The Florida West Coast Section of the IEEE
Serving over 2,300 members in Charlotte, Citrus, DeSoto, Hardee, Hernando, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk, and Sarasota Counties

THE SUNCOAST IEEE SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

http://ewh.ieee.org/r3/floridawc | Volume 44 - No. 12 | December 2001

Computer Society December Meeting

Solving Tough Design Problems with Programmable Logic Devices

Date/Time: **Tuesday, December 4, 2001, 6:00PM to 7:30PM**

Location: **Paradyne Corp., Commons Area**
8550 Ulmerton Road, Bldg. G, Largo, FL

RSVP: **www.pl-ug.org (PL-UG Web Site)**

This is an open meeting. Non-members are welcome. Complementary snacks and cold drinks will be provided.

Marc Medley (Lattice Field Applications Engineer) and Mike Danagher (Lattice Regional Sales Manager) will present applications of PLDs that solve tough design problems. The applications include the use of super fast, low power devices to satisfy the need for performance at reasonable power levels, the use of wide fan-in devices, and the use of programmable interconnect devices to solve interconnect and signaling conversion needs. Also discussed briefly will be the architecture and use of programmable analog devices for analog front end and filtering applications.

Marc has been a field applications engineer for Lattice Semiconductor for five years. Prior to joining Lattice, he worked for 2 years at Scientific Atlanta and 10 years at Rockwell. He graduated from Florida Institute of Technology. Mike has been in sales for Lattice for six years and was an FAE for Lattice for three years prior to that. He was also an FAE for Xilinx and Plus Logic and was a design engineer for Martin Marietta (now Lockheed Martin) in Orlando. He graduated from the University of Central Florida.

Directions: Turn South off Ulmerton Rd. at the above address. Follow the signs on the private road to the 2 story Paradyne building in the back of the property. Park in front of building G. Enter in the main door facing the parking lot.

Inside this issue of the Suncoast Signal:

THE SUNCOAST SIGNAL is published monthly by the Florida West Coast Section (FWCS) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). THE SUNCOAST SIGNAL is sent each month to members of the IEEE on Florida's West Coast. Annual subscription is included in the IEEE membership dues.

All material for THE SUNCOAST SIGNAL is due by the Friday following the 1st Thursday of the month preceding the issue month. Address all correspondence to:

Quang Tang - Seminole Electric Cooperative, Inc.
P.O. Box 272000, Tampa, Florida 33688-2000
Voice: (813) 739-1222 Fax: (813) 264-7906
E-MAIL: q.tang@ieee.org

Chair's Comment

By Quang Tang

Congratulations to Mr. Ervin Nevsimal of Gaither High School. On November 16, 2001, he received the IEEE 2001 Educational Activities Board Pre-College Educator Award in Mexico City, Mexico. Please check out the article on page 7 of this issue for more details of presentation.

If you missed the engine room tour of American Victory ship last month, you missed an excellent tour. The Victory ship is also open to public without the engine room tour.

We are currently working with other engineering societies (AFE, ASHRAE, ASME, and SOLE) in the Tampa Bay area to put together an annual banquet during the Engineers' Week in February 2002. Because of the great success from last year's banquet, we are anticipating a bigger turn out this year. Don't miss this outstanding opportunity at the unbelievable low price of $20 per person. Please use the form on page 10 to make your reservation today - seating is limited.

Students' Corner

I would like to thank Lindsay, Steve, and Clemente for demonstrating incredible leadership skills. I would like to thank Ruben for making an excellent brochure and Pam for your support.

The Charity Golf Tournament was a complete success! We were able to hand Metropolitan Ministries over $1,050 dollars in aide. I only wish that a representative from IEEE FWCS could have been there to witness the true happiness and surprise when we handed that money over to charity. I also wished that more USF faculty members were there to witness this as well. I thank Dr. Tom Weller and Dr. Larry Dunleavy for their support. I hope that they will be a testament to the success of this golf charity tournament. We do plan on making this an annual event.

