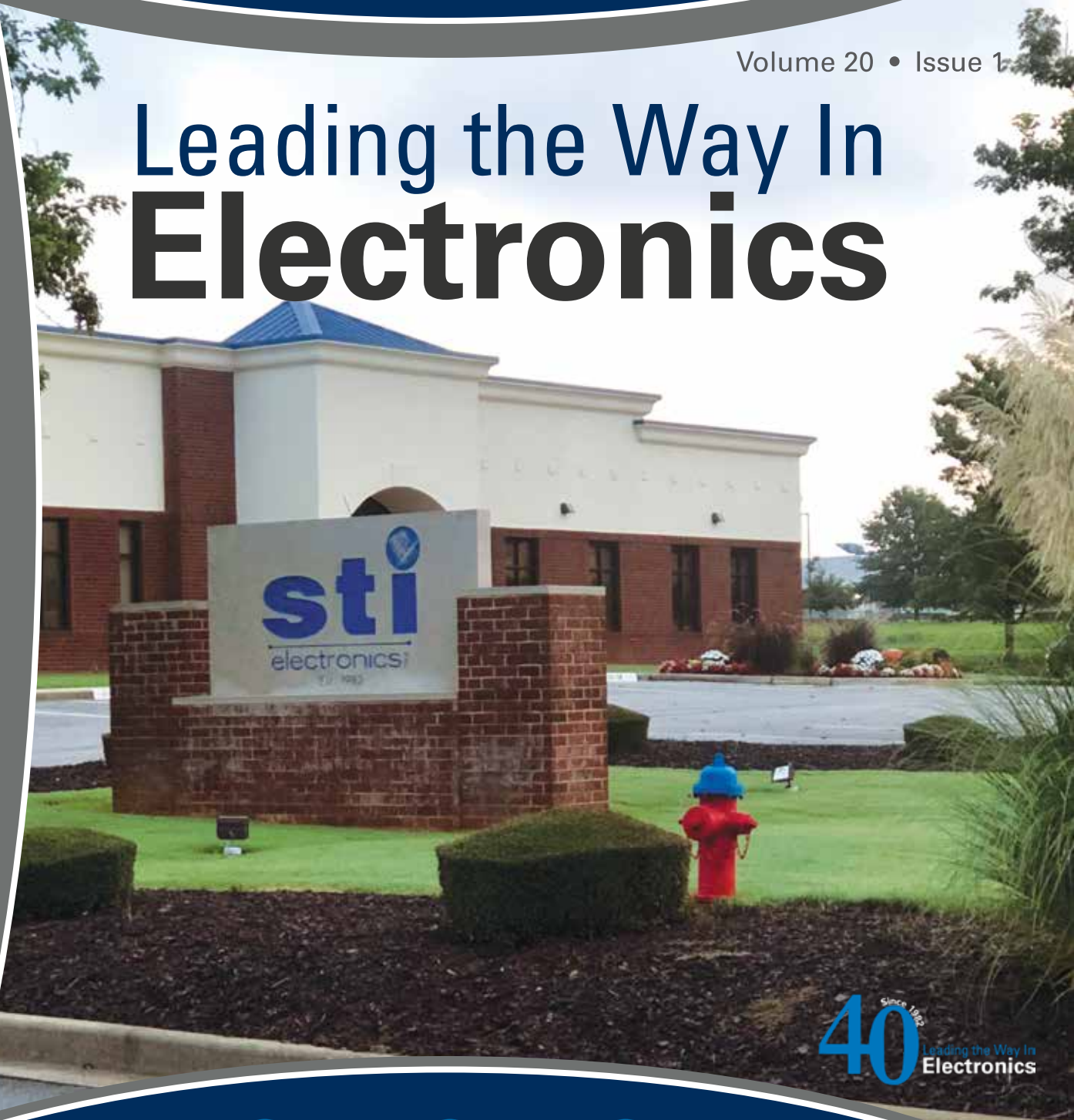




Volume 20 • Issue 1

Leading the Way In Electronics

NEWSLETTER



40 Since 1982
Leading the Way In
Electronics



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Dave's World

JUNE, 2022

In 40 years of doing this, the days are never the same. One day, a month or so ago, I was in my office talking with someone. I don't remember the exact topic but I'm sure it was something important like production schedules or personnel issues or the outlook for Auburn's 2022 offensive line. Someone else (you'll notice I'm not using names to protect the innocent and guilty alike) stuck their head in the door and said one of our employees had just been attacked in the parking lot by a goose. They suddenly had 100% of my attention. I immediately ran to our side door and watched as one goose (let's call him Clyde) screeched, honked at and attacked any STI employee who came near his partner (let's call her Bonnie). Bonnie was sitting on her eggs in the mulch between the employee break area and parking lot. According to my job description, I immediately went from being



an infectious disease and supply chain expert to being a goose expert. (I'm almost equally qualified on all of those for anyone who was wondering.) We didn't want to hurt the geese but we did want to move the eggs/geese for their safety as well as and especially for the safety of employees who used that parking lot, break area, and entrance. We discovered that Bonnie &



David Raby

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Clyde had claimed their real estate and we were not going to persuade them to move although we did get some accidentally funny videos that will be set to Benny Hill music and shown at our Christmas party to all those who survived. We learned that a goose bite hurts but it is getting hit with a wing that will actually put you on the ground (and make you a star in the previously mentioned video). Luckily, everyone survived and safely retreated as we came up with plan B. Plan B was calling our local game warden who referred us to our city police who sent a very nice Animal Control Officer. The Office assessed the situation (and decided quickly they wanted no part of Clyde), made sure people and animals were safe and then gave us our options. The Canadian Geese are a protected species (damn Canadians!) so our options were to wait until the eggs hatched and they left (average time for a Canadian Goose egg to hatch is 28 days) or hire a licensed animal control person to