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## Dave's World



The move to our new building was delayed from November to December (I'm assuming 2008) so I won't bore you with the details this month.

STI Electronics is now a full line distributor of Industrial Supplies in addition to Electronic Supplies. We have added four new people including Ryan Kirk who is managing the Industrial side of the department, Cliff Powell covering Central Alabama, Lee Pulliam covering Central Mississippi, and Jim MacAniff covering Southern Alabama and Southern Mississippi. Brandon Champion will continue to cover Northern Alabama, Northern Mississippi and Tennessee and Jason Speelman will continue to cover Florida for Electronics Distribution with the addition of Industrial Distribution. I'm excited to diversify our product offering as well as adding four new sales professionals to our staff. Please check page 9 of this newsletter for our current Industrial Line Card. Nothing changes on the Electronics Distribution side with Sissie Eckstein as Sales Manager and Brandon and Jason still covering their same accounts. We will transition the new guys into electronics accounts in their territories as they gain some product knowledge. Kelli, Dottie, and Julia will continue to support you from our Madison office.

Looking back, 2008 was an interesting year at STI dominated by our continued growth in capabilities, facilities, people, knowledge and sales. My year has been fun also. A quick review would go like this: ...moving dirt...construction starts...Pan Pac conference on Kauai...building cost overrun... Randy's 20th Anniversary at STI...Training Services sales record in March...James' 10th Anniversary at STI...Shanghai trip cancelled at 3:00am when scheduled to leave at 6:00am...building cost overrun...Electronic Distribution sales record in May...Overall STI sales record in May... golf at St. Andrews...hairy cows...building cost overrun... In line at Space Mountain in Anaheim with daughter when earthquake hits...building cost overrun...SMTA President term ends...SMTA in Orlando during Hurricane...Manufacturing Lab sales record in August...sign goes up in front of new building... STI makes the INC 5000 list...add Industrial Distribution line...football season not off to a good start...buy new SMT line...our bank lost \$23.9 billion in a quarter ...moving in November...building cost overrun... Sissie's 10th Anniversary at STI...bad football season...moving in December.

I'm writing this newsletter article just before Thanksgiving and looking back on 2008, there are so many things to be thankful for. I'm very thankful to all the employees at STI who never cease to amaze me with their willingness to do what needs to be done to support customers, suppliers, and each other.

I'm thankful to live in a country where we have many different opinions but in the end, we vote, the majority wins and we transition peacefully. I believe there were 25 different opportunities to vote on my local ballot this year and I voted for the winner in exactly 2 of them but those other 23 now represent me and I will support them however I can.

I'm thankful God put me at this place at this time with the family and friends that surround me.

And I'm especially thankful for you because your support has caused STI's continued growth as we head into our 27th year and I can never thank you enough for your support and from keeping me from having to get a real job.

Thank you again for a great 2008 and I wish you a Merry Christmas, a Happy Holiday Season, and a fantastic 2009. Please let me know how STI can help you in the future. As always, I look forward to hearing from you.

### David E. Raby

President/CEO  
draby@stielectronicsinc.com

P.S. As I write this article, the plans are to have the Open House for STI's new facility January 29, 2008. More details will follow soon so mark your calendars and hold the date.

# Training Services 2009: *Schedule*

## Madison Alabama



### January

- January 06-09 IPC-A-610 CIT Certification
- January 12-16 IPC J-STD-001 CIT Certification
- January 26-27 IPC Rework/Repair and Modification CIT Recertification
- January 28-29 IPC/WHMA-A-620 CIT Recertification

### February

- February 02-03 IPC-A-610 CIT Recertification
- February 04-05 IPC J-STD-001 CIT Recertification
- February 06 J-STD-001DS Update, Space Application Addendum to J-STD-001D
- February 09-13 IPC Rework/Repair and Modification CIT Certification
- February 17-20 IPC-A-610 CIT Certification (**Tampa, FL**)
- February 23-26 IPC-A-610 CIT Certification (**Orlando, FL**)



Ann Duncan  
Training Coordinator

To register for a course or for additional information go to [www.stielectronicsinc.com](http://www.stielectronicsinc.com) or e-mail us at [training@stielectronicsinc.com](mailto:training@stielectronicsinc.com).



