



BUILDER BULLETIN

A MONTHLY PUBLICATION OF THE APPRENTICE SCHOOL STUDENT ASSOCIATION August 06

11th ANNUAL CHILDREN'S FISHING CLINIC

By EO6 Eric Kilner



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UPCOMING EVENTS

- SPORTS**
Check out page 3 for the upcoming football schedule!
- EVENTS**
SEPT 2: Tailgate Party!
SEPT 9: Orioles vs. Yankees
OCT 14: 3 on 3 Tourney

- UPCOMING DATES**
Rock-n-Bowl
Holiday Dinner Dance
And more!

On July 15th the City of Newport News, local businesses and social groups, and volunteers from around the region all came together for one common cause; to ensure that for at least one day this year children from all walks of life would be able to come together for a fun-filled day of fishing and fun-in-the-sun where they could kick back, stay out of trouble, and make some fishing stories of their own. The occasion was the 11th Annual Children's Fishing Clinic on the James River Fishing Pier. The sun was warm, the bait was cold, and the fish were biting as many of Hampton Road's younger generation, and a couple of apprentices, took their first step into fishing lore.

Apprentices and many other volunteers from the shipyard, were on hand to set up registration tables, string fishing poles, cut bait, and learn how it feels to give a little of their personal time for a huge payoff in the form of a child's smile.

Electricity was in the air as one little girl attending her first fishing clinic, upon catching her first fish of the day cried, "It's all squirmy, Eeee!" Just then the fish jumped right out of her little hands and landed at her feet. She jumped back two feet when the fish touched down in front of her. She was trying to remove the hook from its mouth before she threw it back to swim another

day. "It won't sit still. I'm trying to help it!" The off-handed smile on her mother's face betrayed the fact that she couldn't help but notice a bit of irony in her daughter's plight. In stepped a helping hand to teach the young rookie how to grip the fish and extract the tackle as he turned the small stryber back to the James.

Many apprentices look forward to the event each year stating that it's one of their favorite events on the calendar. Jason Kinney, an X32 ASOC Apprentice, while trying to convince one of his colleagues to join him said, "It's such a great time. The kids have so much fun. And



sometimes I wonder who enjoys the event more, the kids or the volunteers." Everywhere joyous faces were to be seen as apprentices and other volunteers joked, laughed, and told grandiose tales of "the one that got away" as they leaned over the rail of the pier.

The benefits were enjoyed by all during this outing. Volunteers were given a free lunch of hot dogs, hamburgers and sodas for their efforts and spring water was supplied for anglers and workers alike. Reporters from a couple of local television news stations made their rounds as some of the volunteers got a shot at their fifteen minutes of fame. Even Newport News Mayor, Joe S. Frank, stopped and took some time to bait a few hooks with the kids. All told, the event was a smashing success, one to which The Apprentice School looks forward to repeating in years to come.

Above: Volunteers take time for a group picture. **Left:** EO6 Jeff Halbauer and XO6 Ron Hendrickson enjoy time with the kids.

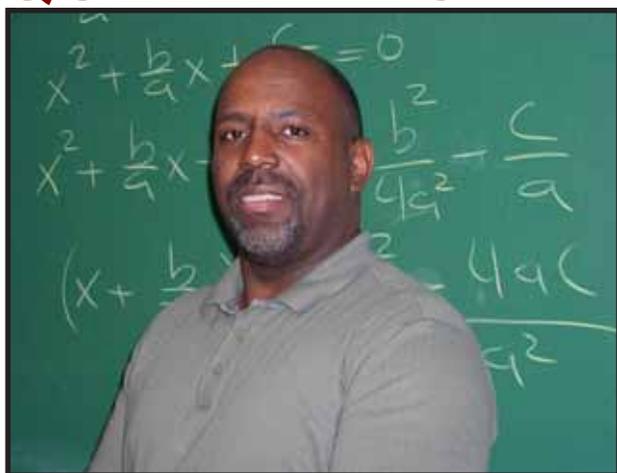




Great Company Great Products **Great People** *Great Results*



022 INSTRUCTOR QUELLEY BONEY



**"Stick with the program
...there are so many
avenues of opportunity!"**

By X06 David Nicholas

An 8 inch volleyball and a 4 inch softball (both having a mass of 255 grams each) are released from an inclined plane 4 feet high and 5 feet long (**they are released at the same time from the same point**). Assuming both balls have smooth round surfaces. Which ball would clear the ramp first?