move the eggs which would of course cause Bonnie & Clyde to move with them. On a side note, our building is on 10 acres that contains a pond or as we call it Lake Solder (that geese (fellow Canadians!), ducks, turtles, and possibly other things we don't want talk about occupy at any given point in time) and 2.5 acres of vacant land with bushes and grass. Of all their options, the geese built their nest in probably the most pedestrian traversed spot

on the property. Again, we didn't want to hurt Bonnie, Clyde, or the eggs. We called the licensed animal control person and explained the problem to them and they said they would not move the eggs because it would cause the geese to attack them! (I did not know geese would attack licensed animal control people!) What a surprise. Several people (no names) offered to solve the problem by making the geese disappear but we really didn't want that plus we had now informed pretty much every legal entity up to possibly the United Nations that the geese were here and them suddenly disappearing might not go over well. So, we waited. There may or may not have been some wagers on dates and numbers of baby geese. (If that happened (not confirming or denying), I'm sure it was not for anything of value.) Every morning when I came in, I would confirm Bonnie was sitting in her spot while making sure not to get between her and Clyde. Employees (mostly) learned to get around them as well as use a different entrance. We did learn that Clyde did not like umbrellas and a few of those were sacrificed for the greater good. Finally, one day we came in and they had moved. It hadn't been 28 days and we never saw any babies. We can only guess what happened overnight with the neighborhood coyotes or fox or hawks or eagles. (The patriot in me really hopes it wasn't a Bald Eagle attacking the Canadian Goose eggs.) Bonnie and Clyde are still hanging around. A few days ago, they were on the roof at the front of the building but I think they discovered that isn't fit for any kind of life as we approach an Alabama summer. I wish them the best and look forward to seeing them back next year but hope they will take advantage of a more natural habitat for starting their family.

David Raby

HAPPENINGS



David • 37 Years

Congratulations

During the first half of 2022 we have had several anniversaries to celebrate. We would like to congratulate each one on achieving this anniversary with us! They have all worked hard for this accomplishment and we truly appreciate their dedication.



