

Counterfeit Part Reporting Trends

Observations in anticipation of forthcoming regulations

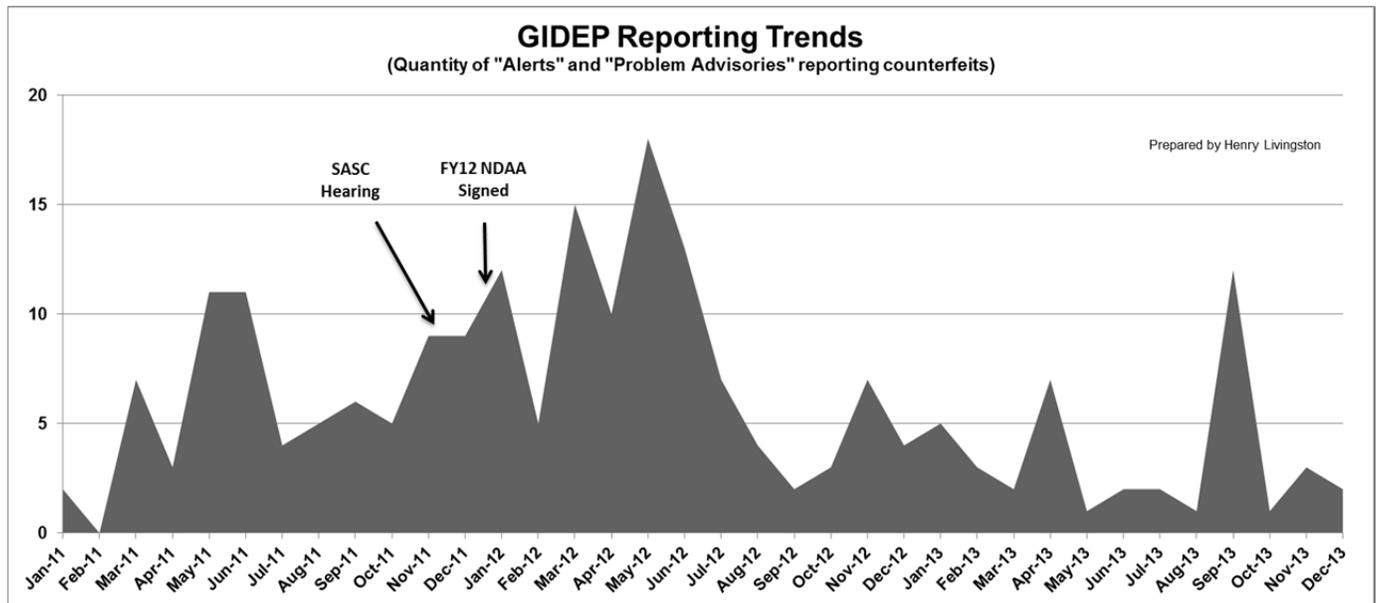
Henry Livingston

Section 818 of the FY2012 National Defense Authorization Act (NDAA) establishes an expectation for contractors and subcontractors to report “counterfeit electronic parts or suspect counterfeit electronic parts” via the Government-Industry Data Exchange Program (GIDEP) [i]. The defense and aerospace industry has long recognized the reporting of counterfeit part incidents as a key practice to addressing the counterfeiting threat [ii]. Despite forthcoming regulations that will require DoD and its contractors to report “counterfeit electronic parts or suspect counterfeit electronic parts”, and despite legislative measures taken to address industry concerns for potential exposure to third party law suits, the reporting of counterfeit electronic parts and suspect counterfeit electronic parts by DoD and its contractors has declined.

In its “Report of the Inquiry into Counterfeit Electronic Parts in the Department of Defense Supply Chain”, the Senate Armed Services Committee (SASC) described how only 271 total reports were submitted to GIDEP out of the 1,800 cases of suspect counterfeit parts in the defense supply chain in 2009 and 2010 [iii]. Several defense contractors and independent distributors told the SASC that they are reluctant to submit reports of suspect counterfeit electronic parts to GIDEP due to concerns about legal liability associated with GIDEP’s requirement that they name the supplier of a suspect part. In an earlier report, the Government Accountability Office noted similar inconsistencies in reporting; contractors cited fear of lawsuits as a reason for not reporting cases to GIDEP [iv].

Soon after the November 2011 SASC hearing on “Counterfeit Electronic Parts in the Department of Defense Supply Chain”, Section 818 of the FY2012 National Defense Authorization Act (NDAA) went into effect and called for DoD to revise regulations to require contractors and subcontractors to report “counterfeit electronic parts or suspect counterfeit electronic parts” via GIDEP [v]. Section 818 of the FY2012 NDAA also included provisions to protect contractors and subcontractors from third party law suits on the basis of reporting in compliance with forthcoming regulations [vi].

