



Suspect Counterfeit Items (SC/I) Materials, Electronic Components & Packaging Issues in the Global Supply Chain



Suspect Counterfeit Overview for Chapter 39



Luncheon Course Material Developed and Presented by:

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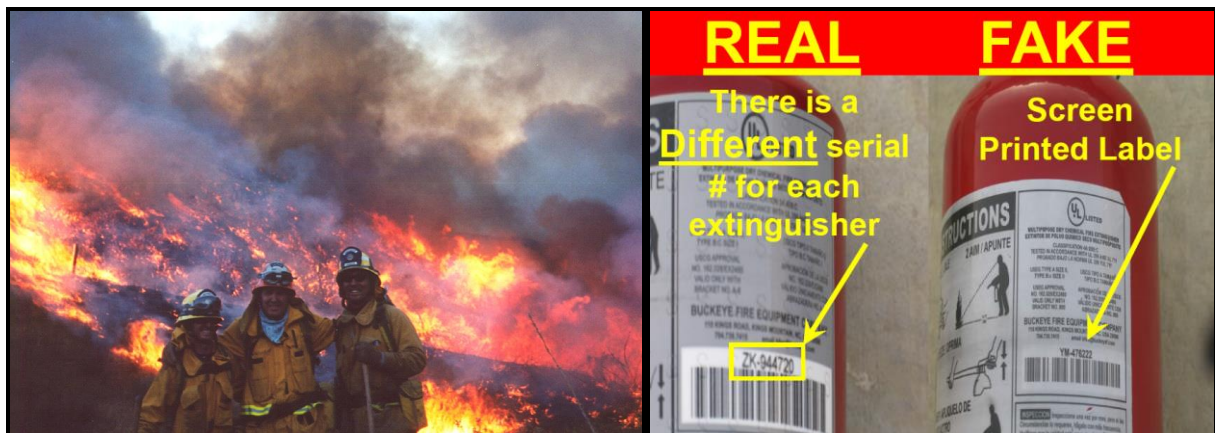
[Suspect Counterfeit Activity Click Here](#)

California Certified Disabled Veteran Business Enterprise
CalVet DVBE Advisory Council Member
CalVet Standing Committee Vice Chair for Operating Guidelines
DGS Certified DVBE & Certified Small Business #0024505

Trust but Verify

Suspect Counterfeiting extends beyond the Rolex® Watch or GUCCI® bag and includes fasteners, slings, components and batteries (to name a few). The visual inspection process does not go far enough. The days of purchasing USA products from your local distributor or manufacturer can be unknowingly circumvented by its procurement or engineering outsourcing to catalogs and internet based organizations from the Pacific Rim and the USA. The DOD, DOE and Commerical sectors are relative newcomers to Suspect Counterfeiting in comparison to the pharmaceutical sector.

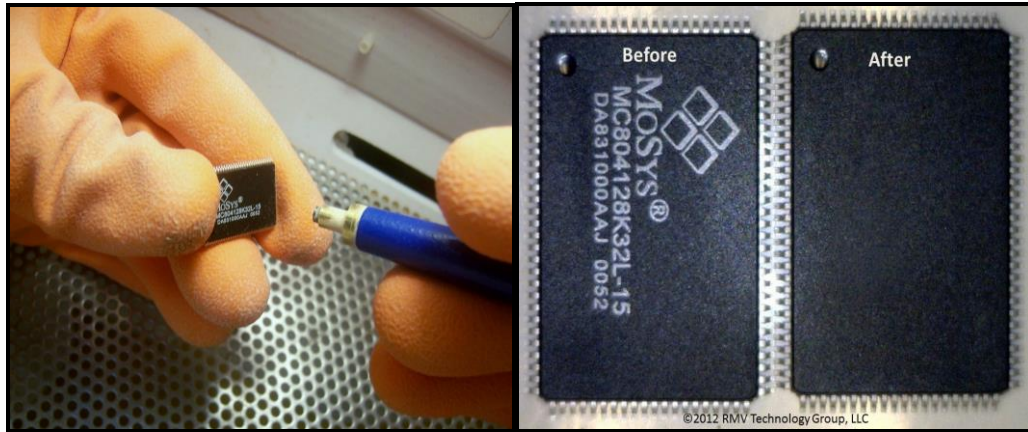
Today, more advanced engineering principles are utilized to insure that products are protected, branded and properly labeled or RFID tagged so that non-conforming and suspect counterfeit products can be more easily traced, identified, inspected and mitigated. Therefore, original products designed with countermeasures are more difficult to duplicate, substitute or counterfeit.



This synergistic approach developed by the scientists and engineers of RMV is taking on a very active role in comparison to the traditional supply chain contract requirements of reliance upon suppliers to do the right thing. Many suspect counterfeit procedures practiced in the pharmaceutical sector could be transferred to the commercial sector.

If one does not test, then one does not have much of a program. See real case examples. If the global supply chain does not think that Suspect Counterfeit packaging material has infiltrated the supply chain, then think again.

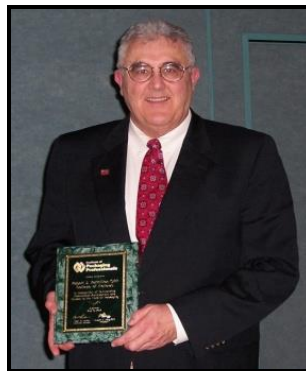
Since 1997, RMV has subject matter expertise as a 3rd party validation laboratory at NASA Ames.



