

# ProService

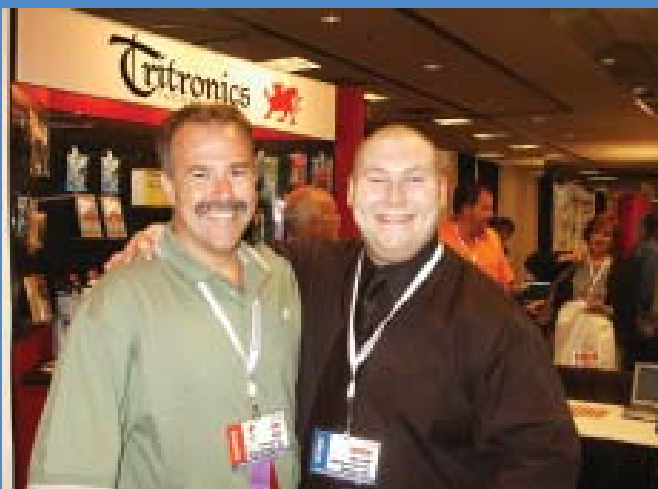
## Magazine

A Journal of NESDA and IS CET • August 2003

[www.nesda.com](http://www.nesda.com) • [www.iscet.org](http://www.iscet.org)

### NPSC 2003 Report

- **Associations Elect New Leadership**
- **Best Ideas Contest**
- **How to Identify Semi-Conductors**
- **NESDA Industry Relations — At Your Service!**



**www.nesda.com**  
**www.iscet.org**

**An official journal of NESDA  
(National Electronics Service Dealers  
Association), and IS CET  
(International Society of Certified  
Electronics Technicians).**

### **Purpose**

ProService Magazine, a publication for members of NESDA and IS CET, is produced by NESDA, the National Electronics Service Dealers Association, 3608 Pershing Ave., Fort Worth, TX 76107. It is intended for the enlightenment, education and entertainment of the members of NESDA and IS CET.

With the exception of official announcements, the statements and opinions expressed herein are those of the authors and not necessarily those of the associations.

Unless otherwise clearly indicated, neither NESDA nor IS CET endorses any company, product or service appearing in any article in this publication.

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## **Upcoming Events**

CEA Industry Forum &  
Fall Conference  
October 13-15, 2003  
Carlsbad, CA  
www.ce.org

COMDEX 2003  
November 15-20, 2003  
Las Vegas, NV  
www.key3media.com

2004 International CES  
January 8-11, 2004  
Las Vegas, NV  
www.ce.org

National Professional Service Conven-  
tion and Professional Service Trade  
Show (NPSC) 2004  
July 27-31, 2004  
Renaissance Hotel, Nashville, TN  
www.nesda.com

If you would like your event listed in  
this section, please contact  
stephanie@nesda.com or call  
817/921-9061 ext.13.



## NESDA/ISCET Officers 2003 - 2004



*Incoming NESDA President Brian Gibson CET and outgoing NESDA President John Eubanks CET*

### NESDA Officers

**President:** Brian Gibson CET (MA)  
**Vice-President:** Don Cressin CET (MD)  
**Secretary:** Doug Freeman (FL)  
**Treasurer:** Fred Paradis CSM (MA)  
**Imm. Past President:** John Eubanks CET (FL)  
**\*Region 1 Director:** Fred Paradis CSM (MA)  
**Region 2 Director:** Vic Gerry (NY)  
**\*Region 3 Director:** Justin Mays CSM (MD)  
**Region 4 Director:** Doug Freeman (FL)  
**\*Region 5 Director:** George Weiss CSM (IL)  
**Region 6 Director:** Bill Sims CSM (TX)  
**\*Region 7 Director:** Clancy Harms (MO)  
**Region 8 Director:** Leo Cloutier CSM (CA)  
**Advisory Board Members:**  
 Fay Wood, SatisFusion  
 David Melwid, PTS  
 Steve Zell, Thomson  
**ISCET Representative to the NESDA Board:**  
 Jim Fellows CET/CSM (ISCET President)  
*\*Regions electing new directors this year*



*Outgoing ISCET President George Brownyard CET and incoming ISCET President Jim Fellows CET/CSM*

### NESDA Standing Committees

**Past Presidents:** John Eubanks CET (Chair)  
**Awards (Past Presidents):** John Eubanks CET (Chair)  
**Nominations:** John Eubanks CET (Chair)  
**Bylaws Internal Development:** Billy Williams EHF (Chair)  
**Information Technology:** Del Whiteman CET/CSM  
**Endorsements:** Vic Gerry  
**Industry Relations:** Wayne Markman  
**Legislative:** Don Cressin CET  
**Membership/Marketing:** Fay Wood (Chair)  
**Professional Service Management:** Randy Whitehead CSM  
**Ways and Means:** John Eubanks CET (Chair)  
**State & Local Representatives:** Pat Viscardi and Gary Thompson CSM (Co-Chairs)

### NESDA Special Committees

**Certified Service Center:** Bill Sims CSM  
**Diversification:** Fred Paradis CSM  
**Convention First-Timers:** Fred Paradis CSM  
**Electronics Industry Hall of Fame:**  
 Dorothy Cicchetti EHF, President and Chairman of the Board

### ISCET Officers

**President:** Jim Fellows CET/CSM  
**Vice President:** Joseph ("C.W.") Villademoros CET/Ph.D.  
**Secretary:** Dan Mundy CET/CSM  
**Treasurer:** Del Whiteman CET/CSM  
**Immediate Past President:** George Brownyard CET  
**ISCET Director:** Bohdan Borowik CET  
**ISCET Director:** Ernie Curtis CET  
**ISCET Director:** Oscar Romero CET  
**ISCET Director:** David Bates CET  
**NESDA Representative to the ISCET Board:**  
 Brian Gibson CET (NESDA President)

### ISCET Committees

**Instructors Group:** Joseph Villademoros, CET/CA/Ph.D.  
**New Certifications/AAMI Investigation:**  
 Dave Bates, CET  
**Publicity:** Joseph Villademoros, CET/Ph.D.  
**ESI Analysis:** Dan Mundy, CET/CSM  
**ISCET Chapters:** David Bates CET  
**Mexican Certification:** Oscar Romero, CET  
**Member Benefits:** Ernest Curtis, Jr., CET  
**By-Laws:** George Brownyard, CET  
**Awards:** Ernie Curtis, CET

## Industry Angels Program Sponsors 2003

The following companies (listed in alpha order) have sponsored the Industry Angels program in 2003, a program dedicated to expanding NESDA membership and the goals of the NESDA organization. NESDA thanks you all! Updates for 2004 sponsorships will be ongoing.