Randy • 34 Years



James • 24 Years



Pat • 21 Years



A.J. • 19 Years



Cornelia • 8 Years



Janie • 6 Years



Brittany • 5 Years



Martin • 4 Years



Melissa • 3 Years



Debra • 3 Years



Janie - 6 Years



Scott - 3 Years



Roger - 15 Years



Christy - 17 Years



Collin - 5 Years



Shelia - 26 Years



Frank -22 Years



Michelle - 15 Years



Sue - 9 Years



Chuck -17 Years



Erick - 5 Years



Travis • 7 Years



Kaven - 3 Years



James - 4 Years



Earlene - 9 Years



Kelli - 16 Years



AND1100 Fluorimeter from ANDalyze®

The AND1100 Fluorimeter from ANDalyze® is a handheld instrument that is used for testing heavy metals in water samples including waste water, drinking water, and industrial water supplies. This instrument has the capability of detecting metals including lead, copper, uranium, mercury, zinc, and cadmium in the parts per million (ppm) and parts per billion (ppb) range with little sample preparation and in only a couple of minutes. The AND1100 uses a DNAzyme reaction and when the heavy metal is present, fluorescence occurs and is measured to determine the concentration of the heavy metal. (For more information visit www.andalyze.com). So, how can the AND1100 Fluorimeter be utilized in the electronics industry? Whether its electronic waste, metal housings or casings, electronics can be a large carrier of heavy metals and specifically lead. In this experiment we evaluated a metal housing to determine if it could potentially leach lead into the water supply of its environment and at what concentration when the units were prepared in three different ways.



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Metal leaching can occur over an extended period of time, so for testing purposes it can be advantageous to develop a method for accelerating the leaching process. For this test, the leaching process was accelerated by filling the metal housings with deionized water and placing in a chamber at 80°C and 25% humidity for two weeks. Deionized water was used for the water supply and as a reference sample. After two weeks the samples were removed from the chamber and the water was immediately tested for lead content. The samples were then refilled with water and left at room temperature for 64 hours and retested. The results are shown in the table below. The AND1100 Fluorimeter® has the ability to test lead content as low as 2 ppb and anything above 100 ppb will be denoted as “above 100 ppb”.

Sample	Lead Detection after 2 weeks at 80°C and 25% Humidity	Lead Detection after 64 hours at Room Temperature
Unit 1	Above 100 ppb	62 ppb
Unit 2	86 ppb	45 ppb
Unit 3	65 ppb	33 ppb

New Technology

Laser Marking

STI Electronics, Inc. is committed to bringing our customers the latest and most advanced technology. One of the most recent additions to our company is Laser Marking. Our team is dedicated to being on the leading edge with the newest techniques and equipment. Our experience and knowledge can provide our customers with more efficient and effective contract services.

How It Works - Laser marking works by using a focused beam of light to mark the surface of a material. When the beam interacts with the material's surface, it alters the material's properties and appearance. This concentrated beam targets only a specified area, allowing the laser marking machine to create precise, high quality, high-contrast marks that are easy to read or scan on virtually any surface. This feature makes laser marking ideal for applications where accuracy and permanency are critical to success.

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- Affordable
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Minimal Contamination

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NAICS Codes: 334418, 334511, 336419,
541330, 541380, 541715, 561910 and 332812
and Cage Code 1JX07.





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On-line IPC Training & Certification



✓ Register Now

In addition to our classroom and on-site training courses, STI offers on-line training and remote testing for the following IPC lecture based Certification/Recertification courses:

- IPC-A-610 Certified IPC Trainer (CIT) and Certified IPC Specialist (CIS)
-Standard required for class
- IPC/WHMA-A-620 CIT and CIS
required for class -Standard
- IPC-A-600 CIT and CIS
required for class -Standard

Note: Currently hands-on courses are not available for on-line training or remote testing for CIT's or CIS's.

The Certified Subject Matter Expert (CSE) on-line courses are also available for

- IPC-A-610, IPC/WHMA-A-620, IPC-A-600, IPC-7711/7721 and J-STD-001
-Standard required for class

Exams that are required for these courses can now be proctored remotely using IPC EDGE.