The following chart shows the quantity of GIDEP reports (“Alerts” and “Problem Advisories”) published over the past three (3) years describing counterfeit or suspect counterfeit instances [vii].



The author offers the following observations concerning this GIDEP reporting trend with respect to counterfeit and suspect counterfeit electronic parts:

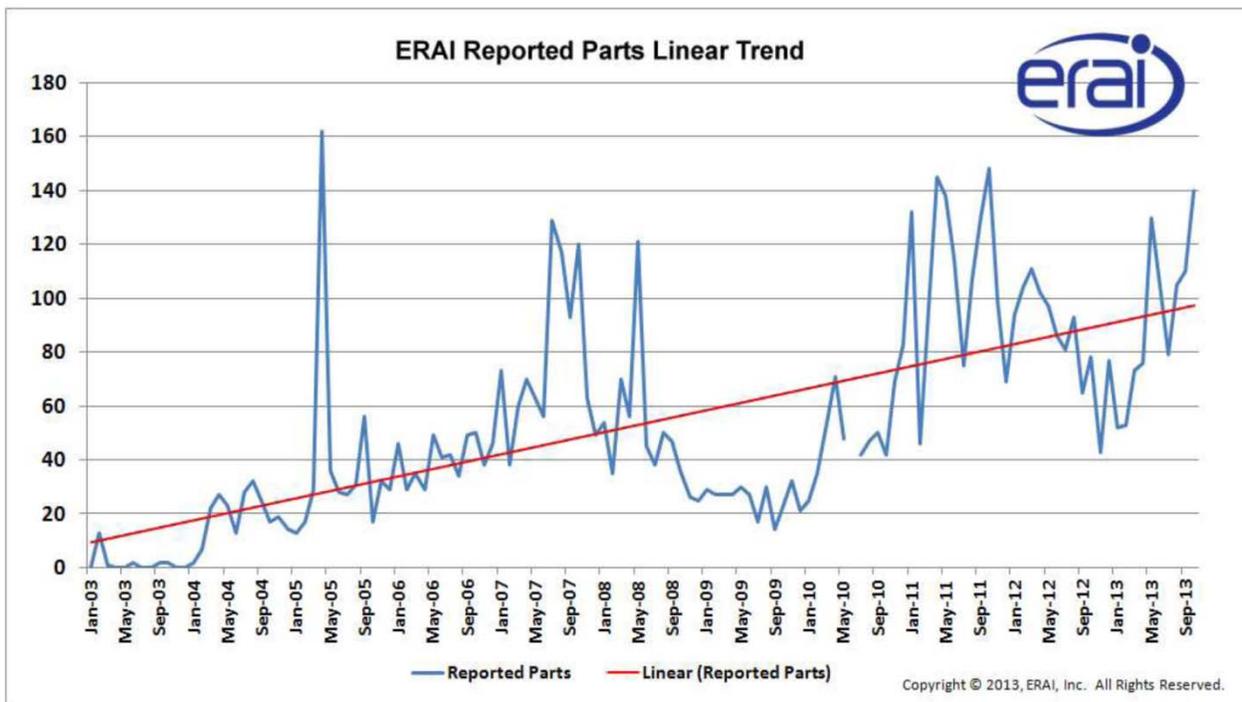
- Though the SASC hearing and FY2012 NDAA may have stimulated an increase in reporting, this increase subsided and reporting has declined over the past year.
- Only two (2) suspect counterfeit parts incidents were reported by a DoD organization; both of these reports were submitted by one DoD organization.
- Nearly one-half of the reports published after the SASC hearing were submitted by one defense contractor.
- The total of GIDEP reports for 2013 calendar year was approximately one-half of the total reports published in the 2011 calendar year.

This GIDEP reporting trend could be an indicator that the counterfeit parts threat is on the decline. However, data on counterfeiting instances reported through other organizations do not support this thinking. ERAI, for example, manages a database of non-conforming material instances reported by its members. The following analysis, presented by ERAI at the DMSMS 2013 Conference, shows the quantity of ERAI reports published over the past ten (10) years describing counterfeit or suspect counterfeit instances [viii].

Reported Parts 10-year Linear Trend

ERAI 2003-2013

20



The ERAI reporting trend indicates the counterfeit parts threat is not on the decline; the quantity of reported incidents continues to increase. In its DMSMS 2013 Conference briefing, however, ERAI notes that “despite being encouraged to voluntarily report, data is not being widely shared.”