Those who have crossed paths with Apprentice School Academic Instructor, Quelley Boney, may already be on the way to calculating the correct "X". This month's issue of "Great People" will show you just "Y" Mr. Boney is highly respected in the classroom.

Quelley was born in Hampton, Virginia and grew up nearby in Newport News. Boney's parents always encouraged education and instilled in him that becoming educated would ultimately prove to be the difference in having or not having. Along that path of learning, Mr. Boney's seventh grade teacher recognized that he had a talent for math and pushed him to excel into a more advanced math program. The awareness of that ability allowed Boney to carry on throughout high school and beyond. After graduating from Warwick High School he enrolled in college classes at Old Dominion University in 1982.

Prior to becoming a teacher at The Apprentice School, Boney involved himself in a lengthy career in Nuclear Power. Employed by Virginia Power, he was hired in as a trainee at the Surry Nuclear Power Station. After completing the training program, he became a Control Room Operator and eventually progressed to actually serve as a Nuclear Reactor Operator. In addition to running a reactor, which delivered much of the electricity to the Hampton Roads region, Boney was also finishing up his undergraduate studies. He earned his Bachelor of Science in Applied Math from Christopher Newport University in 1998. Shortly thereafter, Quelley left the plant to pursue his Master's Degree in Physics at Hampton University. During this time, Boney performed research at Jefferson Lab and later joined a contracting firm with NASA, developing software that would interpret signals from Earth's orbiting satellites.

In June, 2002, Mr. Boney decided to pass on his wealth of knowledge to many others by joining the staff of academic instructors here at The Apprentice School. He was hired into 022 to teach mathematics, physics, and strength of materials. When asked what drew him to NGNN, Quelley responded, "While interviewing with Dr. Hughes, I was very impressed with the apprentice program and how the company pays apprentices to become trained while providing them the opportunity to earn transferable college credits on the clock. I wasn't used to that kind of opportunity. I thought it was amazing." He went on to encourage current apprentices by saying, "Stick with the program; finish it out. This is one of the few companies that want you to be employed for forty-plus years; that actually want to keep you around. There are so many avenues of opportunity, not only to have a job, but to develop a lifelong career."

When Mr. Boney is not devoting himself to students, his main interest is food. He is a self proclaimed "avid eater" who enjoys experiencing a variety of dishes. Instead of bringing this teacher an apple on test day, you may want think about offering a slice of carrot cake, one of his favorite desserts. With so many accomplishments under his belt already, Quelley's personal and professional goals root from the lessons of the Master Teacher; to live each day treating others the way he would like to be treated. The Apprentice School is fortunate to have teachers like Quelley Boney on the roll. If you find yourself in one of Mr. Boney's classes, pay close attention. You just may learn something.





A Meeting of the Minds

By E06 Eric Kilner

Since the first International Conference on Agile Manufacturing (ICAM) in 1997, the International Society of Agile Manufacturing (ISAM) has promoted research, education, and international collaboration to solve worldwide manufacturing problems. Through the organization of conferences, workshops, tutorials, training and other professional activities in academic environments, fellow engineers, businessmen and women, and members of academia have been able to synergize in a non-threatening atmosphere. The ICAM has been held in various countries around the world including: the U.S., India, China, the U.K., and just last year ICAM 2005 was held in Helsinki Finland.

In 2006, the theme of the conference was LEAN and Agile Transformations. Hampton Roads was given the distinct honor of hosting this prestigious event at the Waterside Marriot in downtown Norfolk. Among the numerous sponsors for the event were Northrop Grumman Newport News, Old Dominion University, and the Society of Manufacturing Engineers (SME). The Apprentice School Student Chapter of SME was fortunate enough to partner with the student chapter at ODU in volunteering to assist the presenters, organizers, and guests throughout the three day event. Many of them were invited to participate in some of the shops and lectures as members of the simulations, or as performers of various "players" in demonstrations of manufacturing processes and workflows.