I hope next time more support will be given to the student branch as we need encouragement to grow, and not to here discouraging comments like, "The Golf Tournament is on Sunday, I play golf on Monday" or "That's my day off man".

Thank you to the officers who contributed their hard work to make this charity event a complete success!

Sincerely,
Anthony Webster
IEEE Student Branch President
apwebste@eng.usf.edu

Switchgear Seminar

Sponsored by IEEE PES/IAS & Powell Industries, Inc.

DATE/TIME: Tuesday, December 4, 2001 8:00am

LOCATION: Auditorium 2, Energy Technology Resource Center (ETRC),
University of South Florida in Tampa

RESERVATIONS: Please RSVP to Jason Hawthorne by phone @ (713) 948-4583 or via e-mail jason.hawthorne@powellelectric.com

COST: No Charge

You are cordially invited to join our technical director, Jim Bowen, for a switchgear seminar on the following topics:

Powell Electric is offering a half-day medium voltage switchgear and system grounding seminar at the ETRC on December 4 at 8:00 AM. Last year's seminar was a great success. Jim Bowen, the main speaker, is Powell's technical director and an expert in switchgear design and application. Jim frequently presents peer reviewed material at IEEE conferences. This is a good opportunity to share experiences and to ask questions of a recognized authority in switchgear design and application. CEU's are available for attendance. There is no cost for the seminar, however, reservations are required. E-mail Jason Hawthorne at jason.hawthorne@powellelectric.com or call Jason at (713) 948-4583 to reserve a place in the seminar. The following topics will be presented:

- New ANSI Medium Voltage Switchgear Ratings
- Planning and Executing Medium Voltage Switchgear Modernization Projects
- System Grounding

Important Details:

- ✓ Seminar begins at 8:00 a.m.
- ✓ Continental breakfast provided.
- ✓ Lunch will be served at the conclusion of the final seminar.
- ✓ Each topic will be covered for an hour with plenty of time for questions and discussions.
- ✓ Maps located at http://www.etrc.com/etrc/ETMtgFclty.html
- ✓ For a profile of Jim Bowen, please visit http://www.powellelectric.com
- ✓ Continuing Education credits are available for this seminar.

Sponsors:

IEEE PES IAS POWELL INDUSTRIES, INC.

"Old Hazards…New Solutions!"

Beau Rivage Hotel
Biloxi, Mississippi
January 16-18, 2002

Founded and organized by Petroleum and Chemical Industry Committee
Co-organized by Power Systems Engineering Committee
and Pulp and Paper Industry Committee

Industry Applications Society
Institute of Electrical and Electronics Engineers, Inc.
The IAS Electrical Safety Workshop

This is the best kept secret in the field of electrical safety!" exclaimed a first time attendee at the 8th Annual IAS Electrical Safety Workshop held in Toronto in January 2001. The IEEE Industry Applications Society Petroleum and Chemical Industry Committee created the Workshop in 1991 to provide a forum for people to meet and exchange ideas for preventing electrical accidents and injuries in the workplace. The Workshops have served to advance technology, establish best work practices and accelerate improvement in standards and regulations to reduce electrical incidents, prevent injuries, and reduce the economic impact of electrical accidents. They have linked professionals and centers of excellence in industry, engineering, government, and medicine. Participation has continued to grow and the technical program and exhibits have evolved to stay at the forefront of change impacting electrical safety. As a participant, you will be sharing experiences with engineers, electricians, scientists, safety professionals, risk managers, physicians, training professionals, and others – all interested in accelerating progress in preventing electrical accidents and injuries. For up to date information on the 9th Annual IAS Electrical Safety Workshop, including registration forms, check our website at http://www.ieee-pcic.org/safety/esw.htm

Workshop Mission

The mission of the IAS Electrical Safety Workshop is to:

- Accelerate application of breakthrough improvements in human factors, technology, and managing systems that reduce risk of electrical injuries,
- Stimulate innovation in overcoming barriers,
- Change and advance the electrical safety culture to enable sustainable improvements in prevention of electrical accidents and injuries.