### 2003 Industry Angels Sponsors

AON	ServiceBench
B&D Enterprises	Service Net
Hitachi America Ltd./Home Electronics Div.	Sharp
JVC	Sony
Kenwood	Thomson Inc.
Mitsubishi	Toshiba America Consumer
N.E.W.	Products, Inc.
Panasonic	Tritronics, Inc.
Philips Consumer Electronics	WaCA
Samsung Electronics America	Warrantech
SatisFusion	
Sencore	

*Companies present for the presentation of Industry Angels plaques at NPSC: (left to right): Bob Fisher, Toshiba; Jim Thompson, JVC; Teresa Omar, Hitachi; Kathy Gonzalez, Kenwood; Suzanne Schneider, SatisFusion; Michael Resnick, WaCA; Kim Wagner, Tritronics; Wayne Nichols, Philips.*





# 2003 NESDA/ISCET Awards



**EVERETT PERSHING MEMORIAL MEMBERSHIP AWARD —**  
Fay Wood, Chairman & Founder, SatisFusion, Inc.



**RICHARD MILDENBERGER OUTSTANDING NESDA OFFICER AWARD —**  
Brian Gibson CET



**LEO SCHUMAVON AWARD —**  
Gerry McCann CET/CSM  
(presented by Dorothy Cicchetti EHF, at left)



**ASSOCIATE LEADERSHIP EXCELLENCE AWARD —**  
OPEA, Oregon Professional Electronics Association  
Accepted by Ray Kent, OPEA President  
(presented by Leo Cloutier CSM, at left)



**PARTners in Excellence —** Tritronics, Inc.  
Accepted by Kim Wagner, Vice President, Tritronics  
(presented by John Eubanks CET, at right)



**M. L. FINNEBURGH, SR. AWARD OF EXCELLENCE —** George Weiss CSM  
(presented by George Bluze EHF, at left)



**NESDA PRESIDENT'S AWARDS —**  
Billy Williams EHF (pictured, at left)  
Chris Fabian, Toshiba  
Kim Wagner, Tritronics, Inc.  
Fay Wood, SatisFusion, Inc.  
(presented by John Eubanks CET, at right)



**PERSON OF THE YEAR —** John Eubanks CET  
(presented by Mike Webber CSM, at left)



**OUTSTANDING COMMITTEE CHAIRMAN AWARD —**  
Fred Paradis CSM



**ISCET PRESIDENT'S AWARD —**  
Alignment Club of Los Angeles  
Accepted by Leo Cloutier CSM  
(presented by George Brownyard, at left)



**REGIONAL FRIEND OF SERVICE —**  
Joseph Strona, Toshiba  
Jim Muse, Thomson  
(presented by Leo Cloutier CSM, at left)



**NATIONAL FRIEND OF SERVICE —**  
Chris Fabian, Toshiba

### **ISCET Top 10 CA's**

*For the many volunteers who administer certification exams, ISCET recognizes those who proctored the most tests during the calendar year prior to the convention.*

- |                        |                        |
|------------------------|------------------------|
| 1. C. W. Villademoros  | 6. Edward Reilly       |
| 2. Rod Moore           | 7. Iutisone Tiliaia    |
| 3. Troy West           | 8. Parviz Shams        |
| 4. L. A. Leibensperger | 9. Earl Tickler        |
| 5. Robert Gonzalez     | 10. Leslie Paul Sheets |

# 2003 Convention Report

570 attendees came to "Feel the Power" of NPSC and NESDA/ISCET at the 2003 National Professional Service Convention sponsored by NESDA and ISCET, held in Reno at John Ascuaga's Nugget July 15-19. Included were training, networking, opportunities to socialize, sponsored meal events and even a golf outing at a local golf course. Many individuals and companies share the credit for making this year's event successful. It is not possible in the limited space available to show or list everyone who helped, so these pages will present a capsule view.

New this year were colorful laminated name badges with names in larger, bolder print. The back of the name badge contained an abbreviated schedule for quick reference. Also new this year was Hawaiian Shirt Day, held on Saturday in memory of Rich Mildenberger CET, former NESDA Region 2 Director and ISCET member who passed away suddenly in April. Rich loved brightly-colored shirts, and after the Hitachi crew announced that they would wear Hawaiian shirts at their Saturday breakfast in his memory, other attendees followed. (*Photos showing some of the Hawaiian attire at the bottom of page 12.*)

The 2003 Convention Guide contained 36 pages of ads, convention information, and helpful maps to help get around in the hotel.

The Trade Show was held July 17-18, and featured 38 exhibitors in 53 booth spaces. Those strolling through the show had the chance to visit with exhibitors and gain product knowledge about everything from business software to test equipment. Drawings for donated door prizes during the show helped make it exciting and interesting.

This year's schedule featured more technical training by manufacturers than has been seen in recent years, making it truly difficult to decide between sessions. Training sessions offered learning about everything from hanging flat panel screens, computer networking, troubleshooting projection televisions, rear projection television servicing, to HDTV service and digital convergence techniques. There were also management sessions on preparing your business to become a Certified Service Center, a FieldPower system demonstration, CET and CSM exam preparation sessions, and the annual Best Ideas Contest moderated by Gerry McCann CET/CSM, to name a few.

For anyone new to NPSC, first-timer sessions were held early each morning to give anyone new to the convention tips on how to get the most out of each day's activities.

Who can forget the sponsored meal events!? Attendees were treated to buffet and seated meals with a wide variety of good eats, as well as door prizes where lucky folks won everything from DVD players to big-screen televisions.

NESDA and ISCET also elected new leadership and held annual meetings for their members (*see page 3 for a current list of officers for NESDA/ISCET*).

Whether or not you attended this year's convention, make plans now to attend NPSC 2004 in Nashville, TN July 27-31. The Renaissance Hotel in Nashville will be the site. An early registration form is included with this magazine so you can get the best rate available, or you can register online at [www.nesda.com/npssc](http://www.nesda.com/npssc).

*Photo contributors: Sheila Fredrickson, Stephanie Miller, and Gerry McCann.*

## 2003 Professional Service Trade Show



## 2003 NPSC Sponsors

### Meal Sponsors (In Order of Event):

Warrantech  
Pioneer  
Thomson  
Sharp  
Panasonic  
Samsung  
Phillips  
Toshiba  
Sony  
Hitachi

NESDA/ISCET/FieldPower

Coffee Breaks — PTS Electronics

NPSC Golf Outing — Tritronics

Friday Evening  
Entertainment — Tritronics

### 2003 Trade Show Booth Participants

Andrews Electronics  
AON Warranty Group  
B&D Enterprises  
Certified Service Center Program  
Chief Manufacturing  
Computer & Monitor Maintenance  
Concord EFS  
Cumberland Electronics  
Custom Data Associates  
Federal Warranty  
FieldPower  
Hitachi America Ltd./Home Electronics Div.  
Howard Electronic Instruments  
JVC Service & Engineering Co.  
Key Prestige  
LG Electronics Alabama Inc.  
MCM Electronics  
Mitsubishi  
NESDA/ISCET  
Ness Electronics  
N.E.W.  
Pacific Coast Parts  
Panasonic Services Co.a  
PATx  
Philips Consumer Electronics  
PTS Electronics  
RossWare Computing  
Samsung Electronics America  
Sencore  
ServiceBench  
ServiceNet, LLC  
Sony Service Co.  
Thomson Inc.  
Toshiba America Consumer Products, Inc.  
Tritronics  
VAC Service Corp.  
Warrantech



# NPSC 2003: The Week in Review

## Service Information Symposium Participants

Apex  
Federal Warranty  
GE Customer Care  
Hitachi Home Electronics  
JVC Service & Engineering Co.  
Kenwood  
KeyPrestige  
LG Electronics Alabama Inc.  
Mitsubishi  
N.E.W.  
Panasonic Services Co.  
Philips Consumer Electronics  
Pioneer Electronics Service  
Samsung Electronics America  
Sanyo/Fisher Service  
SatisFusion, Inc.  
ServiceBench  
Sharp Electronics Corp.  
Sony Service Co.  
Thomson Inc.  
Toshiba America Consumer Products, Inc.  
VAC Service Corp.  
Warrantech

## 2003 NESDA Communications Awards

### NEWSLETTERS

#### First Place

"The Speaker" — NESDA of Ohio  
Editors, Ron Purkhiser and Joe Sopko CET

#### Second Place

"TEA News Digest" — Texas Electronics  
Association  
Editors, Mack and Carolyn Blakely

#### Third Place

"WESA Newsletter" — Wisconsin  
Electronics Service Association, Inc.  
Editor, Larry Neuens

### WEBSITES

#### First Place:

NESDA of Ohio  
Webmaster, Gary Thompson CSM

#### Second Place:

WESA — Wisconsin Electronics Service  
Association, Inc.

