

## 10 YEARS OF SUCCESS IN ILLINOIS

This past year, LONCO, Inc.'s Naperville, Illinois office celebrated 10 years of growth and prosperity. Bill Epp, President; Mark Hamouz, Treasurer; J.P. Illes, Secretary; and Steve Banks, Vice President, greeted nearly 100 guests at the Naperville office with refreshments and gratitude. Everyone reminisced about the office's first project, the Chicago Motor Speedway, to the most current project with Yargus Manufacturing, Inc. from California. Bill Epp, who opened the office 10 years ago, now has a staff specializing in civil, structural, and transportation projects around the country. LONCO's staff in both Denver and Naperville provide services for the United States and Canada.

Growth of the Illinois office is attributed to focus on the company's core principle: Always produce high quality work and provide outstanding customer services everyday.

While growing our business in Naperville, LONCO has provided services for a variety of clients, including the following:

- Industrial and manufacturing facilities including NuFarm Chemical, NALCO, ABBOTT Labs, FERRO/Pfanstiehl and GCC Rio Grande
- Power generation companies including BP, Xcel Energy, Aerotecture International, and Rentech Boiler Systems
- National restaurants including McDonalds, Bakers Square, Benihana, and Jack in the Box
- Commercial organizations including Walmart and Office Depot, and the regional grocer Fresh & Easy Neighborhood Market.

LONCO's Naperville office proudly serves local municipal, state and federal agencies, including: IDOT, ISTHA, Du Page County, City of Naperville, City of Aurora, City of Joliet, Village of Plainfield, Naperville Park District, Will County Forest Preserve District and Vernon Hills Park District.



## LONCO TEAM TAKES TWO . . . WITH THE NIST HYDROGEN LAB

LONCO's efforts on the National Institute of Standards and Technology's (NIST) Hydrogen Test Facility project earned the GOLD HARD HAT AWARD in two categories: Engineering Design and Higher Education / Research Project. This award is presented by McGraw Hill in conjunction with The American General Contractors (AGC). The Hydrogen Test Facility project was selected for these awards by an independent jury made up of Architects, Engineers and General Contractors.

In support of federal efforts to create a "hydrogen economy," NIST developed a new Hydrogen Test Facility in Boulder, Colorado. The facility evaluates materials, mechanical properties and standards for hydrogen pipelines. The facility also serves as a center for research in the development of the hydrogen fuel infrastructure and the development of alternative fuels. NIST is using the laboratory to develop long-term materials service tests and apply them to study pipeline materials.

LONCO was the prime consultant on the project and also the structural engineer of record. LONCO worked with our design team partners, Eric Bartczak Architects (Architect), The RMH Group (Mechanical) and Fitzpatrick Engineering (Electrical) to develop the plans and specifications for this research laboratory. Because the scientists that use the facility would be working with hydrogen, which can be a very explosive gas, special design considerations were required to minimize ignition sources.

The requirement to incorporate an existing concrete "Blast Wall" into the design was unique to this project. The cast in place concrete blast wall was constructed in the 1950's. The original structure sheltered scientists who were testing other volatile substances. The LONCO team developed an adaptive reuse design that utilized the existing structure as one of the four walls enclosing the laboratory and supporting the new roof structure.

The project was under very tight budget constraints. Mr. Jim Daley, an independent construction cost estimator, helped develop budgetary numbers for use in the value engineering process.



# EMPLOYEE NEWS



**Megan Gillfillan**

Megan joined the LONCO team on September 16, 2009 as our new Administrative Assistant. Originally from Kalamazoo, Michigan, Megan is a graduate of Western Michigan University where she received a Bachelor's Degree in Marketing, with a minor in Business. Megan moved to Colorado to pursue better job opportunities and to be around her best friend and the beautiful scenery. In her free time, she enjoys watching and playing sports, (Go Steelers!), adding to her DVD collection, downloading new music, singing, being spontaneous and adventurous, and playing golf whenever the opportunity arises...she is a big fan of Arrowhead Golf Course! Megan is very excited to be in this "breathtaking state" and looks forward to starting her new life here.



**Sally Doles, P.E.**

Sally joined the LONCO team this past May, bringing her 4 years of experience in structural design. Sally earned her Bachelor's Degree at Colorado State University, her Master's Degree in Engineering at Texas A&M University, and recently passed the P.E. Exam. She spends some of her free time as Treasurer of the Women In Design Steering Committee.