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For example, today's IT Data Centers (Head ends) must understand how to reliably source static sensitive components and assemblies. Because electronic command and data center components are now much more sensitive to static electricity, both procurement and quality employees must be much more vigilant in the detection and mitigation of substandard or suspect counterfeit products that compromise electronic systems.

Bob Vermillion



Bob Vermillion has developed advanced ESD materials with issuance of a U.S. Patent; one of Bob's ESD developments was NASA Mars Mission approved. Bob has extensive expertise in the evaluation of spacecraft composites and Triboelectrification materials mitigation for a Lunar or Mars Surface. Moreover, Bob has developed an advanced and repeatable test method for mapping materials for Tribocharge Generation at low RH.

In 2002, Bob was recipient of the Institute of Packaging Professional's AmeriStar Award (IoPP) for the No. 1 Design in the Electronics Category for the USA. This unique shipping container package design also provided suspect counterfeit protection for sensitive components and parts. On 16 May 2007, Bob was inducted into the College of Fellows by IOPP. In 2008, Bob founded the ESD Task Force, IoPP Medical Device Packaging Committee. Bob has published extensively in publications for the medical device, aerospace & defense, semiconductor, disk drive and pharmaceutical sectors.

During the 2003 ESDA Symposium, Bob was recognized for contributions in the field of electrostatics for his work as a co-author for many standards documents, including working groups, workshops and technical program committees. Moreover, Bob's lab at NASA-Ames (RMV) is one of the few selected 3rd party, round robin testing laboratories for verification of new and/or revised ANSI ESD Standard Test Methods.

Located on site at NASA-Ames Research Center, Moffett Field, CA, the RMV NASA-Ames lab provides ESD/EMC and System Level Testing, auditing, training and engineering services for advanced and specialty materials, plus protective packaging qualification for USA based companies. Bob develops Certificate of Compliance (COC) procedures for supplier products, specification writing and Technology Training (ESD, EMC, Anti-Counterfeit) for DOE, DOD and NASA customers, CMs, suppliers and distributors.

A Subject Matter Expert in the field of specialty materials science, Bob presented to the Inherently Conductive Polymer Scientific Community for several years on Advanced ESD Methods for Mapping Materials before its commercialization. In 2010, Bob was the first to present to NASA QLF, Kennedy Space Center, by invitation from JPL, on “*Non-Conforming and Suspect Counterfeit Materials Used in the Shipment of Sensitive Electronic Parts*,” that led to a series of articles for Interference Technology (USA & UK). In collaboration with Thomas Reilly, MD, Bob presented a white paper titled “*Considerations for the Control of Static Electricity in a Hospital Environment*” for HealthPack 2010, San Antonio. In 2015, Bob was invited to teach a professional development course at Oxford University: [Suspect Counterfeit Detection, Avoidance and Mitigation for Sensitive Devices](#) due to the rapid influx of counterfeit electronics into the UK.

Moreover, Bob’s course on Suspect Counterfeit Materials & Packaging is receiving many inquiries in the EU due to the unique and ‘first line of defense’ approach to combat counterfeits in the supply chain.

Bob is a Professional Development Certification Lecturer for UCB-Space Science Labs, San Jose State University, California State Polytechnic University, Loyola-Marymount University, Clemson and recent invitations from Oxford University. Bob conducts ESD Seminars for aerospace/defense, space technology, medical, telecom, electronics, disk media, semiconductor and automotive industries. Previous engagements include USA, Malaysia, China, Taiwan, the Philippines and Singapore.

Bob develops Certificate of Compliance (COC) procedures for supplier products, specification writing and Technology Training (ESD, EMC, Anti-Counterfeit) for the commercial sector including DOE, DOD and NASA customers, CMs, suppliers and distributors. Other core services include on-site testing, in-process equipment and robotics validation, troubleshooting plus facility assessments for aerospace/defense, space technology, semiconductor, consumer electronics, semiconductor equipment and medical device manufacturers.

Bob Vermillion is an iNARTE Certified ESD & Product Safety Engineer, Active Member and Co-Chair of the SAE G19A (Suspect Counterfeit Packaging Committee) and G21 Chair of the Packaging Engineering Working group and Vice-Chair of the ANSI ESD Aerospace WIP 20.21 Working Group. RMV Technology Group, LLC is a Member of the American Council of Independent Labs (ACIL) & Union Internationale des Laboratoires Independants (UILI) and certified by ESD Journal as an Approved Lab. RMV is a member of IEEE, IoPP and ASTM. An active member of the ESDA Standards Committee, Bob sits on the Corporate Advisory Board of the California Disabled Veterans Business Alliance. RMV Technology Group, LLC is a SDVOSB/8(a) and SDB Firm, State of California certified Small Business. Bob Vermillion is a member of the CalVet Advisory Board for the State of California. RMV Technology Group LLC is a Certified DGS DVBE #0024505 and Certified Small Business #0024505 with the State of California. RMV is a federally **Certified Veteran Enterprise** (www.vetbiz.org) by the Veterans Administration, Washington, D.C. RMV is a certified member of Northern California Supplier Minority Development Council (NCSMDC). RMV is a member of GIDEP.