#### Third Place:

VPEA — Virginia Professional Electronics  
Association  
Webmasters, Peter Florance CET/CSM  
and Phillip Jones CET



**Welcome Reception**  
Sponsored by Warrantech  
and NESDA/ISCET



**Pioneer Breakfast**



**Thomson Luncheon**





**Sharp  
Cocktail Party  
& Dinner**



**Panasonic Breakfast**

**Samsung Luncheon**



**Philips Cocktail  
Party & Casino  
Night**



*(cont'd on page 12)*





This year's contest was held July 16, 2003 after the Sharp Cocktail Party & Dinner. About 60 people attended and shared the 38 ideas in this article.

**1** — Try using a Company Retirement Planning Service to engage an IRA or similar program for employees. Plan for a nest egg and a retirement future 5-10-20-30 years out. Good morale booster. Helps retain employees with beneficial “Golden Handcuffs.”

**2** — Create a liability waiver for the expensive Plasma, DLP and LCD displays to avoid conflicts about scratches and minor damage occurring during normal handling. Response Feedback: an attorney has advised one participant that this form may not cover many major legal issues but could act as a deterrent in minor incidents. The best solution is to go slow and be careful.

**3** — Always use a moving blanket — request extra towels from the client if needed — to avoid damages. Blanket “pull and slide” everything possible to avoid dropping. (Ref: Victory Packaging — 855-

624-3572 Blankets are 96.00/dozen, the giant rubber bands are \$10.00 per dozen — [www.victorypackaging.com](http://www.victorypackaging.com))

**4** — Build a plywood platform to move and store the plasma products. Line with sponge cushions and use lock wheels. Allows for upright storage from the pickup through the lab process/storage through the delivery truck.

**5** — Pictures were shown of a “plasma” repair lab with cables coming down from the ceiling above, mounting brackets and rubber table stabilizers for servicing and foam rubber lined set-angle service jigs for scratch protection.

**6** — Wrap every product of value in wide plastic wrap to protect finishes from scuffs. (Plastic wrap is available on hand — rolls from packing supply companies.) Use cardboard under the wrap for more rigid screen protection. Double plastic wrap

protruding areas. (Ref: Plastic rolls are available in different colors. Use clear wrap for incoming and red wrap for outgoing products has been mentioned.)

**7** — Since there is so much info at the NPSC, maybe it could someday be assimilated and placed at the website.

**8** — A sample paper notepad was passed around that is given out to retailers. Acts as a retail display floor note pad with servicer name and brands represented. Servicer location and promotional map on rear. Inexpensive cost at about 20 cents per pad. Very consistent promotional product. Constant reminder of the servicer/retailer relationship. Practical substitute for business cards.

**9** — Buy your own truck, purchase full liability and hire a moving company to man it when jobs require. Movers can be trained to make attachments and use proper

*(cont'd. on page 10)*



## Outgoing NESDA President's Remarks — John Eubanks CET

As many before have so trodden ... I now follow in those footsteps ... along a path paved with a sense of awesome appreciation for all of your support and confidence that offered me the opportunity to serve you.

I wish to thank all of our members, officers, directors, committees and industry partners, for all the trust, support, and help they provided. I also want to thank Mack and Carolyn Blakely with our entire NESDA/ISCET staff for their cooperation and willingness to get many tough jobs done, garnered with such a professional can-do attitude that has redefined our association. Together we faced many unforeseen problems over these past two years. Whether from health issues, loss of loved ones or just plain old random difficulties they have only served to temper our will and hone our determination.

I was fortunate to be the first NESDA President to have the advantage of ready counsel from our industry Advisory Board Members. Help from these distinguished partners both present and past enhanced opportunities for success greatly.

All of these are truly critical elements in the progress we have made. Certainly my part if any in these accomplishments are minimal and traceable to some lessons learned early in life. One lesson taught by Mother after she experienced a major trial of life in early December of 1949 was the power of prayer. I saw her pray each and every day afterwards. I can earnestly tell you that I have and continue to pray for this association and guidance each and every day. Another lesson was a simple one taught by the U.S. Navy. Lead, follow or get the heck out of the way. I defer to your opinion as to which portion of this lesson I took the greater advantage.

I evaluate my service to you with a very simple test rather than rely upon any residual appreciation of those dwelling and dining at the bottom of our NESDAnet. This test has only one question that can be answered with a simple "yes" or "no." Am I leaving my NESDA office better than when I entered? Again I will respect your answer to this question as my performance evaluation.

In departing, I offer a testimony for those who may question the power of prayer. Barely one year ago on July 16, 2002 we received news of our daughter

being diagnosed with Hodgkin's Lymphoma. At that time I asked for your prayers that I know so many of you provided. She endured a regiment of chemotherapy treatments and radiation in the time span since we received this news. She is here with us today in remission. Thank you for all your prayers. Can you hear me now?

As I depart to return to the Land of

Chad, I want each of you to know that I carry sincere appreciation for the trust you placed in me and will continue to pray for our association daily. Good night and God bless each of you as graciously as he has blessed me.

*John N. Eubanks CET  
NESDA Immediate Past President*

<http://www.ptscorp.com>

## **Best Ideas Contest**

*(cont'd. from page 8)*

care. Sub-contracting drivers is a great expense savings.

**10** — Set up a Fixed Standard Rate chart like the automobile service companies. Could be a good guideline and provide a reasonable consistent base for time charges. Could be software driven.

**11** — Don't be afraid to hire a blind person for call-taker duty. Use the JAWS accessibility program. Proven to be a very consistent employee. Consult with your "Center for the Blind."

**12** — Use heavy blue rubber garden gloves to carry Vega and large heavy odd-shaped products. The surface tension allows for less slippage and less finger damage. The friction spreads the weight over the hand and away from the fingers.

**13** — Try the same as above with "Wide Receivers" gloves from a sports supply store. The coating does not leave residue.

**14** — Develop a web based system to centralize searching for warranty time and stock eligibility limits for multiple brands without having to log into a secured website. Possibly FieldPower could be the coordinator of this central database. Product updates by subscription.

**15** — Educate lady call-takers to become more technically oriented. Tech Talk need not be deep, but limited to common product connectivity and repeated symptoms. There is an everyday prejudice towards wanting to 'speak to the tech guy' when a caller senses an unfamiliarity of the issue with a lady call taker. Basic tech training can increase confidence for both the caller and call taker.

**16** — Hire past ITT employees. They have very good customer service skills.

**17** — Sell impulse items when a repair is complete. Cleaning products, blank tapes, surge suppressors etc.

**18** — QOS scores can go up 20% by focusing on improving the picture on the repaired TV. Spend about 5 extra minutes with the set owner going over contrast, brightness and other settings under their

room lighting. Often makes the picture much better and some owners show appreciation on the satisfaction survey. Especially beneficial if the primary enjoyer is home at the time of the service call.

**19** — Create a "WOW" effect with the set owner. Go the extra time to clean the screen and mirror to give the client a better picture on each call.