Many Members of the Northrop Grumman family played pivotal roles in the conference. Keynote speaker and Vice President of Process Excellence for Northrop Grumman Newport News, Jennifer Boykin, delivered a speech titled "The Road to Process Excellence" on the final day of the conference. Her presentation focused on some of the ways in which Northrop Grumman uses LEAN Six Sigma Principles in the development of processes and value streams to effectively balance the Navy's needs for a technologically-advanced fleet with a shrinking budget. Glenn Marshall, a benchmarking champion for the Process Excellence Strategy Team and a Facilitator for Operations Supply Chain Management, served as an Industry Program Chair advising on the topics and speakers to be presented. Dave Tilman, Training Administrator of The Apprentice School Advanced Programs, and Jacqueline McCuiston, Manager of Process Excellence Learning, served as members of the organizing committee working with faculty of ODU and many other leaders of local industry and engineering societies to coordinate and administer the conference.

Conference attendees and a small number of apprentice volunteers were given the pleasure of touring the plants of two leading local area businesses. Stihl, Inc. hosted the visitors at their 700,000 square foot manufacturing and warehousing plant located in Virginia



Pictured (left to right): Chris Guthrie, Stephanie Roscoe, Jason Boyd, Valentino Crawford, Kareem Solomon, and Ron Toxey. **Not Pictured:** Laura Brown, Eric Kilner, David Yohe, Dave McDade, and Dave Tillman

Beach. Attendees were allowed to walk the factory floor in an effort to understand how Stihl deals with such issues as resource waste and line synchronization to remain one of the world's leading producers of outdoor powered equipment. Other volunteers and guests were invited to tour Howmet Castings in Hampton, Virginia. Howmet is recognized as a world leader in large structural casting and airfoil production. Visitors were permitted to view the manufacturing processes used by Howmet to blend production floor efficiency with experienced craftsmanship to meet the demands of an ever-changing marketplace.

The Apprentice School Chapter of SME, in partnering with Old Dominion University's Chapter and the Organizing Committee, played a tremendous role in hosting the guests who stayed and learned at Norfolk's Waterside Marriot. The event was a testament to the commitment that Northrop Grumman and The Apprentice School have made to the development of young men and women into the world-class shipbuilders of tomorrow. By allowing these young people to experience an exchange of ideas of such scientific magnitude, and exposing them to a taste of the ideas governing the manufacturing principles of tomorrow, they reaffirm their dedication to the Shipyard and the NAVY of the future.



BUILDER FOOTBALL

2006 Builders Schedule (Bold means home)

September 2	at N.C. Wesleyan College	Tailgate Party
September 9	at Frostburg State University	
September 23	Emory and Henry College	Homecoming
September 30	Salisbury University	
October 7	at Morrisville State (NY)	
October 14	at Wesley College	
October 21	New York Maritime	Trades Day
October 28	Southern Virginia University	
November 4	at Suny Brockport	
November 11	Chowan College	Oyster Bowl





Sara Bonwell Hudgens - Center - **SPECIAL OLYMPICS**

By EO6 Betty Husted

On June 23, Sara Bonwell's Special Olympics were a big hit...and apprentices were there to experience it!

The day was glistening with sunshine and the excitement of the participants and volunteers could not

be contained. The competition included points earning events such as a softball toss, a frisbee toss (through a hoop), kicking a soccer ball into the net, and making the basketball in the hoop. Participants were overjoyed and had one terrific time.

"They (the participants) were just so wonderful," exclaimed S. Kristin Podruchny, "they were just proud of the fact that they were doing something. They do not compare themselves to others they just cheer their own accomplishments. Their lack of inhibition about life is just amazing and very admirable."