## Training Services



Dan Foster  
Director of Training  
Services

Well another year has flown by in Training Services and it is ending as another record year. We have added the "B" revision of 7711/7721 to the schedule this year and also are conducting some BGA classes. By the time you read this STI will be in its new facility across the street (or in the process of moving). It will be great to have everyone under one roof again.

We currently have two classrooms but are expanding to three in our new facility. The classrooms are also larger than our existing ones. We will have two classrooms set up for hands on training and the third will be set up for lecture only.

We are continuing to increase our training staff as well. We currently have Frank, Tom, Michelle, and I am sure most of you have spoken with Ann. We are currently looking for one to two more instructors so if you know of someone let me know.

On a personal note, my oldest daughter will be finishing her junior year in college and the youngest is getting here driving license. In case you are wondering, I have not let her drive my truck yet. My wife continues to be the director of the weekday preschool ministry at our church.

Let me take a moment to thank each of you for depending on STI for your training needs. We appreciate your business and look forward to seeing you again in 2009. Merry Christmas, Happy New Year and may God bless you all.



## Engineering Services



**Mark McMeen**  
**Vice President**

STI's Engineering Services group has flourished in 2008 with a number of firsts. Our revenue in the manufacturing lab has doubled and set new annual sales record with a number of new manufacturing lab customers. Also the analytical lab sales is on pace to break 2007 numbers and set a new record for annual sales. And last but not least the Micro-electronics Lab has secured 4

development contracts in 2008 utilizing the IC/DT technology patented by STI Electronics. All in all a good strong year in view of all the financial uncertainty experienced in the second half of 2008 and a bright future as we move toward the grand opening of our new facility sometime in early 2009.

There has been lots of uncertainty in the markets and a general slowdown globally but we continue to be optimistic as we continue to expand our capabilities in manufacturing of electronic assemblies as well as microelectronic assemblies. STI is positioning itself for continued growth by offering greater capacity and monthly volume output as well as offering better engineering solutions for our customer base. Growth is about expanding ones capability and quality and STI is making the financial commitments necessary to grow our customer base. We look forward to our open house and the opportunity to show off our new equipment lines and new facilities. We appreciate the support over the years and we look forward to meeting your expectations of the future.

Thanks again for a great 2008 and we look forward to serving your needs in 2009. Please feel free to call and come by and see how our staff and departments can better serve your needs. Each of our Department Managers and their staff members are here to serve you because we believe in the slogan: Service and Quality is long remembered after price is forgotten. We want to be remembered for servicing and providing the right product everytime. SEE YOU IN 2009 AND THANKS FOR SUPPORTING STI ELECTRONICS.



**Mel Scott**  
**Mfg. Lab Manager**

It's that time of year again. Time to reflect on progress and improvements that have been made and on areas where problems were encountered. Thank goodness the progress and improvement areas far out weigh the problem areas. All in all it's been a very good year for the Manufacturing Lab. Overall work increased significantly, to the point where our sales figures in the lab will have nearly

doubled last year's numbers. And, last year's sales figures were the best the lab has ever seen. In order to accomplish this we must be doing something right and as soon as I find out what it is I'll let you know. Actually, it has to do with building a quality product and providing our customers with the support they need, on time and within budget.

We passed our first ISO 9001-2000 surveillance audit in August. It seems like we were just certified a short time ago. It doesn't seem like it's been a year already. Continuous improvement of our Quality Management System is as the name implies 'continuous' and never ending. If you aren't improving you are stagnating. And if you are stagnating you are slowly dying in this industry. So, continuous improvement is a good thing and worth doing.

One area where time doesn't seem to be moving too quickly is in the completion of STI's new building. The building of the facility actually progressed rather quickly until the exterior was completed. Now time seems to be dragging on. As you read this, new electronics manufacturing equipment should be arriving and being installed. I believe the plan is to install the new equipment and get it up and running prior to shutting down our SMT line in our existing facility. Then we will move our manufacturing from the old facility to the new. This should all be accomplished by the end of December. We are excited and anticipate good things happening in our new building. It will allow us to continue to grow our business. I can't tell you that we will double our sales again next year but we do expect to increase sales by double digit percentages.