**20** — Stock some candy — suggested was Tootsie Roll Pops — at the front counter — to calm the sometimes rambunctious small children of incoming product owners.

**21** — Use a local automotive body and fender paint shop to match TV cabinet paint. Color matching is tough to obtain without professional help. The various shades of Silver on 32 and 36-inch cabinets are not standard and often can become scuffed by the protective wrapping blanket.

**22** — The "Shoulder Dolly" is now available to help move big screen TV's. Two men lift using their shoulders, and steady the set with their hands. Works well on uneven surfaces and stairs. The company — this year — is presenting at the NPSC Trade Show. Cost approximately \$300.

**23** — Use frequent flyer credit cards for business purchases to accumulate great vacation or inexpensive travel to NPSC next year.

**24** — Using a credit card also gives a better tracking method for bookkeeping systems. Charge parts, accessories and chemicals. All business expenses.

**25** — Create and print out a simple bar graph of all manufacturer rates for quick comparison between each warranty company. This is an easy tool for negotiating and comparison. TPW's commonly require a separate bar graph.

**26** — When adjusting mechanical focus from behind a PTV, use removable tape to secure a white paper card inside the screen. Easier than a mirror. Much easier than running back and forth to make the adjustments.

**27** — Add a "Chat Room" to the NESDAnet Program.

**28** — Buy a "Scorpion" Flashlight from a police supply company. No board cracks or breaks can get past the Xenon Gas Bulb 6,500 candlepower beam.

**29** — Use removable hard drive caddies for data backup — the cost of removable USB external drive bays and large hard drives have dipped below the cost of similar size blank backup data tapes. This is very effective in peer-to-peer networks and stand-alone systems.

**30** — To rebuild a rubber tire pulley, try ply-o-bonding a belt to the old form of the pulley.

**31** — As an employee benefit, arrange for corporate membership to a local health club for employee participation. This acts a company benefit for the employee to join and also normally offers added family participation discounts.

**32** — Encourage thermal photography maps for major circuit boards and set about a system to require temperature photos for modern component-filled board trouble shooting. Thermal cameras are now readily available.

**33** — Call-takers should request the owner supply model/serial/date stamp information when logging in a call. Often the client will be made aware of the trinkets and obstructions of getting to the TV. Sometimes if they have to go look at the TV back, they will clean it up a bit before the technician has to waste much time removing statues and flowers.

**34** — Have the client, if possible, fax their bill of sale to confirm the warranty and actual purchase date before getting out and finding the BOS differs with the verbal date of purchase.

**35** — Begin to work with local hospitals. Because they are always downsizing, the process of sub-contracting technical services has expanded. Similar products, much higher rates of payment. Time sensitive but very lucrative new business for consumer servicers. Investigate biomedical repair training.

*(cont'd. on page 16)*



**<http://www.mcminone.com/magazine>**

(cont'd from page 7)

## **Toshiba Breakfast**



## **Sony Luncheon**



## **Western Night**

Sponsored by NESDA/ISCET, FieldPower • Entertainment sponsored by Tritronics, Inc.

## **Hitachi Breakfast**



(cont'd on page 15)



*National Electronics  
Industry Hall of  
Fame  
Introduces  
Newest Inductees*

After a delay of half a decade, the National Electronics Industry Hall of Fame has returned to actively promoting the accomplishments of a few select individuals by honoring them with this prestigious award. This year's induction of new members took place at the annual NESDA/ISCET Awards Banquet held on Saturday, July 19, 2003 in Reno, Nevada at NPSC 2003. Dorothy Cicchetti EHF, current President and Chairman of the Board, presented each new member with a beautiful plaque honoring their achievement.

Honored with this prestigious award in 2003 were these five individuals, listed together with the category in which they were honored:

**Communications**

*Wallace S. Harrison*

(not pictured, unable to attend)



**Industry Association  
Members**

*Billie S. Abernathy*



**Association  
Executives**

*Clyde W. Nabors*



**Outstanding Individuals  
Who Do Not Clearly Fit  
Another Category**

*Carson E. "Chic" Young PE*



**Scientists, Inventors  
and Engineers**

*Nandalall Sukhdeo,  
Ph. D.*

**<http://www.pacparts.com>**

By Ed Clingman, IS CET Administrator

As NPSC 2003 passed on down the parade route it seemed to those of us who were marching with the paraders that something special and important was happening ... old friends who meet all too seldom allowed their exuberance to invade the otherwise tranquil sense of being with their warmth toward each other and the laughter combined with the dedication to leaving better prepared for tomorrow than they were when they arrived. I wonder how the parade watchers perceived this? Or was it only a product of participation that allowed the feeling at all?

How can IS CET better use the yearly convention to further its programs and goals in education and certification in the electronics industries? If you've got ideas, we need to know about them. Contact [ed@iscet.org](mailto:ed@iscet.org) or call 817/921-9101 ext. 18 to talk about it, or drop a line to: Ed Clingman, IS CET Administrator, at IS CET, 3608 Pershing Ave., Fort Worth, TX 76107-4527

At any rate it's all over, and life goes on. Lots of happenings to look over.

### Online Testing & Learning

The New IS CET Online Testing was demonstrated at the CA conference. Combined with the under-development online learning will prove to be the tool of tomorrow for IS CET. It will open the gate to efficient access for international testing, as the online learning will to international distance learning. Online testing will go into beta testing in September 2003 and in actual operation in October 2003. Learning will be a little later since all the learning material has to be input to system, which takes some time.

In this demonstration the goal of IS CET was presented: *"IS CET will be the dominant and prestigious organization for certification and learning."*

### Student Chapters

The IS CET Board gave the go-ahead for changes to the Student Chapter program benefiting the chapters as well as better supporting the educational aspect of the program. These changes will be put into effect in September 2003. Chapters will

be notified as to what these changes are.

Schools are about to begin their fall semesters. If you are a sponsor, please let us know who the officers of your chapter are, the address of your website if you have one, and any projects you will begin in the chapter. We will disseminate news about chapters to all and attempt to keep you informed. E-mail [patricia@iscet.org](mailto:patricia@iscet.org) or [ed@iscet.org](mailto:ed@iscet.org) with your information.

### FCC Testing

Many people don't know that IS CET gives the FCC examinations as an FCC COLEM. FCC licenses are required for many telecommunications applications, including repair to transmitters and receivers used in the maritime and aircraft industries. An FCC license is a good thing to have if you possess the knowledge required. Contact [patricia@iscet.org](mailto:patricia@iscet.org) for further information, or to arrange for testing.

### Testing Updates

In the Test Manager's report to the IS CET Board, our Test Manager, Mr. Leonard Bowdre, indicated which tests were outdated and shared plans for updating them. When a timetable is arranged details will be shared with you.

The NASTeC program will be in full development and deployed by the year's end. This involves a complete overhaul of the program to meet IS CET standards. This program takes IS CET to the world of Appliance Technician Certification and learning. Lots of exciting things are poised to happen in this program; stay tuned to this "station" for details!

The test we secured from CEA, The Consumer Electronics Association, has been in Committee Review and reported out to the Board during NPSC 2003. This also is a complete program to add to our retinue. It will be several months before definite plans are formulated and presented to the Board ... but assuredly this will be another important tool in IS CET's plans for the future.