IEEE FWCS Teacher In-Service Program

By Ralph Painter

The IEEE has several active initiatives that are designed to strengthen K-12 education in the areas of science, mathematics and technology with the aim of attracting talented students to engineering and technical careers. The Florida West Coast Section of IEEE is at the forefront of the initiative to provide teacher in-service presentations that increase the ability of teachers to present technical subject matter and to inform teachers about the rewards, opportunities and challenges that are available to students who choose to study the sciences, mathematics, engineering and technology.

Most school districts across the country require that teachers accumulate a certain number of continuing education credits in order to renew teaching certificates. Teachers can satisfy their continuing education requirements by attending college level courses or by attending classes and seminars that are conducted during teacher in-service days. In-service days are days that students have off and that teachers can use to develop their skills and attend to other duties outside the classroom.

It just so happens that the FWCS is home to Doug Gorham who is the IEEE Project Manager for Pre-College Education Activities. Doug is available to assist any FWCS member who is interested in developing a topic for a teacher in-service presentation. Doug also has strong connections with the school systems in our area since he took leave from his job as Principal of Bayshore High School in Manatee County to manage this program for the IEEE. The school districts ask that each in-service topic be related to the Sunshine State Standards established by the Florida Department of Education. Almost any topic that an IEEE FWCS member would be interested in presenting can easily be tied to the standards. Doug facilitates the approval process by acting as a go-between with the school system and by providing outlines of the standards. Recently, Doug was provided with a list of topics for which educators have asked for in-service presentations: energy transformation, circuits, motors, wireless communication, magnetism, plasma/fusion, robotics, and energy. These topics fit well with the experience of our members and the areas of interest of several IEEE societies. Developing a topic can be as easy as choosing your favorite technical subject and working up a short presentation for teachers. Demonstrations, hands-on materials and practical applications are strongly encouraged. A question and answer period is good way to end the presentation. The questions often stimulate interaction between the teachers and provide the speaker with a way to gage how well the teachers understood the material.

Teachers need encouragement and support. One of the greatest impacts of the teacher in-service presentations is the encouragement that teachers feel by knowing that members of other professions recognize the value of teaching and are willing to spend time working together to broaden the scope of information that teachers can offer to their students. The sidebar conversations and informal interchanges between teachers and IEEE members that occur before, during and after the main in-service presentation are equal in importance to the presentation itself.

The teacher in-service presentations provide opportunities to participate at several different levels so IEEE members can find the level that best fits their talents, preferences and time available. For instance, in addition to the main speaker, between two and four coaches are needed for each presentation. Many of the presentations include hands-on materials. Coaches assist teachers in assembling materials, answer questions and generally facilitate the process. Coaches are also available for informal one-on-one conversations with teachers during breaks. Most of the information transferred to teachers regarding the engineering profession happens informally in conversations with coaches.

One of the presentation topics that has been presented by FWCS members is called “Everything You Always Wanted to Know About Motors, but Were Afraid to Ask.” This presentation is adaptable to teacher audiences that range from sixth grade science teachers to high school physics and technology teachers. Teachers assemble a working motor from a kit of materials purchased with grant money from the Verizon foundation. The cost of the kits is about $3.00 each including the one AA cell required to operate the motor. In addition to the kit assembled during the in-service presentation, each teacher is given copies of the class notes and a kit to take back to the classroom to assemble with their students. IEEE members will recognize that the kit is a series DC motor or a universal motor similar to the motors found in electric kitchen mixers, hand-held drills and the starter motors found in automobiles. Depending on the level of teachers in attendance, the discussion can range from applications of motors in automation, transportation and household appliances to the magnetic fields created around current carrying wires. Bring along an AM radio and the static caused by the arcing commutator can lead to a discussion about radiated electromagnetic energy. The following members have participated in this presentation: Jules Joslow, Quang Tang, John Stankowich, Jack Killngsworth, and Ralph Painter. So