**Michelle McElhane**



Michelle McElhane, a senior at the Colorado School of Mines, spent last summer as an intern in LONCO's Denver office. Majoring in Civil Engineering, with a minor in Economics and Business, she found LONCO to be a good place for some hands-on experience. During her summer break, Michelle enjoyed some shopping, volleyball, reading and running.

David comes to LONCO from MBB Construction at the Illinois State Toll Highway Authority (ISTHA) as a Project Manager. Since graduating from the University of Illinois, Chicago campus, David rose to the level of Senior Project Manager. He brings to LONCO 15 years of experience. David is married and has 2 children, a daughter who is 11 years old and a son who is 2 years old. David and his family enjoy living in the City of Chicago, where his hobbies are golf and motorcycle riding.

**David Cedeno**



**Allison Wainwright**

Allison comes to LONCO with 3 years of experience in engineering design and construction administration. Her background includes structural design for commercial and residential projects. She is a graduate of the University of Colorado at Boulder with a Bachelor's Degree in Architectural Engineering. Allison is an active member of the Women In Design Steering Committee. She enjoys running and attending yoga classes in her free time.



**Andy Brown**

Andy Brown has worked in LONCO's Bridge Inspection Department for three years. Andy joined the Army Reserve in 1999 as an Engineer, and he currently holds the rank of Staff Sergeant with titles of Construction Specialist / Combative Instructor / Unit Armorer. Andy has been deployed to Panama several times with the Army as a Subject Matter Expert for Royal Building Systems. Andy was deployed to Iraq (2003-2004) as a squad leader in a vertical construction platoon, which was responsible for building all the base camps. His family was delighted to welcome him home from his most recent deployment to Afghanistan (2008-2009). He held a construction management position as an inspector while in Afghanistan.

**Tamara Soto**



Tamara joined LONCO this year as a Transportation Engineer. After earning her degree from the University of Puerto Rico, Mayaguez Campus, Tamara gained well-rounded experience working in several IDOT Departments: Transystems, QC/QA Coordinator and IDOT Design, Traffic and Materials. Tamara is married and has a 2 1/2 year old daughter.



**William Epp, P.E., S.E.**

William Epp, President of LONCO, was recently selected to the Naperville Riverwalk Commission. Bill's 26 years of engineering consulting experience makes him an asset to the commission. The Riverwalk Commission promotes, encourages and guides the development and use of the Riverwalk, a beautiful, linear park located in downtown Naperville along the DuPage River. Mr. Epp is one of 13 members serving a three-year term. The members include the Mayor, the Park District Board President, a Riverwalk Foundation representative, a Millennium Carillon Foundation representative, a few City and Park District employees, and a few interested residents.

## MENTORING STUDENT ENGINEERS

As co-chairman of the American Public Works Association (APWA) Mentorship Committee, LONCO, Inc.'s Business Development Manager, Carol Ksiazek, is giving back to the engineering community by organizing and hosting career seminars in the area. Most recently, the Fox Valley Branch of the APWA Mentorship/Membership Committee educated students at Northern Illinois University (NIU) about the benefits of student membership with APWA. A panel consisting of Dr. Mansour Taherzadeh, Ph.D., P.E., Associate Dean of Engineering; Joel Maurer, City of DeKalb Engineer; William O'Donnell, Managing Director of Business Development for Entegri Wind Systems Inc.; and our own Carol Ksiazek, presented information on engineering career options available in today's marketplace. Carol is the APWA liaison for NIU, conveying to audiences that student membership with the APWA is a great way for students to learn about job shadowing opportunities, career opportunities, networking, and internships within the APWA Member Organizations.



## LONCO'S PREQUALIFIED

LONCO, Inc. successfully met the criteria to receive the Capital Development Board Prequalifications for professional design Civil/Structural Engineering, until May 31, 2010. LONCO, Inc. looks forward to pursuing public projects for the State of Illinois.

## LONCO IS NOW INTERNATIONAL

New projects are taking our engineers around the continent. LONCO, Inc. is now licensed to practice engineering in Saskatchewan, Canada.

## AURARIA HIGHER EDUCATION CENTER (AHEC) NEW FOUNDRY ENCLOSURE

The Auraria Higher Education Center management decided that the Arts Building arts foundry required a roof. The original arts foundry area incorporated an open air facility surrounded on three sides by a free standing brick wall. AHEC's goal was to build a roof over the foundry area so that students working on projects are not exposed to the elements during the winter months.

AHEC commissioned Eric Bartczak Architects to design the roof enclosure and to reprogram the foundry space, which would include a clay mixing room and a new ceramics area. Additionally, a new ventilation and filtration system was required along with the architectural integrity of the existing Arts Building not being compromised by the construction of the new arts foundry area.