### Tech Talk Toshiba's PJTV Digital Convergence Alignment

That's the Tech Talk article for this issue ... but it's too large to reprint in the magazine. If you have interest in this subject, which is currently being presented to Toshiba's ASC techs via their own educational network, just go to [www.iscet.org](http://www.iscet.org) and click on Members Only, then click on PJTV Digital Convergence Alignment, which you can print or download as a PDF file. If you do not have Internet access write us at: IS CET, Dept PJTV, 3608 Pershing Ave., Fort Worth, TX 76107-4527.

Next month's Tech Talk article will be on Toshiba's PJTV, N2PSP Wide Power Supply.

Is there something you would like to see addressed in one of our Tech Talk articles? Let us know and we'll do our best to fill your order. Contact [ed@iscet.org](mailto:ed@iscet.org) or write to the address above.

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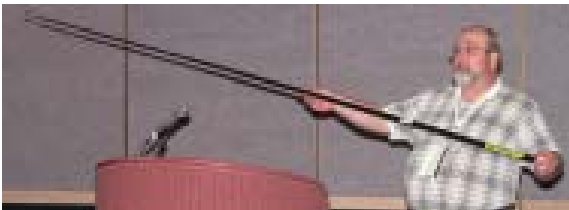
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for details.





(cont'd from page 12)



***A Few of the Many  
Training Sessions ...***

**<http://www.repairworld.com>**



# Expectations

by *Brian Gibson CET*

As I start my journey as the new NESDA president, I ponder what my fellow peers expect from me. We all have expectations and some are very real, while others are rather unrealistic. I would like to take this time to explore and share my views about expectations, and how I feel we can meet or at the very least express them to each other.

The president of any organization is expected to watch over and guide its members to help them achieve greater success in their industry. It is extremely important that he or she learns from the success and failures of those who served before them. Why reinvent the wheel, when you can spend your precious time finding ways to make it roll smoother and faster?

In the last few years many "nails" have been placed on our road causing us to re-evaluate our direction. Learning which roads will lead us to prosperity and happiness is of utmost importance. One of my expectations is to help all of us find the best roads to travel and share those stories with everyone. Knowing which direction is correct is a direct result of many of us traveling down the wrong road. Many of us continue to travel the wrong way because it's the way we have always gone; it's what we know best. The problem for us is that this "road" has become almost impassable. We need to find a new route. I

have my map books out, and hopefully our NESDA team will be able to offer new ways that will lead us to stability and prosperity.

We must also help our industry partners understand not only our expectations but also those of our clients. For quite some time now we have seen many of the popular service categories disappear from our benches, due to economics. Many of us would like to see the manufacturers raise the prices on their equipment when it's sold, providing everyone in this discipline a chance to survive. We all know that we would have a better chance of it snowing in Florida in August than that ever happening. However, there are many new and exciting products on the showroom floor today such as plasma, LCD, LCOS, and many others that are commanding enormous investments by the consumer. These consumers have much higher expectations than those who purchase conventional product at the local box merchant.

When a client spends an enormous amount for a product they expect to receive world-class service. The current pricing structure for warranty service on these products doesn't allow for the knowledge and professionalism needed to provide what these clients expect. Having parts available immediately to achieve the repair

is paramount as well as providing retraining to the entire service community on these new products. I view this as an important fork in the road, do we continue going along as we always have or do we ask for the road to be repaired? I believe the answer is clear, and it is only through the power of membership and respectful discussion that our goals can be met.

I have expectations that we can and will be heard on this and many other issues relating to our industry under my leadership. The ultimate goal is not to beat up on any one entity, it is to help all prosper.

Several new programs were launched during the past year and I stand committed to see that we bring them to fruition. FieldPower has been evolving since its inception, and I believe it is time for us to get our arms around it and make it fly.

Through the help of our friends at Hitachi, we are about to take this program for its first real test drive and find out just what this baby can do! Stay tuned — I believe you will be impressed with the results. Our other great program, TechMate, has been receiving fabulous support from the manufacturing community and now it's time to find fuel to help get our most valuable asset, our own NESDAnet tips, into our database. Many hours of hard work has gone into both of these programs and I am determined to see them fly.

It is going to be an exciting year for me, and with your help and support, I know that we can meet one another's expectations.

*Brian Gibson, CET*  
*NESDA President*

## Best Ideas Contest

(cont'd. from page 10)

**36** — When designing a carrier for large screen and odd shaped heavy products, mount foldable jointed handles, offset to minimize back bending. This was sketched for the assembly, depicting a wood and pipe "stretcher" with up-set handles.

**37** — Use the "Don't Nix It — Fix It" brochure and picture from the NESDA website. The presenter uses this in promotional mailings to education / school clients and prints it on recycled paper with the RECYCLE symbol prominently displayed.

**38** — Sell anti-virus software to computer clients. Become a dealer for "Command Software" and sell downloadable legitimate professional licenses. Good profit, great service.

**This year Best Idea votes went to:**

**1) 12&13      2) 18&19      3) 35**

The above are quick notes taken during the session. Pictures, pass around's and verbal descriptions enhance the information. "Being there" is indispensable to effectively utilize this 60 minute idea tossing session.





## **Reflections on the Path to the Presidency ...**

*by Jim Fellows CET/CSM*

Having just returned from the great NPSC in Reno, I paused to reflect on the path that led me to the ISCET presidency. I thought it might be appropriate to share a little bit of "where I'm coming from." Although I've been in the electronics industry for 40 something years (the exact number is a secret), I didn't become really aware of NESDA until sometime in the 80's. At that time it was referred to as the "NESDA Convention." After attending my first convention, I became immediately addicted, and haven't missed one since. The name was changed a number of years ago to the NPSC (National Professional Service Convention), but I am still sometimes guilty myself of referring to it as the

"NESDA" convention. I'm really doing a disservice to ISCET when I do this, since it truly is a joint convention of ISCET and NESDA. Better recognition and promotion of ISCET throughout the electronics industry is one of my goals for this year.

Although I had been a CET for a number of years, it wasn't until the early 90's that Barbara Rubin (former Director of Member Services) approached me and asked if I would be interested in serving on the Board of Governors. The next year I was elected as one of the "Directors" of the ISCET board. I also became immediately addicted to ISCET. The value of training and certification, and the dedication to the industry of both the board and

the ISCET staff greatly impressed me. I've always freely admitted that there are great technicians that are not CETs, and there are CETs that are not great technicians. I do, however, stand by one statement: Anyone that studies for a CET certification (even if they don't pass the exam) **will** become a better technician. I've been personally involved in CET training for about 6 years now, and have seen many examples of this improvement.

This is going to be an exciting year for ISCET, with many new programs to be announced. I'll talk more about these in future articles. The first challenge is to try to carry on with all of the great things that George Brownyard started in his two terms in office. He's going to be a tough act to follow!!

I look forward to serving the ISCET membership this year, and welcome any questions or suggestions. I can be reached at: [jim.fellows@iscet.org](mailto:jim.fellows@iscet.org)

*Jim Fellows CET/CSM  
ISCET President*

**<http://www.ayssoftware.com>**

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*Welcome!*

## In Memoriam

*The NESDA/ISCET family mourns the loss of these and expresses our deepest sympathy to their families and friends.*

• **Harold Haskovitz**, founder and owner of H&H TV and Electronics in St. Louis Park, Minnesota passed away on May 2, 2003. He was a charter and life member of NESDA. Harold and his wife Shirley were regular attendees of NPSC.

Harold served as a Seabee in World War II, and was one of the few courageous survivors of the first wave of the battle of Iwo Jima, witnessing the famous raising of the flag on Mount Suribachi. He was also the founder and past president of the Minneapolis Electronics Dealers Association.