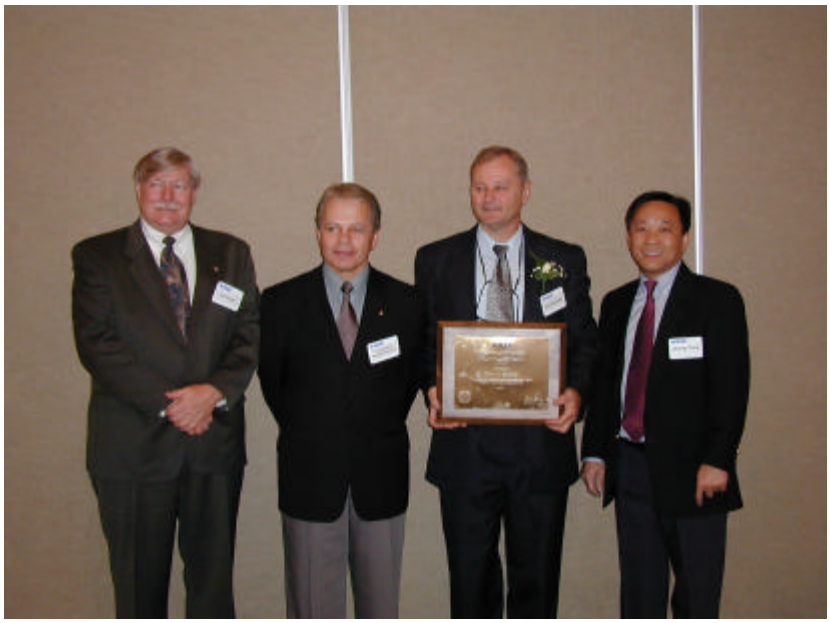
far this year, the electric motor in-service class has been presented to Technology teachers on three occasions in Manatee and Pinellas counties. The motor presentation will be repeated for Hillsborough County teachers during Engineer's Week around February 18, 2002. If you are interested in participating in the motor presentation as a leader or a coach, please contact Ralph Painter at rdpainter@tecoenergy.com or by calling (813) 641-5224.

Another recently developed teacher in-service topic is called "Simply Spectroscopes." In the short version of this presentation, teachers determine the wavelengths of some of the bright emission lines generated by compact florescent light bulbs and teachers measure the range of wavelengths that are visible to the human eye from ordinary incandescent light bulbs. Of course, the presentation includes a simple explanation of diffraction gratings and wave interference. The topic may seem complex and difficult, but turns out to be very simple. The FWCS has materials enough for fifteen workstations. Assuming two teachers per workstation, a group of thirty teachers can be easily accommodated. In the longer version of this presentation, teachers also assemble a cardboard spectroscope from kit materials paid for with grant money from the Verizon foundation. The cost of presenting the short version of the presentation is negligible. However the cost of the cardboard spectroscopes included in the longer version is about $10.00 per kit. "Simply Spectroscopes" is aimed at high school chemistry and physics teachers but can be adapted to middle and high school physical science teachers as well. The following members have participated in the "Simply Spectroscopes": Jules Joslow, Quang Tang, John Stankowich, Scott Haynes, and Ralph Painter. If you are interested in leading or coaching the "Simply Spectroscopes" presentation, please contact Ralph Painter at rdpainter@tecoenergy.com or by calling (813) 641-5224.

Photos above are from recent "Simply Spectroscopes" Teacher In-Service Program Presentation to Hillsborough County Science Teachers by Ralph Painter at Adams Middle School.

IEEE EAB Pre-College Educator Award – Ervin L. Nevsimal

During the Board of Directors Series Meeting in Mexico City last month, Mr. Ervin L. Nevsimal of Gaither High School was presented by Mr. Lyle D. Feisel, IEEE Educational Activities Vice President, with the IEEE Educational Activities Board 2001 Pre-College Educator Award with citation ***"for teaching and leadership in the Pre-Engineering Program in the Gaither High School, Tampa, Florida"*.** The IEEE EAB Pre-College Educator Award was established by the IEEE Educational Activities Board in 2000 to recognize a pre-college teacher who has inspired in students an appreciation and understanding of math, science, technology and the engineering process and has encouraged students to pursue technical careers.