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**Do you have a question?
Do you need information?
CHAT with us online!**



IPC/WHMA-A-620D CIT/CIS Optional Hands-On Course

By Pat Scott



Pat Scott
Training Services Manager
pscott@stiusa.com

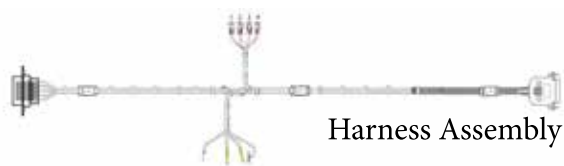
If you've taken the IPC/WHMA-A-620D Certification/Recertification course and you're interested in some hands-on Cable/Harness training you might want to consider taking the IPC/WHMA-A-620D CIT/CIS Optional Hands-On course. This course was developed to help users become familiar with the basics of cable and wire harness fabrication.

This 1 day course consists of the following:



IPC/WHMA-A-620D Certified IPC Specialist (CIS) Certification/Recertification Course Overview & Schedule

Module 1 (Mandatory)	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8
Course Introduction General (Section 1) Applicable Doc. (Section 2) Preparation (Section 3) Measuring (Section 11) Testing (Section 19) ~ 3.5 hrs.	Crimp Terminations (Section 5) Insulation Displacement Connections (IDC) (Section 6) ~ 2.5 hrs.	Soldered Terminations (Section 4) High Voltage (Section 20) ~ 2.75 hrs.	Connectorization (Section 9) Over-Molding/Potting (Section 10) ~ 2.0 hr.	Ultrasonic Welding (Section 7) Splices (Section 8) ~ 1.5 hr.	Marking/Labeling (Section 12) Securing (Section 14) Finished Assembly Installation (Section 17) ~ 2.5 hrs	Coaxial and Biaxial Cable Assemblies (Section 13) ~ 1.5 hr.	Harness/Cable Electrical Shielding (Section 15) Cable/Wire Harness Protective Coverings (Section 16) ~ 1.5 hr.
Open Book Exam	Open Book Exam	Open Book Exam	Open Book Exam	Open Book Exam	Open Book Exam	Open Book Exam	Open Book Exam
HANDS-ON MODULES - OPTIONAL							
H1 – Prep (requires M1)	H2 – Crimp (requires M1 & M2)	H3 – Soldered Term (requires M1 & M3)	H4 – Connectorization (requires M1, M2, & M4)	H5 – Splices (requires M1 & M5)	Hands-on in H1	H6 – Coax (requires M1 & M7)	Hands-on in H1
H1 Wire Preparation Measuring Shielding Testing	H1 Wire Preparation Measuring Shielding Testing	H1 Wire Preparation Measuring Shielding Testing	H1 Wire Preparation Measuring Shielding Testing	H1 Wire Preparation Measuring Shielding Testing		H6 Coax	
	H2 Crimp Terminations	H3 Soldered Terminations	H2 Crimp Terminations	H5 Splices			
			H4 Connectorization				



Upon successful completion of the hands-on projects the students (CIT/CIS) certificate will note the Modules completed. Typically, this course is offered after each 620 CIT or CIS course. Check out our schedule of classes at <https://stiusa.com/all-training-events/> to register.

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Mixed Technology Training Kit

Available in both Lead Free and Tin Lead versions, the Mixed Technology Solder Training Kit offers a realistic mixture of Through-Hole and SMT. It contains many of the common components found in mature technology applications for both through-hole and surface mount production. It is our most popular training kit due to its tremendous flexibility for production training. The Solder Training Kits provide a cost effective and consistent approach to solder training. Instructors no longer have to spend their valuable time keeping track of inventory and sorting through production scrap. The parts are packaged in static shield bags to promote ESD practices. The kits are a reliable and economical way to ensure that each student and each class receive the same training materials. All parts and boards are guaranteed solderable. Custom boards, kits, and individual parts are also available. The Combination Kit has increased focus on SMT as reflected in additional component count.



SKU: 405-1075
Category: Training Kits & Materials



[https://stiusa.com/product/
mixed-technology-training-kit/](https://stiusa.com/product/mixed-technology-training-kit/)

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4th of JULY

Independence Day

**STI will be closed Monday, July 4th in
observance of Independence Day**



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