Memorial contributions may be made to your favorite charity. Cards may be sent to:

Shirley Haskovitz and family  
H & H Electronics  
2625 Louisiana Ave. S  
St. Louis Park, MN 55426

• **Larry Broschart CET**, retired owner of Consolidated Electronics Ltd., Portland, Oregon, died July 27, 2003. He was one of the founders of ISCET, had served as president of the Portland Chapter of OPEA. He was a certified Journeyman, held an FCC First Class license, and received the International Technician of the Year Award in 1981. Graduate of Multnomah Electronics

College (now University of Portland Multnomah School of Engineering), he was a retired Major in the U. S. Air Force and a jet fighter pilot.

• **Gerald Reid**, most recently Vice President, Consumer Services & Facilities for SatisFusion, Inc., died July 17, 2003. In his career, which spanned over 35 years, he served executive positions with Montgomery Ward, GE, Philips, and Zenith. He was a long-time supporter and friend of EIA/CEA, NESDA and the overall industry and will be missed by all. Memorial contributions may be made to The American Lung Association in memory of Gerald Reid, to assist research in finding a cure for pulmonary fibrosis.



By Cary Citro, CEO  
B&D Enterprises

In the semiconductor industry today there are many different manufacturers, logos, case styles, and part numbers. Here is a brief overview of how to identify a part by looking at what's marked on the device.

**Transistors** — Most Japanese or Korean transistors will be marked with an A, B, C, D, J, H or K prefix followed by the part number. Japanese numbers are prefixed with a 2S, or a 3S (even though this may or may not be marked on the part, depending on the case style) and Korean parts with a KS, or KT (for such makers as KEC or Samsung). Just because a part says C2316 doesn't mean it is a 2SC2316 made by Sanken. Samsung also makes a KSC2316, which is a different device altogether. Check the case style and the logo, if any, on the device.

Did you know? — All Japanese semiconductor part numbers are registered to a specific manufacturer by the EIAJ? (Electronic Industry Association of Japan) For example Toshiba makes the 2SD1555, and therefore that part number belongs to Toshiba only. The only time you will see D1555 on a part not made by Toshiba is when a company not registered with the EIAJ produces them, such as some Chinese semiconductor companies.

Did you know? — The Japanese transistor numbering system is organized so that you can tell what type of part it is just by the number? For example all 2SA's and 2SB's are PNP types, all 2SC's and 2SD's are NPN types, and all 2SJ, 2SK's and 3SK's are FET types with the J's being P channel, and the K's being N channel.

**Part Number Prefixes** — Both the Japanese and American manufacturers use families of prefixes that can easily identify what the manufacturer of the device is. See the chart at bottom right for some examples.

There are many more families of components made by many other manufacturers. Also these prefixes are a good general rule of thumb, not an exact science. Since so many manufacturers of semiconductors exist there will always be exceptions to this guideline, but for 98% or so these guide-

lines will be correct. Again, check your case style, know your spec, and look for logos on the device.

**OEM? Or not OEM?** — I hear this statement made many times by service people that think that buying a semiconductor from the consumer goods division parts source, or one of their distributors, is the only way to ensure that they get an "OEM original device." Consumer product groups of certain Japanese companies have completely different divisions that manufacture the semiconductors. They buy their parts from the semiconductor divisions, or their distributors. The division that makes the TV doesn't make the semiconductor. So just because you don't buy the device from a consumer product parts depot, or one of their distributors, doesn't mean you're not getting an original device. The correct semiconductor manufacturer makes it and it meets published specs, or it doesn't. Don't get me wrong, some consumer product divisions do have semiconductors specially made, tested and sorted, programmed, or branded with internal house or schematic numbers. Sometimes you must deal with the consumer divisions to get a custom part, there's no way around it. But, buying a component that is a stan-

dard device can be done anywhere as long as you get a device that is not re-branded, pulled, or a cheap imitation. STR-S6301 is a Sanken device, period. Buying from a consumer product division verses a non-consumer product source is irrelevant. You either get a Sanken IC, or you do not. To say that one source is "OEM" when another source is "generic" is redundant. The part meets Sanken specification, or it does not. In a case like the STR-S6301 there are very little chances of getting a fake device because the IC is difficult to produce, unlike a H.O.T., which can be readily faked.

The same can be said of the Sanyo STK series. These also would be very difficult to fake. The chart on the following page shows the basic supply chain of semiconductors.

It is up to you as to where you source your semiconductors, but always be sure to use a source that will guarantee their parts to be new and originally manufactured by the correct semiconductor makers. I hope this information is of assistance to you and if you have further semiconductor questions, please don't hesitate to call our engineering department at 814/757-8300.