Mr. Nevsimal was nominated by Florida West Coast Section (FWCS). Along with Mr. Nevsimal at the Award Ceremony from FWCS were Mr. Jim Howard, Region 3 Director-Elect 2002-2003, and Quang Tang, FWCS Chair.

For more information about the EAB awards, please logon to:
http://www.ieee.org/organizations/eab/arc/awards/call.htm

Photo (l to r):
Mr. Jim Howard, Region 3 Director-Elect, Dr. Constantine Anagnostopoulos, EAB Pre-College Educational Coordinating Committee Chair, Mr. Ervin Nevsimal, Award Winner, and Mr. Quang Tang, FWCS Chair.

Fort Myers Section Meeting

We are planning a Section Luncheon Meeting in Fort Myers to be held at the Florida Gulf Coast University Tuesday, January 22, 2002. Our guest speaker will be Walter Rodriguez, Ph.D. Walter is Professor and Chair-Director of Computer Information Systems, Decision Sciences, Computer Science, and Engineering in the FGCU College of Business.

Dr. Walter obtained his Ph.D. in engineering project management from the University of Florida. A wealth of practical and academic experience, this speaker promises to show us how FGCU meets technology head-on. Details of the meeting will be presented in next months SIGNAL. Mark your calendar for this notable event.

Resources For Volunteers

Check it out! A revised Volunteer Resources web site has been posted at www.ieee.org/organizations/vols (or go to the IEEE main page, www.ieee.org, and click on "Volunteer Resources"). New features of the site are direct links to various organizational unit home pages, quick links to sites used by many volunteers, and the capability to suggest pages that should be linked from the Volunteer Resources Home Page.

The site includes links for IEEE volunteers in the area of writing/creating content and publishing as well as for those involved in Technical Societies, Sections, Chapters, Student Branches, Conferences, Standards Development, Professional Development, and Organizational Unit Board Activities.

For additional information, contact John Wettlaufer of IEEE Technical Activities, telephone (732) 465-7809 or j.wettlaufer@ieee.org.

SP/COMM News

The SP/COMM society would like to thank Mr. Ron Brown for his informative lecture held Nov. 8th. The topic of RF link characterization and simulation is very important with the explosion in wireless communications products. The lecture generated some lively audience participation, and was enjoyed by all. After the lecture several of our members including our lecturer were treated to dinner by Mr. Bill Graves as a courtesy of TRAK Microwave. Thanks Bill.

2002 Review Seminars For PE Electrical and EIT/FE April Examinations

Review seminars for the new format PE (Electrical) and Engineer In Training Fundamentals of Engineering (EIT)/ (FE) exams will begin:

Monday, Jan 28 for the EIT/FE Exam & Thursday, Jan 31 for the EE Exam. Seminars are conducted from 7-10 P.M. (Monday or Thursday) for ten weeks. The registration fee is $300 and includes a new text which covers the new "depth and breadth" exam format. The seminars will be held on the main USF campus in Tampa.

To register, contact: Alan M. Keith, P.E., PO Box 14042, (EC37), St Pete, FL 33733.
Alan.M.Keith@pgnmail.com
Phone (727) 384-7937, FAX (727) 384-7994
Pinellas Chapter, Florida Engineering Society

Job Opportunity

Electrical - Marketing Engineer

Local growing company is seeking an Electrical – Marketing Engineer with BSEE degree. Account management or tech support experience desired with excellent verbal & written skills. Knowledge of electronics or electrical power systems helpful. Will support multiple sales forces and handle special projects. Salaried position, bonus program, 401k, plus benefits. Mid Pinellas, excellent opportunity in a growing company. Send resume to:

Advanced Protection Technologies
Louis Farquhar
Fax (727) 524-6178 or
Email lfarquhar@apttvss.com.

