabin environment of the building, timbers removed during demolition were re-used in the design of both entryways. Construction for Dynasty Arena was completed last year while Collier Arena was finished this summer and is currently being prepared to host polo players for next year's season.

Collier Arena



Dynasty Arena



New Clients:



Wind Turbine Structural Support Design

Sullivan Energy Group selected LONCO, Inc. for the design of a support system for a wind turbine. Sullivan Energy Group is the exclusive Urban Green Energy (UGE) authorized Illinois distributor and installer of UGE vertical-axis wind turbines in the Midwest. UGE turbines are an innovative green technology that is a cost effective, sustainable, and an attractive way to power residential, business, school, church, park district, golf course, or amusement park facilities. LONCO conducted a feasibility study of an existing roof and designed the mounting necessary to minimize any vibrations from the powerful motor. This particular turbine has a vertical axis that will be attached to the existing roof structure.

LONCO, INC.

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To Our Valued Clientele