### Examples of Part Number Prefixes

CTB, CTG, CTM, and CTU prefixes = Sanken diodes

CXA, CXB, and CXK prefixes = Sony Integrated circuits

DBA, DBB, DCA, DFB, DFC, and DFD prefixes = Sanyo diodes

DTA, DTB, and DTC prefixes = Rohm transistors

ERB, ERC, ERD, ESAC, ESJA, and ESJC prefixes = Fuji diodes

FMB, FMG, FML, and FMU prefixes = Sanken diodes

FT prefixes = Fujitsu Integrated circuits

HA, HB, HC, HD, HG, HM and HS prefixes = Hitachi Integrated circuits

LA, LB, LC, and LE prefixes = Sanyo Integrated circuits

SI, STR, STRD, STRM, STRS and STRZ prefixes = Sanken Integrated circuits

SLA, SMA, and STA prefixes = Sanken transistor arrays

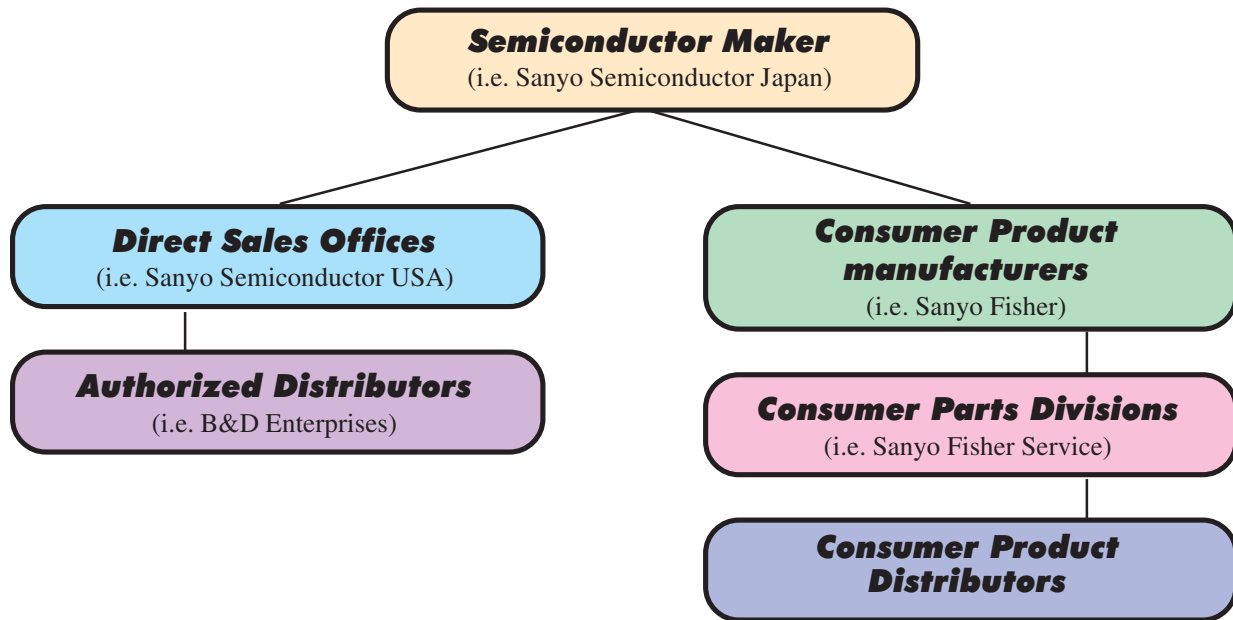
STK prefixes = Sanyo thick film IC's

TA, TB, TC, and TD prefixes = Toshiba Integrated circuits

UPA, UPB, UPC, and UPD prefixes = NEC Integrated circuits

VPA, VPH, VPM and VPS prefixes = Sanyo video packs

# <<< Semiconductor Supply Chain >>>



## The NESDA Industry Relations Committee — At your service!

by Wayne Markman  
Industry Relations Chairman

NESDA has a solid relationship with manufacturers, service contract providers, claims processors, parts distributors, dealers, and basically every member of our industry. Our industry partners are willing and eager to listen to us.

The Industry Relations Committee has a history of resolving issues that may be difficult for an individual company to resolve. The committee has the ability to find and contact the appropriate parties to discuss both sides of many disputes. We have had tremendous success in the past resulting in servicers being paid thousands of dollars for claims that members couldn't get resolved.

The committee also has the ability to present issues (other than just claims) to our industry partners in an effort to improve virtually every aspect of how our industry does business. The committee is particularly interested in ideas regarding standardizing many of the tasks that we currently must perform differently for each manufacturer or contract provider. This has been an ongoing challenge for many years (in other words, we have struggled and have achieved small gains at best) but we are determined to continue the effort to improve our plight.

*How can NESDA members and NESDAnet get involved?*

1. REQUEST ASSISTANCE FROM THE COMMITTEE. This can be done by e-mail, fax or letter. Requests MUST include documentation of the problem, such as copies of unpaid claims and what steps have already been taken to resolve the issue, include dates whenever possible. Parts distributor issues must include copies of pertinent documents such as invoices, tracking numbers etc. E-mailed requests MUST have a heading pertinent to the issue or simply titled "IR Request for Assistance."

2. Industry issues and ideas should be discussed openly on NESDAnet (obviously) but don't assume that the committee will pick up the thread and take any action. (so much e-mail and so little time) Simply ask and the committee will get involved. If we don't respond, e-mail again or call either the committee chairman or NESDA President Brian Gibson. Try to be realistic, but not restrained (we all would love manufacturers to raise the price of VCR's back to \$800, but get real).

We understand that frustration can result in the need to vent immediately and NESDAnet is the perfect way to vent, however if you think that the Industry Relations Committee can help, feel free to contact us. We have set up an e-mail address

for easy access to the committee, [IndustryRelations@att.net](mailto:IndustryRelations@att.net).

Try to remember that committee members are volunteers who must run their businesses daily as well as serve the NESDA board and membership. Let's work together to make our industry better.

Wayne Markman  
Industry Relations Chairman  
1935 State Street  
Hamden, CT 06517  
203-776-9123, 203-785-1562fax

*Editor's Note:* NESDA members who want to take advantage of the service provided by the Industry Relations Committee, can get a Request for Assistance form inside NESDA Members Only at [www.nesda.com/members](http://www.nesda.com/members).

*Wedding Bells* — Congratulations and Best Wishes to NESDA/ISCET Associate Editor **Stephanie Peistrup**, who married **Matthew Miller** on August 2, 2003.



# Welcome New Associates & CET's

## Welcome New CET's: Passed Journeyman Exam from 5/8/03 to 8/4/03

### William Patterson, CA

Gerald G. Randall ..... Attalla, Al

### Linda Altman, CA

Jean-Claude Peck ..... Bloomington, Ca

### George Weiss, CA

Glen L. Wolfe ..... Carpentersville, Il

### Michael DeBourbon, CA

J. Douglas Ferguson ..... Indianapolis, In

### ISCET

Patrick J. Horgan ..... Claremont, Ca  
Donald N. Humphries ..... San Diego, Ca  
Mikael A. Schiold ..... Lone, Ca  
Sid R. Wilson ..... Springfield, Mo

### Gary P. Moore, CA

David M. Franklin ..... Paducah, Ky

### Roger W. Fullwood, CA

Arthur L. Chapman Jr. .... Fayetteville, Ar  
Thomas D. Fraczak ..... Edmonds, Wa  
Kesava Murthy ..... Belleville, Mi

### Bernardo-Gomez Juarez, CA

Mario Garcia-Irigoyen ..... Caliacan, Sinaloa, Mex  
Heriberto Garcia-Vargas ..... D.F., D.F., Mex  
Guillermo Gonzalez-Flores .....  
Fresnillo Ecatelmas, Mex  
Carlos Hernandez-Flores .....  
Xtazcoquitlan Ver C.P., Mex  
Hector Ibarra-Martinez ..... Mexico, Mex  
Jose A. Moreno-Reyes ..... Durango, Mex  
Ignacio Salas-Lopez ..... Juarez, Chihuahua, Mex  
Cesar L. Saucedo-Reyes ..... Saltillo, Coah, Mex  
David Teruel-Martinez ..... Chihuahua, Mex  
Fernando M. Zuniga-Romero ..... D.F. Mex

### Linda L. Funk

Lorenzo J. Paul ..... York, Pa

### Norman Ahlhelm, CA

Dustin L. Laferney ..... Killeen, Tx

### lutisone Tiliaia, CA

Adrian Aguirre ..... El Paso, Tx  
Jose Cuellar ..... El Paso, Tx  
Christopher M. Myrick ..... El Paso, Tx  
Luis A. Robles ..... El Paso, Tx  
Arturo Torres, Jr. .... El Paso, Tx  
Frank Valverde ..... El Paso, Tx

### Edward Reilly Jr., CET/CA

Andrew K. Raveling ..... North Las Vegas, Nv

## Welcome New Associates: Passed Associate Exam from 5/8/03 to 8/4/03

### Lazergrade

David M. Brooks ..... Jacksonville, Nc  
Trevor O. Declercq ..... Brooklyn, Ny  
Yong Rang Kim ..... Thornton, Co  
Randall E. McKinney ..... Goldendale, Wa  
Royce A. Mydler ..... Du Quoin, Il  
Patrick K. Offaherty ..... San Francisco, Ca  
Andrew Schultz ..... Cinebar, Wa  
Lukas J. Wolak ..... Denver, Co

### Tony C. Jetton, CET/CA

Gregory D. Hudson ..... Hayden, Al

### Sandi Merris, CA

Harry Slomowitz ..... Walnut Creek, Ca

### Raymond Miles, CET/CA

Camile Gilberto Acedo ..... San Marcos, Ca  
Camile Jason M. Holmes ..... San Mateo, Ca  
Camile Robert Powick ..... Hesperia, Ca  
Camile Scott J. Proskow ..... Pismo Beach, Ca

### Jim White CET/CA

Robert J. Redmond ..... Inglewood, Ca

### Alan C. Besore, CET/CA

Claudil Alezi ..... Delray Beach, Fl  
Dwain R. Beckford ..... Lake Worth, Fl

### John N. Eubanks, CET/CA

Ala Adham ..... Jacksonville, Fl  
Matthew J. Murdaugh ..... Jacksonville, Fl  
Joshua J. Murdock ..... Jacksonville, Fl  
William M. White ..... Livingston, Tn  
Stewart A. Wilson ..... Jacksonville, Fl