Well, that's about it for now from the Manufacturing Lab. Thanks for your business this past year! We wish you and yours the very best during this holiday season and look forward to working with you again next year.



## Engineering Services



**Casey Cooper**  
**Microelectronics**  
**Lab Manager**

The past year has been an exciting year for the Microelectronics Lab. Richard Garnick joined the lab this year as a Microelectronics Applications Engineer. Richard has over 30 years experience in process manufacturing engineering of both commercial and military electronics. At STI, he is responsible for the development, maintenance, and operation of process equipment and software utilized in the development and manufacturing of microelectronic assemblies.

We are very excited to have him join the engineering team.

With the success of the Standard Missile-2 flight test in October 2007, the lab gained additional contracts in 2008 with a primary focus in applying STI's patented packaging technology, Imbedded Component/Die Technology (IC/DT®), to missile defense systems. The Microelectronics Lab continues to expand into new market sectors and develop leading-edge packaging technologies as the electronics industry's requirements increase, driven by more complex electronics operating in harsh environments within small form factor systems. To inquire about how IC/DT® can address your size, weight, power, and reliability needs for your electronics assembly, please contact the Microelectronics Lab Manager Casey Cooper.

In addition to the other labs in the Engineering Department, the Microelectronics Lab is also gaining a significant increase in manufacturing, assembly, and test area. STI's new facility will include an expanded state-of-the-art cleanroom to perform all microelectronics prototype and development in addition to final assembly and test. This state-of-the-art laboratory features a precision HVAC system for maintaining tight control over temperature, humidity, and particle contamination control. The expanded cleanroom will feature over 1000 square feet of Class 1,000 (ISO Class 6) manufacturing and assembly lab area for die attach, component placement, package seal, and test. A gowning room and prep lab will provide another 700 square feet of Class 10,000 (ISO Class 7) work space for surface preparation and materials qualification. An Electronics Test Lab was added to the STI's new facility for design and analysis services as well as qualification testing services such as signal analysis, surface insulation resistance (SIR) testing, and strain gage testing. The Microelectronics Lab is a quality provider of design, assembly, and test services with quality control ensured through ISO 9001:2000 compliance and certification. We look forward to working with you in 2009!



**Marietta Lemieux**  
**Analytical Lab Manager**

As far as our equipment capabilities are concerned, this year we have added a RADWAG MXA-5 microbalance, with a max capacity/readability of 5g/1ug. Thus, if you are in the need of some accurate weighing, please give us a call. Our wish list though, is still grand and hopefully we will be adding some additional equipment in the near future. In the new building we will definitely have the room available to expand.

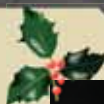
In April of this year Kristi Freeman decided to leave the Analytical Lab to pursue other career opportunities. We wish her well in all her endeavors. Both Aaron and myself however, could not be more excited about the future of the Analytical Lab within STI. The layout of the Analytical lab area inside the new building is both functional and impressive in size and we cannot wait to start moving in and get back to work for you.

We would like to take the opportunity to thank you very much for your business, and hope that you will come see us in our new home where we hope to continue to serve you with all your failure and material analysis needs in 2009.





## Electronic Sales & Distribution



**Sissie Eckstein**  
Electronic  
Sales Manager

The Electronic Sales and Distribution Department of STI has had another exciting year. At the beginning of the year we added a new line of torque drivers by Atlas Copco. It has been a very good addition to our Line Card. We also added a new addition to our customer service staff, Dottie Grantham.

If you have not seen it yet we finished our catalog earlier this year. It was a long process but the hard work has paid off. We are very proud of the catalog and it has been a very beneficial tool for our customers. As you can see we are not slowing down for a minute. Our goal is to be a Total Solutions Partner for our Customers. We want to make it as easy as we can for you to call us, order product and know that you will get fast and friendly service.

