SAE INTERNATIONAL STANDARDS-
COUNTERFEIT AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION

December 2015

Bruce Mahone
Director, Washington Operations
SAE International
www.sae.org
G-19 & G-21 Counterfeit Avoidance, Detection, Mitigation & Disposition Committee Update

1. OEMS/Users of Electronics: AS5553
2. OEMS/Users of Materiel (other than electronics): AS6174
3. Independent Distributors/Brokers of Electronics: AS6496
4. Authorized Distributors of Electronics: AS6081
5. Test Laboratories of Electronics: AS6171

G-19 & G-21 Counterfeit Prevention & Detection Standards
G-19 Subcommittees Formed Since 2009

G-19 CI - Continuous Improvement Subcommittee
(AS5553A: Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition)

G-19 D - Independent Distributor Subcommittee
(AS6081: Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition; Independent Distribution)

G-19 AD - Authorized Distributor Counterfeit Mitigation Subcommittee
(AS6496: Counterfeit Electronic Parts Counterfeit Mitigation AD’s)

G-19 DR - Distributor Risk Characterization Subcommittee
(ARP6178: Counterfeit Electronic Parts; Tool for Risk Assessment of Distributors)

G-19 A - Test Laboratory Standards Development Subcommittee
(AS6171: Test Methods Standard; Counterfeit Electronic Parts)

G-19 C - Standards Compliance Verification Subcommittee
(AS6462: AS5553, Verification Criteria
AS6301: AS6081 Verification Criteria)

G-19 T - Definitions Task Group
(AIR6273: Terms and Definitions - Counterfeit Parts)
## Summary of SAE G-19/G-21 Aerospace Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE AS5553A (G19-CI)</td>
<td>Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition</td>
<td>Issued January 2013 and available at <a href="http://www.sae.org">www.sae.org</a>. Rev B in development</td>
</tr>
<tr>
<td>SAE AS6171 (G19-A)</td>
<td>Test Methods Standard; Counterfeit Electronic Parts</td>
<td>In draft; Individual test methods balloted. Main document balloting in process</td>
</tr>
<tr>
<td>SAE AIR6273 (G19-T)</td>
<td>Terms and Definitions:</td>
<td>In draft.</td>
</tr>
</tbody>
</table>
## Summary of SAE G-19/G-21 Aerospace Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE AS6301 (G19-C)</td>
<td>Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition – Independent Distributors Verification Criteria</td>
<td>In draft.</td>
</tr>
<tr>
<td>SAE ARP6178 (G19-DR)</td>
<td>Counterfeit Electronic Parts; Tool for Risk Assessment of Distributors</td>
<td>Published 2011-12.</td>
</tr>
<tr>
<td>SAE AS6496 (G19-AD)</td>
<td>Authorized Distributor Counterfeit Mitigation</td>
<td>Published 2014-08</td>
</tr>
<tr>
<td>SAE AS6174 (G-21)</td>
<td>Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel</td>
<td>Rev. A Published 2014-07. Rev B and slash sheets (refrigerants, fasteners) soon</td>
</tr>
</tbody>
</table>
Counterfeit Avoidance Accreditation Program (CAAP)

Under PRI (Performance Review Institute – the conformity assessment arm of SAE)

a. Establishing audit criteria and requirements to meet counterfeit avoidance standards

b. Replacing stakeholder audits with one audit process, approved through a consensus decision-making process of industry stakeholders

c. Conducting in-depth, technical counterfeit avoidance process audits

d. Improving compliance to counterfeit avoidance standards throughout industry with consistent audit requirements

e. Utilizing technically experienced auditors to assure process familiarity
Anti-Counterfeit Advisory Group (ACAG)

- Comprising of Representatives of a Broad Range of Aerospace/Defense Communities
  - OSD, NAVAIR, DLA, DCMC, NASA, DHS, FAA
  - Airframers, Engine Mfrs, Component Mfrs, Distributors
  - Standards Committee Chairs, (SAE G-14, G-19, G-21, etc.)
- Will address consistency, gaps, and other overriding issues in standards, then make recommendations to committees
- Will serve as a neutral forum to address any other anti-counterfeit issues that arise
SAE J3061, publication 3 December 2016 - Rationale:

- To provide a cybersecurity process framework and guidance to help organizations identify and assess cybersecurity threats and design cybersecurity into cyber-physical vehicle systems throughout the entire development lifecycle process.

- Defines a complete lifecycle process framework that can be tailored and utilized within each organization’s development processes to incorporate cybersecurity into cyber-physical vehicle systems from concept phase through production, operation, service, and decommissioning.

- Provides high-level guiding principles.

- Provides information on existing tools and methods.

- Provides the foundation for further standards development.
QUESTIONS?

Bruce Mahone
Director, Washington Operations
SAE International
Desk - 1.202.434-8943
Cell - 1.703.303.6225
bmahone@sae.org