### ISCET

Robert H. Chrisman ..... Lone, Ca  
Luu Huu Dung ..... Antelope, Ca  
Ronald G. Hanes, Jr. .... Lone, Ca  
Mark C. Hungerford ..... Portland, Or

### Roger D. Smith, CA

Alexander G. Lee ..... Bushnell, Fl

### J. J. Villademosos CET/CA/Ph.D.

Chad W. Debusk ..... Key West, Fl  
Ryan C. Denicourt ..... Key West, Fl  
Robert L. Doering ..... Clearwater, Fl  
Paul J. Ferlita ..... Hudson, Fl  
Christopher P. Flynn ..... Ocala, Fl  
Nathan A. Glenn ..... Tampa, Fl  
Norman G. Gooch ..... Key West, Fl  
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Steven R. Holland ..... Zephyrhills, Fl  
Mark A. Hutchins ..... Tarpon Springs, Fl  
Garrett P. Kopp ..... Green Cove Springs, Fl  
Justin T. Lawrence ..... Key West, Fl  
Luis Llano ..... Brandon, Fl; 87  
Robert S. Mcgall ..... Brandon, Fl  
Brian K. Morgan ..... Largo, Fl  
Luis Ojeda, Jr. .... Tampa, Fl  
Raymond A. Soloman ..... Tampa, Fl  
Sabourou T. Tittle ..... Key West, Fl

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Mark D. Jackson ..... Moscow, Id

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Tracey A. Mcsweeney ..... Mishawaka, In

### Michael DeBourbon, CA

Scott A. Hudson ..... Indianapolis, In

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Alva W. Buck ..... Evansville, In

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Maurice D. May ..... Bedford, Ky

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Harold A. Padgett ..... Lyons, In  
Jeffrey E. Wilson ..... Rosedale, In

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Dean A. Hall ..... Vincennes, In  
Donald S. Lips ..... Vincennes, In  
Jacob Ty Reinhart ..... Fort Branch, In  
Paul A. Vonderwell ..... Vincennes, In

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Warren A. Keiss ..... Haysville, Ks  
Eric E. Melton ..... Edna, Ks

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 Andres A. Garcia-Chavarria ..... Iztapalapa, D.F., Mex  
 Enrique A. Gonzalez-Lopez ..... Ecatepec, Mex  
 Domingo Hernandez Castillo ..... Nezahualcoyotl, Mex  
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 Danny D. Gates ..... Grants Pass, Or  
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 Shane D. McDonald ..... Medford, Or

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 James P. Mazza ..... Wernersville, Pa  
 Jason E. Miller ..... Nuremberg, Pa; 88;  
 Timothy S. Mokris ..... Allentown, Pa  
 Nathan S. Personius ..... Rock Stream, Ny  
 Aaron M. Reinert ..... Breinigsville, Pa  
 Jonathan D. Rizzo ..... Pittston, Pa  
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 Andrzej R. Golinski ..... Tymbark, Makopolska, Poland  
 Jerzy M. Golinski ..... Nowy Sacz, Poland  
 Wanda H. Kowalczyk ..... Zyrardow, Poland  
 Andrzej J. Kubiak ..... Krakow, Poland  
 Marek P. Pogoda ..... Lodz, Poland  
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 Joshua J. Birdsall ..... Hot Springs, Sd  
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 Jeffrey W. Fernau ..... Rapid City, Sd  
 Jason C. Harry ..... Midland, Sd  
 Kyle A. Irby ..... Gillette, Wv  
 Aaron T. Johnson ..... Mitchell, Sd

Joshua D. Kurtenbach ..... Mitchell, Sd  
 Christopher R. Lamont ..... Ellendale, Nd  
 Richard A. Mcdonald ..... Huron, Sd  
 Travis A. Schmitz ..... Naper, Ne  
 Adam P. Vanoverschelde ..... Mitchell, Sd  
 Jacob R. Williams ..... Spearfish, Sd

**Vickie Jackson, CA**

James L. Hixon ..... Ringgold, Ga  
 Zachary D. Waller ..... Ooltewah, Tn

**Norman Ahlhelm, CA**

Roberto Castorena ..... Killeen, Tx  
 Gregory L. Ducote ..... Killeen, Tx  
 Rodney A. Lawson ..... Killeen, Tx  
 Steve Q Morris ..... Copperas Cove, Tx

**Mack Blakely**

Gary H. Hitchcox ..... Denton, Tx

**William Burrow**

Adam L. Lowther ..... Rising Star, Tx  
 Donnie W. Miekos ..... Sweetwater, Tx  
 Jossue U. Saucedo ..... Sweetwater, Tx

**Robert G. Gonzalez**

Harvinder S. Binning ..... Edinburg, Tx  
 Oscar Flores ..... La Feria, Tx  
 Eddiberto Guajardo ..... Mission, Tx  
 Tito E. Medina ..... McAllen, Tx  
 Jesus P Sanchez ..... Mcallen, Tx  
 Rene Solis ..... Rio Grande City, Tx  
 Juan A. Zuniga ..... Edinburg, Tx

**James Harris, CET/CA**

Paul E. Larue ..... Kempner, Tx  
 Alphonso Powell ..... Harker Heights, Tx  
 Jon M. Richardson ..... Nolanville, Tx  
 Abdulghani Ali Tabbara ..... Killeen, Tx

**Iutisone Tiliaia, CA**

Armondo Gonzalez ..... El Paso, Tx  
 William P. Grady ..... El Paso, Tx  
 David A. Holguin ..... El Paso, Tx  
 Michael A. Jones ..... El Paso, Tx  
 Christina Mosqueda ..... El Paso, Tx  
 Pedro A. Parra ..... El Paso, Tx  
 Juan J. Perez ..... El Paso, Tx  
 Daniel S. Salinas ..... Sunland Park, Nm  
 Manuel Q. Soto ..... San Elizario, Tx  
 Joseph A. Wendel ..... El Paso, Tx  
 Martin Zamarripa ..... El Paso, Tx

**Barry L. Fichter, CA**

Marc J. Dion ..... Waldorf, Md  
 Steven M. Hutchings ..... Alexandria, Va

**Jerry Hartley, CET/CA**

Jacob E. Thomas ..... Coleman Falls, Va

**Edward Reilly Jr., CET/CA**

Edward S. Deguzman ..... Las Vegas, Nv  
 Kenneth R. Layman ..... Las Vegas, Nv  
 Eric J. Thompson ..... Henderson, Nv

**James C. Shambow, CET/CA**

Jay E. Simon ..... Portland, Or  
 Dylan White ..... Portland, Or  
 Mark S. Zuniga ..... Portland, Or

**David Skeen, CET/CA**

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 Eric N. Deckard ..... Olympia, Wa  
 Dan J. Ehrenheim ..... Tacoma, Wa  
 Austin L. Elliff ..... Eatonville, Wa  
 Donald E. Erwin ..... Tacoma, Wa  
 Gerald C. Gordon ..... Port Orchard, Wa  
 David W. Lawson ..... Tacoma, Wa  
 Erik T. Risinger ..... Gig Harbor, Wa  
 Garry D. Streeter ..... Tacoma, Wa

**Jeff Paschke, CET/CA**

Timothy A. Foth ..... Oshkosh, Wi

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