As the New Year is quickly approaching we are gearing up for new and exciting plans for next year. We would like to say thank you to all our loyal customers and friends for continuing to help us grow.

### **Kester Wire Solder**



Kester the World Wide Leader in solder wire manufacturing is pleased to announce wire solder for today's applications including flux cored solders for use on both leaded and lead-free applications.

First for difficult to solder metals that need fully activated rosin flux, Kester 48 rosin core is the product. For No Clean applications try Kester 275 flux cored wire with superior activity. If you are using a water wash system Kester 331 water soluble is the product of choice with the ability to solder the most difficult metals.

All of these products are available in either standard 63/37 alloy or lead-free alloys K100LD or SAC 305. Simply contact STI for samples or help with any of your soldering needs at: [sales@stielectronicsinc.com](mailto:sales@stielectronicsinc.com) or (800) 858-0604.



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please go to [www.stielectronicsinc.com](http://www.stielectronicsinc.com).**

**Christmas 2008**



During the Holiday Season, More than ever, our thoughts turn gratefully to those who have made our progress possible.

In this spirit we say, simply but sincerely,

Thank You and Best Wishes for a Merry Christmas,  
a Restful Holiday Season, and a Happy, Healthy, and Prosperous New Year.





# Industrial Sales & Distribution



**Ryan Kirk**  
**Industrial Sales**  
**Manager**

I am excited to be part of STI's new Industrial Line as Industrial Sales Manager. The new Industrial Line can provide wider product offerings to STI's current customers and also expand into industrial accounts providing quality solutions for our customers application needs. Our main premier line of tooling is Atlas Copco Tools. For a full listing of Industrial Products and Solutions available to you, please see page 9 of this newsletter.

We have added three new outside sales representatives to our current staff to better serve you. We are committed to excellent customer service and as a result have hired three outside sales representatives to better serve you. Please give us a call at (800) 858-0604 or email me at rkirk@stielelectronicsinc.com to discuss any application issues we can help you with.

Let me take a moment to introduce our outside sales staff:



Brandon Champion  
Northern Alabama,  
Northern Mississippi  
& Tennessee



Jason Speelman  
Florida



Lee Pulliam  
Central Mississippi



Jim MacAniff  
Southern Alabama &  
Southern Mississippi



Cliff Powell  
Central Alabama

**BCP- a revolution in battery tools** Using power screwdrivers? It's time to set yourself free! For a truly uplifting experience try our new BCP range of batter clutch pistol-grip screwdrivers. The BCP represents freedom - true freedom - from cables or hoses! It's also fast, powerful and offers superior ergonomics. You won't be disappointed. BCP tools mean higher productivity for your quality critical assembly operations independent of the industry.

**Your Ideal Working Partner** BCP screwdrivers are perfect for low-torque, non-critical joints in a broad range of applications. Final assembly of cars, offroad vehicles, buses, trucks, aircraft, motorcycles, engines, and white goods are just some examples of applications which can benefit from the performance and accessibility provided by the ergonomic BCP screwdrivers.

**A pleasure to work with** When you first pick up an Atlas Copco BCP screwdriver, you will like the feel of it in your hand. This slim, well-balanced design and ergonomic pistol grip make it a pleasure to hold. Its compact size and Lithium-Ion batteries make it the lightest battery screwdriver on the market. There's plenty of power as well, with torque levels ranging from 1.8 up to 12Nm. All these ergonomic features make the BCP screwdriver the kind of tool you can work with all day long.



## Industrial Offerings

- Assembly Tooling
- Tool Accessories
- Hand Tools
- Material Handling
- Hydraulic Tooling
- Safety Products
- Misc. Support Products

## Contact Information

**Ryan Kirk**  
(256) 278-8957 Mobile  
(888) 650-3006 Fax





# Industrial Line Card



## Industrial Division

### Assembly Tooling

Atlas Copco  
ASG  
Makita  
Dewalt  
Milwaukee  
Simonds  
CS Unitec  
Chicago Pneumatic  
AirCat  
Ingersoll Rand  
Kolver USA

