SAE 2013 Counterfeit Parts Avoidance Symposium

Technical Session Schedule

As of 10/03/2013 07:40 pm

Friday, September 27

SAE 2013 Counterfeit Parts Avoidance Symposium

Session Code: ***CPAS1***

Room 519 AB ***Session Time:*** ***ALL DAY***

Time	*Paper No.*	*Title*
8:00 a.m.	***ORAL ONLY***	***US Legislation and Rule Making Activity on Counterfiet Parts*** *This briefing will include an update on US legislation and rule making activity on counterfelt parts. The brieing will describe the implications of this activity on US defense contractors and suppliers of products destined for use by the US DoD; and include a discussion of a "counterfeit electronic part avoidance and detection system" required of contractors.* *Henry Livingston, BAE Systems*
8:30 a.m.	***ORAL ONLY***	***AS5553A and AS6081 Synergy - Part II, Mitigating the Risk of Open Market Parts*** *Revision A of AS5553 was released in January 2013 at the request and collaboration of the international community to address fraudulent/counterfeit part risk mitigation on a global scale across multi-sector electronic supply chain industries and to provide uniform requirements, practices and methods to mitigate the risks of receiving and installing fraudulent/counterfeit electronic parts. While AS6081 was released in November 2012 for distributors of open market parts and invoked by the U.S. Defense Logistics Agency Land and Maritime Qualified Testing Suppliers List (QTSL) Program, it may not be clear how these two standards work together to provide a robust fraudulent/counterfeit parts risk mitigation program for OEMs/CMs. Most recognize these initiatives as warranted and positive steps toward decreasing the risk of a counterfeit part entering the DOD supply chain. However, many are left wondering what can be done now to prepare for and support impending changes in government procurement flow down requirements, specifically related to: personnel training, assessing potential sources of supply in order to determine risk, means for identifying "trusted sources", guidance for debarring sources of supply, supply chain traceability, part inspection and test (minimum test requirements) and reporting, material control and corrective actions. This presentation will offer insight, direction and will incite group discussions all of which will aid attendees in their efforts to prepare for and respond to the changes that can be flowed down by government buyers.* *Phil Zulueta, Consultants to Management*
9:00 a.m.	***ORAL ONLY***	***Current Status of Various Industry Standards for Mitigating Counterfeits*** *The Counterfeit Detection techniques of today are barely keeping up with what counterfeiters are able to do in terms of finding new ways to counterfeit EEE devices. They have come up with techniques that are hard-to-detect and have even been able to make bigger investments to counterfeit parts at silicon level. Counterfeiters are introducing product at the non-packaged level since most traceability today mainly focuses at packaging and post packaging level.* *Sultan Ali Lilani, Integra Technologies LLC*
9:30 a.m.		***BREAK***

10:00 a.m. ***ORAL ONLY*** ***Material Based Part Authentication - Using the Built-in Imprints***

There are some inherent problems with counterfeit detection by inspection. It is getting increasingly difficult to obtain golden parts of right vintage for the purpose of comparison. Wrong vintage parts can mislead the whole detection process with possible false positive or false negative signals during the inspection. For help with detection, the toolkit for part inspection needs to include a catalog of possible and impossible materials and processes for different time periods. The key to materials based authentication is built into a part with material characteristics and properties. The presentation will describe the development of a a tool tha can be applied for all parts, latest and vintage alike without having to rely on a golden part.

Diganta Das, Univ. of Maryland

10:30 a.m. ***ORAL ONLY*** ***Risk Assessments and Avoidance Protocols: Segmenting your Supply Base by Risk***

The complexity of the electronics supply chain has necessitated the development of multiple, sometimes differing, standards to mitigate the risk of obtaining counterfeit electronics. To manage this, some OEM's are applying the most stringent proscriptions to all classes of supplier resulting in frustrations, longer lead times and added costs.

Kevin L. Sink, TTI Inc.

11:00 a.m. ***ORAL ONLY*** ***What is not enough and What is too much! (Electrical Test)***

The extent of electrical testing that is required to authenticate the product being tested must take into taking into consideration the application and the risks associated with the application. The total risk of the project is based on product risk, component risk, and supplier risk. The subsequent electrical test needed to mitigate such risk determines the extent of electrical testing that needs to be performed. It is imperative that we understand the risk level and what we are trying to accomplish when a test plan is set-up to define the extent of electrical testing. Although full datasheet electrical testing is most desirable for any counterfeit mitigation testing; however such full electrical testing per the datasheet can be cost prohibitive and in some cases may not be possible given the time constraints of when the product is needed to be used in the actual application. This paper addresses various aspects of electrical testing from risk, cost and applicability perspective.

