



Chairman's News

Jim Erickson, WCN Chair

I'm heading up a Section that is growing and improving because of the outstanding past chair Fred Orland. Working with Fred over the last two years has been interesting, and rewarding. The section has increased in member turnout and become more involved. The development of new programs such as the Local Consultants Network and expanding the involvement with the Universities has increased interest. I plan on maintaining this growth in the section. Thanks, Fred. The challenge for the Section is to maintain the enthusiasm and increase membership in IEEE.

IEEE Membership Benefits: bringing together knowledge, community, and profession

IEEE is the world's largest technical society, bringing members access to the industry's most essential technical information, networking opportunities, career development tools, and many other exclusive benefits.

This years WNC Section meetings included the following:

"Medical Imaging"

Perry Sprawls, PhD Professor Emeritus Emory University School of Medicine discusses many aspects Medical Imaging. His presentation illustrate how the different methods produce images, some of the unique features of each, and then take us on a "Fantastic Voyage" of the human body with images produced by state-of-the-art medical imaging technology. In addition to x-rays, other forms of radiation and energy are used for modern medical imaging. These include radiation from radioactive substances such as in Positron Emission Tomography (PET), ultrasound, and RF signals produced in the body with very strong magnetic fields in the process of Magnetic Resonance Imaging (MRI).

"The New I-26 Bridge over the French Broad River"

In celebration of engineer week the ASME, SWE, ASCE, IEEE, & PENC together had **Joe Minicozzi** of the AICP describe a vision of a bridge that makes a statement and sets off the community. He shared innovative ideas for the I-26 connector based on trends in engineering and infrastructure around the world. He will also lead a discussion on Asheville's design vision for the next century.

In addition, "Engineering Career Round Table with the Engineering Students at UNCA" (see page 2 article) and the "UNCA Senior Projects Preliminary Design Reviews" where conducted.

We were told about 2 Projects: 1) A wireless interface for Aurora light ballasts - by Stan Frady and 2) A wheel chair lift designed by a team of 7 Seniors. It was interesting to see the progress that the engineering students made since the concept design review.

LCN Corner

Chuck Stonecyper, WNC LCN Chair

Our IEEE Western North Carolina Local Consultants Network (LCN) has become operational in the first quarter of 2006. We offer a referral service for our consultant members. The LCN can enable a business to acquire unique technical skills on a temporary or extended basis. Our network of consultants can get a project over a hump or take the company to the next level.

The LCN integrated with the WNC web site in January. Members are invited to view our web page at

www.ewh.ieee.org/r3/wnc/lcn.html

In addition an article introducing us to the Western North Carolina business community was published by the Western North Carolina Business Journal (www.wcbj.biz) in February. The network is new and our plans for the next six months are to connect with area businesses to better understand their needs and alert them to our technical skills.

In addition we will growing our LCN membership and skill base. Jim Corr our WNC IEEE vice chairman put it succinctly, "We have a couple dozen active members in the network right now as we start up and we'll be adding names and skills over the coming months as we get our marketing plan running." William 'Tilt' Thompkins the LCN Marketing Coordinator leads this effort.

The IEEE Western North Carolina Local Consultants Network (LCN) meets monthly, a general invitation is sent out by e-mail to all members. GET INVOLVED and this LCN will be successful and beneficial to your career. Our next meeting is Wednesday, April 5, at 6 pm in the Shoney's Restaurant at the intersection of Long Shoals Road and I-26.

Contents

Chair's News	1
LCN Corner	1
Upcoming Events	1
Student Chapter Activities	2
Precollege/TISP News	2
Professional Activities	2
IEEE USA and Region 3 News	2
IEEE Member Profile	3
IEEE Officers Contact Info	3

Upcoming Events

- ◆ April 18 - General Membership Meeting @ Asiana Grand Buffet
- ◆ April 19 - UNCA Senior Project Design Review
- ◆ April 26 - WCU Senior Project Design Review
- ◆ May 11 - General Membership Meeting @ TBD



Henderson County students FIRST Robotics entry, HENDO .

Precollege/Teacher In-Service Training News

The IEEE WNC section supported the Henderson High School FIRST robotics team with a \$500 grant this spring. The FIRST Robotics competition

<http://www.usfirst.org/robotics/>

is an event in which high school students design and build a robot to complete specific tasks in a game. The team will compete at the regional competition on March 30 to April 1 at the University of South

Carolina in Columbia, SC. Teams from all over the US and other countries compete for a chance to go to the national championship in Atlanta, GA. Dr. Joe Fahmy, Director, NC State Engineering Programs at UNCA, visited the team and presented the grant along with providing some interesting demonstrations of some of the robots used in the University of North Carolina-Asheville/North Carolina State Mechatronics program for the gathering of students and parents. IEEE member Brian Kowald is a team advisor.