### Hand Tools

Channel Lock  
Gear Wrench  
SK  
Knipex  
SOG

### Tool Accessories

DTI Screwfeeders  
Assembly Automation  
Sturtevant Richmond  
Lubbering  
D&D Production  
APEX  
Grey Pneumatic  
Sunex  
Master Pneumatic  
Kromer

### Hydraulic Tooling

Enerpac  
SPX

### Material Handling

Worksmart Systems  
Ashland Conveyor  
American Lifts  
Eckart  
Herkules

### Safety

Mechanix Wear  
Microflex  
Ringers Gloves  
Uvex Glasses  
Stream Light  
SAS Safety  
Encon Safety Products

### Misc.

General  
Master Cool - Adobe Air  
Pinpoint  
AutoCrib  
Jet Equipment  
Wilton  
Shop Vac  
Fluke  
Hubbell  
Wampfler  
Lista

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# Operations & Training Resources

**By: Diana Bradford, Vice President**



2008 has certainly gone by in a blur. I can remember my parents telling me that the older you get the faster time goes by. That was one of those parental words of wisdom that has certainly proved to be true.

We have definitely been busy around STI during 2008. The new facility has been under construction for a year now and we are only days from moving in. Jim has done an excellent job (as usual) working with the general contractor and making sure we have a building we will all be proud to work in.

I wanted to take a moment to tell you about some things coming in 2009 to STI to better serve our customers. Since I am Vice President of Operations and Training Resources, I need to break it down by dept. or responsibility so please bear with me.

## **Operations**

As Sissie mentioned in her article, the new, improved distribution catalog is fresh off the press and in the hands of our customers. Now we are working on a new, improved website that will be up and running by the end of January. The catalog will be available on our new website as a searchable PDF by product type or group. Following quickly on the heels of the new website will be an STI on-line store. Electronic as well as industrial distribution items will be available for purchase initially with additional products added daily.

The new website will also have additional features for the engineering services division. As the Analytical Lab finishes customers' analysis, the reports will be uploaded to the website. The customer will be able to access the report through a secure web portal with a unique username and password. Customers will be able to access their current report as well as any archived reports.

## **Training Resources**

### **Training Materials**

As many of you know, Training Materials is one of the original departments within STI. STI began in 1982 with Training Materials and Consulting. Training Materials has had a great 2008 and I want to thank Mel Parrish and his staff for continuing to follow STI's philosophy of offering a quality product at a great price in addition to offering excellent customer service. Mel and staff have worked hard this year to make sure most of our training kit products are available in multiple finishes and will continue to work on additional product offerings for 2009. If there is a particular product or kit configuration you need, please contact Mel ([mparrish@stielectronicsinc.com](mailto:mparrish@stielectronicsinc.com)) and he will be glad to customize a kit for you. All of the products in Training Materials will soon be available for purchase on-line so check back with us often.

### **Training Services**

Those of you who have been fortunate enough to be trained by one of STI's Master Instructors, knows that STI's instructors are the best in the business. The Training Services staff, under Dan Foster's direction, works hard every day and in every class, to make sure that they are prepared and presenting the information whether it be lecture or a hands on demonstration to the best of their ability. The classrooms in STI's new facility will be larger and we have added a classroom for lecture purposes as well as the two classrooms set up for hands on training such as the J-STD-001 or IPC-7711/7721 Rework and Repair Courses. We are also in the process of adding additional instructors to our staff so we can meet the needs of our training customers in a timely fashion. If you know of someone who is qualified in the IPC standards and has extensive hands on and manufacturing experience, please have them contact us at [dbradford@stielectronicsinc.com](mailto:dbradford@stielectronicsinc.com). Thank you Dan, Frank, Tom, Ann and Michelle for a fantastic 2008 and a large thank you to our customers who depend on STI for their training and certification needs. We look forward to seeing you all in 2009.

***May each of you have a Merry Christmas and a happy, healthy and prosperous New Year!***



# Training Materials



Mel Parrish  
Director of Training  
Materials

Looking over the last year with the perspective and gravity of the recent national election, gas prices, economy, Middle East, Training Materials seems to be rather underwhelming. But it really has been an excellent year and we look forward to the New Year in 2009 and the opportunity to locate to our new facility.