Department of Electrical Engineering
University of South Florida
Tampa, FL 33620

Poster Presentation Judge Invitation
December 7th, 2001

November 16, 2001

Dear Fellow Engineer:

The Electrical Engineering Department invites you to become a Poster Presentation Judge on the afternoon of December 7th. All USF E.E. students completing their required "capstone" projects must augment their written report with an oral Poster Presentation. Thus, on Friday December 7th those of our E.E. students who are completing their Senior design (or similar) projects and who thus are ready for, or very close to graduation, will be making their presentations to an audience of fellow students, faculty, and visiting industry engineers.

To add professional realism, this event, our fourth, is organized along the lines of an IEEE conference's Poster Session. It includes evaluation of the presentations by teams of faculty and practicing engineer judges. There will be a few specific criteria to be judged. Results will be tabulated and summed to yield a single score for each student presentation. Very good presentations will be awarded special recognition.

To provide a relaxed "ambiance", snacks/refreshments will be available for all. In addition to the formal "judging" you will have the opportunity and time to meet our students, faculty and fellow judges informally.

Our Poster Presentation has become one of the highlights of the E.E. department's "Senior Day" events; a day that ends with our IEEE Student Chapter's industry-supported Senior Banquet. We hope you will be able to also attend the Banquet at which we expect to announce the award recipients of the Poster Presentations. (For more information and/or reservations contact the Chapter's officers at 813-974-4776.)

To assist our planning, if you can come, please enter this event now on your calendar; also let me know that you will be able to assist us as a judge as soon as possible (tel. 813-974-4782, E-Mail: henning@eng.usf.edu). *Judges will meet in the ENB Engineering building (Room #TBA) at 2 pm for final instructions.* Student presentations will start at 2:30 pm and finish by 5 pm. Presentations and judging teams will be divided into two groups; each group will have 1 1/4 hrs for judging and 1 1/4 hrs to roam the presentations and meet others students, faculty and visitors. We look forward to seeing you and/or a colleague of yours on December 7th!

Sincerely,

Dr. Rudy Henning
Distinguished University Professor

NATIONAL ENGINEERS WEEK® 2002
FEBRUARY 17-23

CELEBRATE ENGINEERING 2002 BANQUET

Date/Time: Saturday, February 23, 2002
6:00PM Social, 7:00PM Dinner, 8:15PM Program

Location: Holiday Inn City Centre (813) 223-1351
111 West Fortune Street, Tampa, FL 33602

Speakers: Planning Stage
Topic: Planning Stage

Entertainment: A local caricaturist; Magic Show;
Music through out the evening

Door Prize: Given through out the evening

ASME International

Each February, National Engineers Week unites engineers and the public in a celebration of innovation and technology, National Engineers Week increases public awareness of engineering's contributions to our quality of life.

The Florida West Coast Engineering Societies are pleased to announce the annual Engineers Week Banquet. This year, the banquet will be held on Saturday, February 23, 2002, at the Holiday Inn City Centre in Tampa. This event brings engineers of various disciplines together to share an evening of fellowship, fine dining, entertainment, and recognition of individual achievement. Local engineering societies will bestow student Engineer of the Year Awards in their respective disciplines. Each society's Engineer of the Year Award will be presented. Teacher of the Year from Pinellas, Hillsborough, and Pasco Counties will also be presented. This event will be moderated by local celebrity and entertained by a local magician. Participating Societies are Association for Facility Engineers (AFE), American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRA), American Society of Mechanical Engineers (ASME), Institute of Electrical and Electronics Engineers (IEEE), and Society of Logistic Engineers (SOLE).

Tickets are $20.00 per person, and must be purchased in advance. Eight seat tables are available for corporate reservations. Please use the mail-in reservation form below, or call Quang Tang at (813) 739-1222 or email q.tang@ieee.org for more information.