If you could not help out with this year's Special Olympics event, you truly missed a good time! Any member of the student body can help out with these events! In December, The Apprentice School Student Association will host Sara Bonwell's annual Christmas party.

This is one of our favorite events to be part of! Ask any delegate for details!



SPOTLIGHT

By X18 Roger Miller

X11, Jessica Aranda

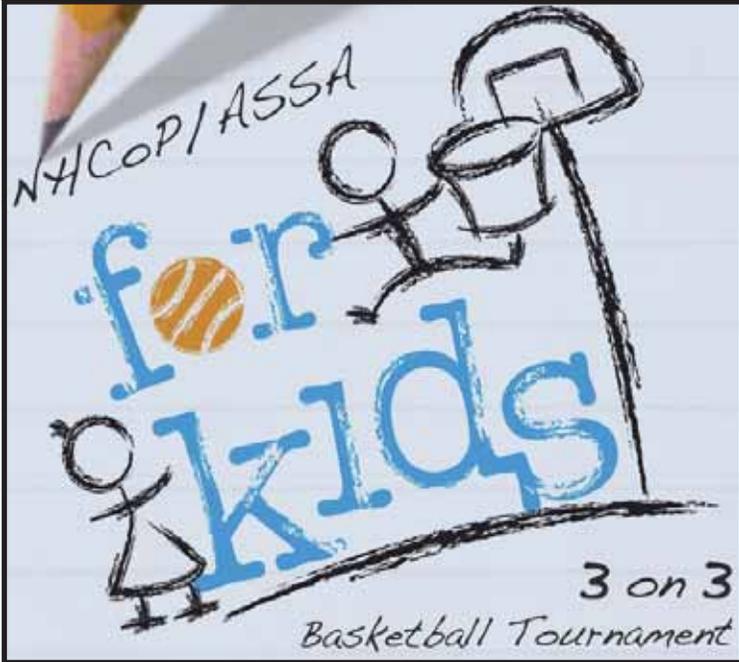
APPRENTICE

This month's "spotlight" is on X11, Jessica Aranda. Her craft instructor, X11 Mike Gravitt, recommended Jessica for the spotlight. Gravitt said "that she was a firecracker, and that he sometimes had to tell her she was trying to do too much". Jessica entered The Apprentice School in March 2006. She is originally from Southampton County, VA and a 2005 graduate from Southampton High School.

Jessica applied to The Apprentice School for the educational opportunities as well as receiving a paycheck while going to school. Jessica says that she is enjoying her

experience as an apprentice. Even though only at the school for a short time, Jessica has already worked in three rotations: The Apprentice Gallery in the Steel Production Facility, the Ring shop, and the Covered Module Assembly Facility (where she was working at the time of this interview, She was due to rotate to a new job after the first of August). Her plans for the future are to graduate from the Apprentice School and then enter the US Marine Corp. Jessica said that she was given a lot of warning about the shipyard being a "mans society," but has found it more than welcoming.





6 Apprentice Teams/
Only current Apprentices can play
Active Apprentice School players ineligible

Games start at 9:00 a.m.
at the Apprentice School gym
on October 14, 2006

Team Registration begins August 7
\$60.00 fee per Apprentice Team (3 or 4 players)
includes registration, lunch and \$30 donation to Forkids
Non-Cash Prizes awarded
Adult Spectator Tickets are \$3 (\$5 at the door)
12 & under \$2 (\$3 at the door)
Tickets go on sale on August 7



ASSA
Apprentice School Student Association

**IT'S TIME
FOR ELECTIONS**

Homecoming Queen

All female apprentices, except those on academic probation, are eligible to be a contestant for Homecoming Queen. The Homecoming Court shall be composed of a queen and four attendants.

The Queen and attendants will be elected by the Apprentice School Student Association.

Those interested in running for Homecoming Queen should pick up an application from
Tony Jones (Faculty Advisor).

APPLICATIONS DUE BY AUGUST 25!





⚡ **Corner** Electricity: The Invisible Danger!