Sultan Ali Lilani, Integra Technologies LLC

11:30 a.m. ***ORAL ONLY*** ***Your Top Ten List on How to Protect Yourself Legally***

Do you understand what your rights and obligations are under Section 818 of the National Defense Authorization Act of 2012? Have the proposed DFARS caused you even more confusion? During this presentation, we will discuss the top ten ways of protecting yourself. We will review how to avoid liability under the False Claims Act and the False Statements Act and clarify confusion caused by Section 818 and the proposed DFARS. Suggested terms and conditions for your purchase orders and invoices will also be offered. Finally, we will examine the various burdens of proof that are required to be established in a civil case as opposed to a criminal matter.

Keith Gregory, Snell & Wilmer

12:00 p.m. ***ORAL ONLY***

Luncheon Keynote: Counterfeit Part Risk Analysis ¿ Moving from ¿Subjective Assessments¿ to Risk Analysis Supported by Empirical Data and Defensible Estimates

Counterfeit part risk has been discussed from various perspectives. Briefings presented by DoD describe a ¿profile of counterfeit risk¿ based on the age of technologies and the susceptibility of those technologies to counterfeiting. SAE Aerospace Standard AS6174 presents a counterfeit materiel risk assessment model based on ¿impact of supply chain¿ (cost of operations, degraded function, sabotage or malicious functions, personnel injury or death) and ¿likelihood of counterfeiting¿ based on production availability from original manufacturers. SAE Aerospace Standard AS5553 includes a ¿risk stack chart¿ describing counterfeit electronic part risk as a function of ¿supplier reliability and product criticality¿. DfR Solutions describes counterfeit electronic part risk in terms of probability of failure versus supplier trustworthiness. Integra Technologies describes types of counterfeit electronic parts, tests and inspections used to detect them, and the probability of detection. A common thread weaving through all of these representations is that vulnerability to counterfeits and risk mitigation is a function of supplier selection, due diligence applied when using riskier suppliers and end use application considerations.

Henry Livingston, BAE Systems

1:00 p.m. ***ORAL ONLY***

Practical Solutions for Management of Component Obsolescence Risk for Counterfeit Avoidance

Thirty year lifecycles. Minimal customer commitments. Market forces that favor change. Suppliers that are driven by short-term metrics. It¿s hard to conceive of a more challenging environment in which to manage the production of high performance electronic products. Now add thousands of opportunists that are just waiting to capitalize when there are large gaps between supply and demand. This is today¿s reality for the Aerospace & Defense (A & D) supply chain.

Tyler Moore, Arrow Electronics Inc.

1:30 p.m. ***ORAL ONLY***

Mitigating Counterfeit in the Authorized Supply Chain with AS6496

Upon its release, the first SAE standard created to mitigate counterfeit electronics, AS5553, proved truly eye-opening to many folks in the electronics industry. The complexity of distribution came to light as well with the publishing of AS6081 which provided better definitions of the different categories of distributors. The conversation has naturally progressed to the next anti-counterfeiting standard, AS6496. The ECIA began drafting a standard which SAE later decided to employ in the creation of a new standard. SAE commissioned the G-19AD committee to compose the AS6496 standard utilizing this previous work presented by the ECIA. This committee, comprised of OEM, OCMs, manufacturers, customers, government representatives, and of course distributors, has since been hard at work fleshing out a standard which will undoubtedly impact all players trying to avert counterfeit electronics. Upon completion, this standard will define the requirements for distributors operating in the authorized supply chain for mitigating counterfeits. In my presentation, I will walk through the current draft, and point out many of the major details that differentiate AS6496 from previous standards.

Charles Amsden, Mouser Electronics Inc.

2:00 p.m. ***ORAL ONLY*** ***Why An Authenticity Marking Standard Is Needed Now!***

An industry/government agreement on an authenticity marking standard is the critical next step for Section 818 Consensus has been elusive between industry and government on the new Rule enforcing anti-counterfeiting wording in National Defense Authorization Act for FY 2012, Section 818.
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An immediate practical step is needed to address what is fast becoming an impasse on the issue. Without losing the flexibility of the current Rule, and without trying to impose an unworkable single solution, the government can establish ways industry can move forward right away.
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Adoption of an authenticity marking standard represents a specific way in which industry can begin to comply with the new Rule. This need not be a definitive recipe, but can be delivered as guidance. Nor does this need to be holistic from the start; this may begin as partial and practical, and will evolve and grow as the Federal and supplier working relationship against counterfeits grows.

Janice Meraglia, Applied Dna Sciences Inc.

2:30 p.m. ***BREAK***

Friday, September 27

Expert Panel Discussion: SAE Standards and Guidance - A How-to

Session Code: ***CPAS2***

Room 519 AB ***Session Time:*** ***3:00 p.m.***

Moderators - *Phil Zulueta, Consultants to Management*

Panelists - *Diganta Das, Univ. of Maryland; Keith Gregory, Snell & Wilmer; Sultan Ali Lilani, Integra Technologies LLC; Henry Livingston, BAE Systems; Janice Meraglia, Applied Dna Sciences Inc.; Kevin L. Sink, TTI Inc.;*