Student Chapter Activities

We would like to thank UNCA and staff for hosting the "Engineering Career Round Table" program. Dr. Joe Fahmy and the IEEE Student Branch officers and members for all their meeting preparation efforts.

We would like to thank the panel members (Dr. Perry Sprawls, Jim Corr, Tom Blooming, Chuck Stonecypher, Bob Pettigrew, A. J. Burke, Brett Pierce) for sharing their career's with the students and the presentation on professionalism and ethics by Bob Pettigrew.

The "Engineering Career Round Table"

Professional Activities

"Medical Imaging - WCU Edition"

Perry Sprawls, PhD, Professor Emeritus Emory University School of Medicine conducted a second session for the staff and students of Western North Carolina University (WCU) on March 16 2006. Once again Perry illustrated how different methods produce images, some of the unique features of each, and took us on a "Fantastic Voyage" of the human body with images produced by state-of-the-art medical

provided an interactive educational forum for the future aspiring engineers. We are fortunate to have a very diverse group of very experienced engineers in our IEEE Western North Carolina section. This is an opportunity for us to share this wealth of experience with our engineering students. The objective is to have a round table discussion to provide the students with information and an opportunity for the students to ask questions about what to expect after graduation.

A panel of IEEE members presented a short overview of various engineering career functions/roles, career paths and the importance of professionalism. This was followed by an open discussion and question

imaging technology. In addition to x-rays, other forms of radiation and energy are used for modern medical imaging. These include radiation from radioactive substances such as in Positron Emission Tomography (PET), ultrasound, and RF signals produced in the body with very strong magnetic fields in the process of Magnetic Resonance Imaging (MRI).

IEEE USA and Region 3 News

The main portal to the IEEE site has a fresh new look. Go to <http://www.ieee.org/> and check it out. It is much easier to find what you need. They include a tour of the new site.

The new "The Institute Online" program promotes Engineering to young people. Sure, teenagers love listening to their favorite music on iPods and snapping pictures of their friends with camera phones, but most aren't aware that engineers are behind these

cool technologies. To help youngsters understand how engineers affect the world we live in, the IEEE Educational Activities Board has developed a program aimed at familiarizing pre-university students with basic engineering concepts. Find out more at:

<http://boldfish.ieee.org:80/u/2360/06821375>.

This is a way to improve the interest in engineering and science.

"...take a Fantastic Voyage through the human body..."

IEEE Member profile



Western North Carolina
PO Box TBD
Asheville, NC 28801

Phone:
(828) 683-2048

Fax:
(828) 667-4999

E-mail:
wnclocalconsultantsnet
work@ieee.org

Networking the
world.

We're on the Web!
<http://www.ewh.ieee.org/r3/wnc/>

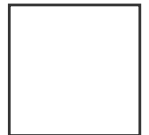
With this newsletter we will start a new column for each quarter that will highlight the career and interests of an IEEE member. This time we will look at the outgoing IEEE WNC Chair, **Fred Orland**. Fred began his career as a student of mathematics and electronics engineering with undergraduate degrees in both of these from Saint Norbert and the University of Detroit, respectively. He then went on to complete the Masters in EE at UCLA on a graduate fellowship from Hughes Aircraft Company while he worked there.

He left Hughes and went to work for TRW Semiconductor as an applications engineer for a few years before moving to Ampex Computer where he worked as a design and project engineer. He then returned to TRW for the remainder of his career in satellite communications and integrated flight avionics now in service on the new F-22 Raptor. After retiring to Asheville, NC to be closer to his family, Fred became very active in the local IEEE chapter and served as Chair up until early this year. He now serves as Treasurer for the IEEE WNC Section.

IEEE Officers Contact Information

Chair	James Erickson	james.erickson@ieee.org	(828) 683-2048
Vice Chair	Jim Corr	jimcorr@ieee.org	(828) 694-3610
Secretary	AJ Burke	ajburke@ieee.org	(828) 667-4999
Treasurer	Fred Orland	fredorland@ieee.org	(828) 665-4761
Professional Activities	Fred Orland	fredorland@ieee.org	(828) 665-4761
Student Activities College	Jim Corr	jimcorr@ieee.org	(828) 694-3610
Student Activities Pre College	AJ Burke	ajburke@ieee.org	(828) 667-4999
Nominations & Appointments	Bob Pettigrew	robp50@ieee.org	(828) 651-0330

IEEE Western North Carolina
PO Box
Asheville, NC 28801



**RECIPIENT NAME
STREET ADDRESS
ADDRESS 2
CITY, ST ZIP CODE**