During the last year we continued to see a very high demand for Tin Lead solder training components and materials. Lead Free has been increasing slowly but the initial surge in interest has diminished somewhat. From a soldering skills training perspective, the principles are still basically the same. Clean solderable materials (boards and components), consistent heat sources, heat bridge, solder feed and cleaning (if required) all apply to soldering whether it is Lead Free or Tin Lead. Aside from these common principles, some of the alternative board finishes are quite a challenge to generate consistent solder wetting and spread and the solder doesn't look as good either. We tried our best to capture these subtle differences in the last revision to the IPC-A-610D standard. In case you haven't heard, we are in revision again for the new IPC-A-610E which may be ready for release next year.

The Training Materials Staff continues to be committed to same day shipping for any normal quantities of training kits and components since we understand the importance of training schedules and the necessary flexibility required for unpredictable enrollment numbers.

In 2009 we'll be here to make our training customers more successful since they know that their STI training materials and tools will be consistently high quality, and in place when they are needed.

## FEATURED PRODUCT OF THE MONTH!

The STI Training Materials Kit for this Month is our 7711/7721, Rework Repair Training Kit. They are available in tin-lead and also lead-free versions. Mention this article and receive 10% off of the regular price during December.

To place an order, contact our customer service representatives at (800) 858-0604 or [sales@stielectronicsinc.com](mailto:sales@stielectronicsinc.com)

## Surplus Inventory Sale

STI Electronics, as one of the largest distributors of electronic assembly and solder supplies, occasionally has overstock on some items. We have created a surplus inventory list with prices drastically reduced. The surplus inventory list is available at our website, [www.stielectronicsinc.com](http://www.stielectronicsinc.com), and is updated monthly. Please call (256) 705-5545 and ask for Sales or (800) 858-0604. Quantities are limited so don't delay.



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## **Jim's Corner**

*By: Jim D. Raby, PE, Technical Director*



of that era. God brought Mary Ellen Mitchell into my life and then David, Sheila, and Ashley, all great additions and only by the Grace of God.

The time I spent with ABMA, NASA and the Navy at China Lake were all a stimulus and training for the beginning of STI. During those days I met so many wonderful people both government and civilians that played a role in my growth in this industry. There are a few that I must call by name because they helped in more than just work activities, Albin Wittmann during my early ABMA and NASA days, William Fenner and Bob Lewis during my NASA days. At China Lake there was Dillard Bullard and Burrell Hays that either believed in me or just simply gave me enough rope to hang myself, but they were both great supporters. Willis Wiloughby, John McInnis and Steve Linder in Washington D. C. gave me tremendous strength and support. Herb Abrams of Litton as well as Emmett Wheeler of Westinghouse were

It was great to be born and raised in Alabama and the USA, and God gave me the opportunities that he did, beginning with my time in the US Navy during the Korean war and the great ET, Radar and other class A schools that I was able to attend. The people I met during that time, added to the greatness

cheerleaders for me. There was also my true friends and cheerleaders Richard Johnson and Ross Ribauto of Hexacon.

It was with the above great people as well as John Britton, Mel and Pat Scott, Carl Buchanan and Kathi Johnson that led me to the life that I now have where my wife and son now run the business as well as own it, but don't let me collect the money. I have just told to you the story of my life and STI would not be where it is today with any one of the above missing. God has blessed me greatly and I will forever praise His name for these blessings. If STI had not been successful I would not have been true to the direction the above people pointed me. Now I must also thank each of the STI employees that are presently bearing the work load for all their efforts.

I hope that as each of you look back on your life you too will find that there have been great people that had influence over it. I also hope you will be as grateful for the things they have done for you as I am for the influence the ones I mentioned by name as well as many others that I did not mention had on mine. God is great, let's give Him the Glory and Praise. Have a Merry Christmas and a Happy New Year.

Jim D. Raby  
Technical Director  
[jraby@stielectronicsinc.com](mailto:jraby@stielectronicsinc.com)