By EO6 Betty Husted

A hazard that is not visible to the naked eye but is the most common source of energy is ELECTRICITY. Many electrical shocks and near misses are caused by mistakes. Things like, work control errors, failure to pay attention to the details, procedure violations, and the gradual blindness of complacency.

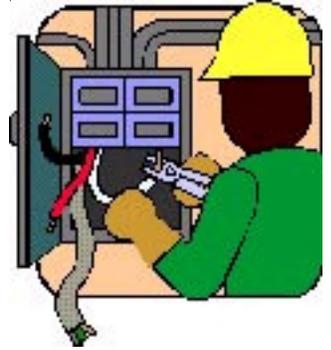
According to research, most people that die as a result of electrical shock had received training on how to prevent it!

Here are some serious results of electrical shock:

1. Pain
2. Damage to muscles
3. Damage to nerves and tissues
4. Loss of muscle control
5. Cardiac arrest
6. Burns to the skin/ tissues

We need to learn some of the electrical hazards we see on a daily basis:

1. Equipment not grounded
2. Plugs that do not match the outlets
3. Wires and lines running across floors, decks, and platens
4. Cords with frayed or damaged insulation
5. Tools that smoke, smell, or spark
6. Electrical cords left near heat sources
7. Extension cords used in place of permanent wiring



These are just a list of many that we come in contact with at some point in our weekly work environment. Remember to follow all procedures and when in doubt: GO AND FIND OUT!

Don't Learn Your Lesson the Hard Way



ASK THE BUILDER

Submit inquiries to:
roger.b.miller@ngc.com



**Is it a bird? Is it a plane?
NOPE...ITS THE 900-TON CRANE!**

Many of you may be wondering what the deal is with the 900-ton crane that decorates the north yard's horizon. To answer this question I talked with Kyle Harrington, O46 Crane Engineering & Quality Manager. He stated that the 900-ton crane will be upgraded to a 1050-ton crane and that 120-tons of structure will be added over a period of 16 months starting in July, 2007 and completed November, 2008.

All of the upgrades to the crane mechanicals (cables, wheels, drums, etc.) will be done by O46 and headed by Matt Causely (a recent Apprentice School graduate). The structure work and repainting is to be contracted out. While the 900-ton crane is down, two mobile cranes will be used. One of these cranes is rated for 750-tons and will take up a 160 square foot section of the platen and will arrive in April, 2007 on 160 flat bed trucks. The change in rating was brought about by the updated design and super lift requirements of the new CVN 78 carrier.

The Builder.