LONCO designed the structural system to support the new roof over the foundry, mixing room and ceramics area. The architect's design required the reuse of the existing brick wall and the existing kilns' cover as part of the final roofing solution. Providing adequate space for the new and very tall Donaldson filtration system proved to be an additional structural challenge.

The new roof is constructed of a lightweight standing seam metal deck. The flexible nature of the roof decking required the framing system be designed to support vertical loads from snow and weight of the structure, and horizontal loads from the wind and seismic forces. LONCO met this requirement by using rigid steel frames in both the longitudinal and transverse directions of the building.

The structure's design minimized the transfer of forces from the new roof structure to the adjacent Arts Building and brick fence. To accomplish this, new columns and foundations were constructed within the original perimeter.

The finished project provides 2,790 square feet of enclosed space for the AHEC Art Students. The project was completed in a timely manner and within the budgetary constraints. LONCO extends our sincere thanks to the project owner – The Auraria Higher Education Center, and the design team – Eric Bartczak Architects (Prime), Fitzpatrick Engineering (Electrical), and The RMH Group (Mechanical), for a job well done.



## FIRST ANNUAL LONCO NAPERVILLE COMPANY PICNIC

The First Annual Naperville office Company Picnic was held this past summer at Shabbona Lake State Park. The staff and their families enjoyed a delicious meal of barbecued hamburgers, brats, and hotdogs. Shabbona Lake State Park Recreation Area was the perfect place to spend a relaxing Sunday afternoon with boating, bean bag toss and egg toss. Bubbles were available to keep the younger members of the LONCO family entertained.



# NEW CLIENTS AND INTERESTING PROJECTS



LONCO's new client, Cedar Forest Products (CFP), manufactures hundreds of standard, pre-engineered wood and steel structures. CFP relies on LONCO to provide structural engineering services for their products, which include: picnic shelters, gazebos, pavilions, concession stands, restrooms, band shells, kiosks, cabins, lodges, multipurpose buildings and bridges. Before they arrive to the construction site, building components have already been pre-assembled and construction-coded in the plant to ensure a perfect fit. LONCO and CFP work together to create affordable and low maintenance structures designed for years of service and comfort.

## WORKING WITH Illinois Department of Transportation

LONCO has been busy with 18 Illinois Department of Transportation projects since April 2008. The projects encompass a variety of tasks: roadway resurfacing and replacement of box culverts, bridge decks, and PPC deck beams. Project development is a team effort at LONCO to ensure each project is completed on time and within budget.

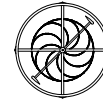


RENTECH Boiler Systems, Inc. is the fastest growing boiler manufacturer in North America. Backed by over 1,700 years of combined boilermaking experience, RENTECH Boiler Systems, Inc. has a reputation as the industry leader in developing new innovative designs across the range of boiler applications. They specialize in a full range of custom design HRSG systems, Cross Flow HRSG Boilers, and Waterwall HRSG designs. RENTECH engineers are experts at fully integrated solutions that comply with all performance criteria. They are backed by a single source guarantee and have a full understanding of all aspects of the cogeneration plant. Direct access to the Port of Houston via truck or rail allows RENTECH to support international markets in a timely manner. LONCO is pleased to provide structural design services for RENTECH'S boiler housing and supports.

## WORKING WITH RENEWABLE ENERGY

In July 2009, Bill Epp and Rod Malanyaon conducted a structural analysis of the wind turbine and solar panel hybrid ballast system for the Harold Washington Social Security Administration Building in Chicago. Both renewable energy units were invented by Industrial Designer/Professor Bill Baker, President of Aerotecture International. The Hybrid Aeroturbine consists of twin helical rotors and airfoils housed within two steel cages, which are combined with a shelf of photovoltaic solar panels.

The four hybrid systems are located on the roof of the 10 story building. The compact size of the wind turbine and solar panel allowed its components to be transported by freight elevator. The combined weight of each hybrid system is 1,755 pounds. The wind turbine is rated at 3,000 Watts of power with a constant wind speed of 32 mph. The solar panels are rated to produce 2,100 Watts of power. Bill Baker and Aerotecture International have installed over a dozen wind turbine and solar panel hybrid ballast systems across the country, with many additional projects on the horizon.



**Aerotecture International**  
...visionary technology



# LONCO, INC.

Civil, Structural & Transportation Engineering, Since 1962

ACEC  
MEMBER

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