Return this Reservation Form to Quang Tang, P.O. Box 270756, Tampa, FL 33688-0756 ***CELEBRATE ENGINEERING 2002 BANQUET – Saturday, February 23, 2002***			
Name	Email		
Address			
City	State	Zip Code	
Work Phone ( )	Home Phone ( )		
No. Tickets @ $20 each	Amount Enclosed $ (Check payable to IEEE-FWCS)		
Dinner Choice	Vegetarian	Prime Rib	Grouper Chardonnay

Brain Teaser Challenge Column

By Butch Shadwell

November BTC Solution

I am very impressed with the thoughtful answers I received to last months BTC. There is no doubt that BTC readers are a cut above the norm. As you recall, the question was about how one goes about purchasing a laser weapon. Would you opt for the higher power model or give in to the showroom hype for the higher energy unit. After you've finished kicking the tires, you may have to do some calculations to determine the best buy.

Let's say that the conversion efficiency of light energy to heat at the target is constant for both lasers, all of the time. With this fact, let's consider the high energy laser first. As we all know, energy is the integral over time of the power. So a laser that projects even a very low power beam could impart a lot of energy if it stayed on target for a longer period of time. Of course this demands a tracking system that will keep the laser focused on target for that period. Extremely difficult if the target is moving. Also we must consider the thermal impedance of the target. This is a measure of the target's ability to move heat away from the point of impact of our laser and the specific heat of its construction material. (In case you've forgotten, "specific heat" refers to the amount of energy it takes to raise the temperature of a given amount of a given material, one degree centigrade.) If the power of our laser is relatively low, we may never see a significant rise in temperature at the target regardless of how much energy is projected against it.

In the case of a high power laser, the issues of thermal impedance and specific heat are dramatically reduced. Also if the beam duration is limited to a very short time, the tracking system has a simpler problem. But, if the beam is very brief, say only a few picoseconds, then how much damage can be done. We might vaporize a thin outer layer of the target's skin or perhaps even produce a small perforation, but will we be able to disable it? And what if the high power laser can only fire once a second?

Thanks for your intelligent responses and as you can see, designing a laser weapon requires a careful collaboration between high power, high energy, and targeting technologies.

December BTC

With Halloween just around the corner as I write this, I've been thinking about what my costume should be this year. If you know where to go, your trick or treat bag can even collect items with Cartier and Gucci on them. In past years I have gone as Commander Ryker from Star Trek: Next Generation, and the Incredible Hulk (green isn't my color). I even went as the Terminator, with the glowing red eye, one time. I take great pride in making my own costume every year.

This year I was toying with the idea of disguising myself as a Computer Nerd, totally consumed by his interest in technology. No one will ever recognize me as such a character since most people only know me as a suave, cultured individual with an eye for men's fashion and impeccable taste in wine. At least I'm pretty sure that's how they see me. To complete my Nerd persona, I decided should have that ubiquitous symbol of nerdery, the slide rule in a holster. Some of you may know that the slide rule implements a scale for adding and subtraction with two adjacent linear rows of decimal numbers. Of course the really neat thing that slide rules can do is multiplication and division. How many of you know how this is done?

Questions or comments to the Brain Teaser Challenge, please contact Butch Shadwell at 904-223-4465 (voice), 904-223-4510 (fax), b.shadwell@ieee.org (email), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. http://www.se.mediaone.net/~butchs/

December 2001 Calendar of Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 *EXCOM at TECO Center; COMP Meeting; IAS Switchgear Seminar 8am*	5	6	7 *Material Due For the Signal; Poster Presentation at USF 2:30pm*	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23 30	24 31	25	26	27	28	29

Institute of Electrical and
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Florida West Coast Section
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Tampa, Florida 33614

DATE SENSITIVE MATERIAL. DO NOT DELAY

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Or send address changes including your name, IEEE Member number and all pertinent information to:
IEEE, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331 or call (800) 678-4333
Or fax your address changes to (732) 562-5445

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