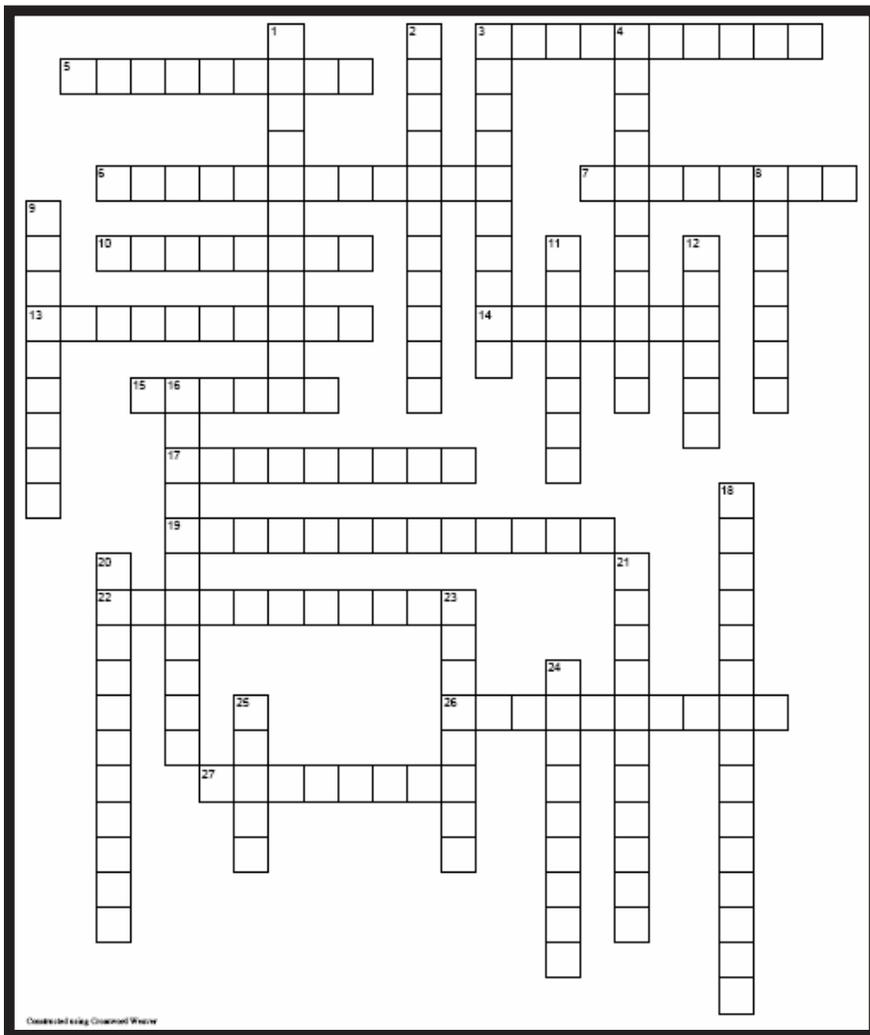


CROSSWORD

Analytical Chemistry Terms

By X06 Daniel (RIP) Rippeth

Put your thinking caps on. This is one of RIP's toughest yet!



Created using Crossword Wizard

WORD BANK:

Accuracy, aliquot, amphiprotic, buffer, composite, convenience, donor, enthalpy, entropy, equilibrium, histogram, homogenous, internal, milligrams, molality, nernst, normality, outlier, precipitate, qualitative, quantitative, regression, repeatability, reproducibility, robustness, selectivity, tolerance, uncertainty.

ACROSS

- 3 The quality of a method that can be used in a variety of matrices
- 5 A visualization of the number of times each value occurs in a range of measured values
- 6 Type of analysis used to determine the amount of a substance present in an analyte
- 7 The measure of the agreement between an experimentally determined value and the actual value
- 10 Number of moles of a substance present per kilogram solvent
- 13 Ppm is often expressed as ___ of a substance per liter solution
- 14 A data point with a value much higher or lower than the other points
- 15 A solution that contains a conjugate weak acid and the corresponding weak base used to maintain a pH
- 17 A sample formed by the combination of many grab samples
- 19 Ability of a method to produce precise results when performed by the same analyst in the same time period
- 22 Type of analysis used to determine the identity of a substance present in an analyte
- 26 The quality of a solution that is uniform in composition
- 27 Type of standard added to all samples and standards containing the analyte

DOWN

- 1 The insoluble solid formed when soluble reagents are reacted
- 2 The quality of a species capable of acting as an acid or a base
- 3 Mathematical technique used to fit a equation to a data set
- 4 The measure of a method's ability to measure for an analyte independently of interferents
- 8 A sample portion of a solution
- 9 Number of equivalents of a substance per liter solution
- 11 A measure of disorder
- 12 The equation that relates electrochemical potential to the concentrations of the products and reactants
- 16 The range of values possible for a measurement
- 18 Ability of a method to produce precise results regardless of analyst or time period
- 20 The state of a system in which the concentrations of products and reactants remain constant
- 21 A sampling plan in which samples are collected based on ease of collection
- 23 Heat absorbed or released by a reaction is reported as a change in ___
- 24 The maximum error present in a reported measurement
- 25 A bronsted-lowry acid is an electron ___

SPELLING EXCERSIZE

Answers on reverse.

capital
grammer, Quiz
a
no comma

Write the correct word in each blank. The word choices are the following: **they're**, **there**, and **their**.

- 1. _____ opposition to the proposal is strong.
- 2. _____ not the same apprentices that I saw yesterday.

- 3. This lifestyle is too opulent for _____ taste.
- 4. The money was found over _____.
- 5. The school catered to _____ parents' demands.

By X06 Daniel (RIP) Rippeth

(See page 8 for a bonus grammar quiz!)





capital grammer, Quiz no comma

BONUS!

1. Identify the indirect object in the sentence.
Please let me borrow your stereo, so I can play music at tonight's party.

1. Borrow
2. Tonight's party
3. Me
4. Play music

2. Identify the simple subject in the sentence.
Mercedes manufactures three sport models.

1. Mercedes
2. Mercedes manufactures
3. Manufactures three sport models.
4. Three sport models.

3. Identify the complete subject in the sentence.

The car that my brother owns needs new tires.

1. The car that my brother
2. Needs new tires.
3. The car
4. The car that my brother owns

4. Identify the compound subject in the sentence.

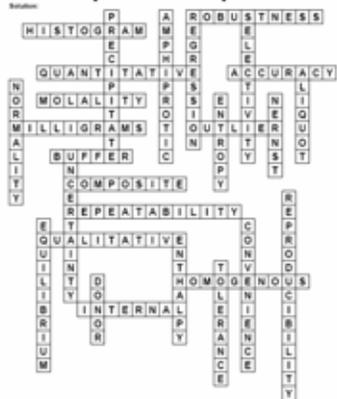
Wieners and beans are common campfire food.

1. Wieners and beans are
2. Wieners
3. Common campfire food.
4. Wieners and beans

5. Identify the direct object in the sentence.

Gloria opens the freezer in the basement.

1. In the basement
2. The freezer in the basement.
3. Gloria
4. Gloria opens



BUILDER BULLETIN
COMMENTS AND INFORMATION

If you'd like to make a comment or request information contact Jason Kinney:
jason.kinney@ngc.com

GO BUILDERS!



UPCOMING ACTIVITIES

September

2nd TAILGATE PARTY

Take a bus trip down to Rocky Mount, North Carolina to support The Builders Football Team in their first seasonal game against Wesleyan College. We'll be cooking out, hanging out, and cheering on the team!

TICKETS \$5

Include entrance to the game

LIMIT 2 PER APPRENTICE TO RIDE THE BUS

LIMIT 5 PER APPRENTICE TO DRIVE

8th HOMECOMING QUEEN ELECTIONS

The Apprentice School Student Association will be voting on the 2006 Homecoming Queen. Any female apprentice in good standing can run! To obtain an application, see Tony Jones. Applications for Homecoming Queen must be turned in completed no later than August 25th.

9th ORIOLES/YANKEES

Join fellow apprentices, faculty, and alumni on our yearly trip to Orioles Park at Camden Yards, Baltimore, MD.

TICKETS \$20

\$20 TICKETS ARE FOR DRIVING SEPARATELY

\$30 BUS TICKETS ARE CURRENTLY SOLD OUT

If you haven't purchased tickets, you'd better hurry!

OCTOBER

14th 3^{on}3 BASKETBALL TOURNAMENT

The Apprentice School is teaming up with the New Hire Community of Practice (NHCoP) to raise money for *homesforkids.org*

4-player teams will raise \$60 to compete!

LOOK FOR POSTERS AND FLYERS AROUND CAMPUS!

VISIT www.nnapprentice.com/assa.com

OTHER EVENTS APPROACHING

ROCK-N-BOWL

HOLIDAY DINNER DANCE

(One of our biggest events of the year)

ANSWERS TO GRAMMAR QUIZES

- | | |
|------------|---------------------------------|
| 1. Their | 1. Me |
| 2. They're | 2. Mercedes |
| 3. Their | 3. The car that my brother owns |
| 4. There | 4. Wieners and beans |
| 5. Their | 5. The freezer in the basement |

YOUR BUILDER BULLETIN TEAM IS:

Jason Kinney, X32 ASOC (Editor, Publications Chair) – Betty Husted, EO6 Design (Co-Chair) – David Nicholas, X06/X89 Planner – Eric Kilner, E06 – Daniel Rippeth, X11 – Roger Miller, X18