This reporting trend suggests that the anticipation of forthcoming regulations and the legislative remedies in place to address industry concerns have yet to stimulate reporting of counterfeit parts and suspect counterfeit parts via GIDEP. A recent article published by Electronics Purchasing Strategies may provide some insight – “The stigma of being known as a source or receiver of counterfeit or substandard parts has been one of the reasons behind the failure to report such activities” [ix].

Doubtless many contractors have established internal business processes to review reports published through GIDEP to determine whether or not the incident may impact them. Some contractors, however, have not established business processes necessary to share their own discoveries with others. Forthcoming US Government regulations will require DoD and its contractors to report “counterfeit electronic parts or suspect counterfeit electronic parts” via GIDEP [x]. Furthermore, the Office of the Inspector General for DoD has recommended that counterfeit electronic parts and suspect counterfeit electronic parts be reported in writing to the contracting officer and the Department of Defense Inspector General [xi]. Contractors and subcontractors, therefore, should include reporting practices as a part of their “counterfeit electronic part avoidance and detection system” [xii].

[i] The Government–Industry Data Exchange Program (GIDEP) is a cooperative activity between government and industry participants seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities and equipment. <http://www.gidep.org/>

[ii] “Counterfeit Parts: Increasing Awareness and Developing Countermeasures”, Aerospace Industries Association of America, March 2011

[iii] Report of the Inquiry into Counterfeit Electronic Parts in the Department of Defense Supply Chain, Senate Armed Services Committee, May 21, 2012 (112th Congress, 2nd Session, Senate Report 112–167); p.17-19

[iv] GAO-10-389, “Defense Supplier Base: DOD Should Leverage Ongoing Initiatives in Developing Its Program to Mitigate Risk of Counterfeit Parts” (Mar. 2010)

[v] FY12 NDAA §818(c)(4)

[vi] FY12 NDAA §818(c)(5)

[vii] GIDEP Failure Experience Data (FED) reports provide information about problems, potential problems and failure experience data on parts, components, materials, manufacturing processes, specifications, computer software, test equipment and safety. FED is exchanged to improve quality, reliability, and delivery schedules and to reduce costs. FED reports include “Alerts” and “Problem Advisories”. (<http://www.gidep.org/>)
NOTE: Some GIDEP reports are not accessible to Industry members, such as “Limited Distribution Agency Action Notices”. This analysis does not include these reports.

[viii] “An Overview of Historical Trends Relating to Suspect Counterfeit, Non-Conforming and High Risk Electronic Components”, ERAI, Proceedings of DMSMS 2013 Conference (December 2013); p.20
<http://www.meetingdata.utcd Dayton.com/agenda/dmsms/2013/proceedings/presentations/P7019.pdf>
ERAI reporting data used with permission from the author.
ERAI, Inc. is a privately held information services organization that monitors, investigates and reports issues affecting the global semiconductor supply chain. (<http://www.eraicom/>)

[ix] Ojo, Bolaji; “DoD Sets Tough Counterfeit Prevention Rules”; Electronic Purchasing Strategies, 15 July 2013
<http://electronicspurchasingstrategies.com/2013/07/15/dod-sets-tough-counterfeit-prevention-rules/>

[x] FAR Case 2013-002, Expanded Reporting of Nonconforming Supplies

[xi] Comments submitted to in response to DARS-2013-0014, Detection and Avoidance of Counterfeit Electronic Parts (DFARS Case 2012-D055); Document DARS-2013-0014-0020

[xii] DARS-2013-0014, Detection and Avoidance of Counterfeit Electronic Parts (DFARS Case 2012-D055); proposed subpart 246.870-2(b)(6) and clause 252.246-70XX(c)(vi)



Henry Livingston is an Engineering Fellow and Technical Director at BAE Systems Electronic Systems and a pioneer in establishing detection and avoidance practices to prevent the infiltration of counterfeit electronic parts in defense and space applications. He also participated in many government and industry conferences, seminars and training events as a leader in counterfeit part avoidance practices. Henry published numerous papers and articles on component reliability assessment methods; obsolescence management; semiconductor industry trends; and counterfeit electronic parts avoidance and detection. Henry is a member of the SAE Counterfeit Avoidance Steering Group; the SAE G-19 Counterfeit Electronic Parts Committee; the TechAmerica Supply Chain Assurance Subcommittee; the former Aerospace Industries Association Counterfeit Parts IPT; the Industry Advisory Group to the Government-Industry Data Exchange Program; and the Counterfeit Prevention Task Group of the Space Quality Improvement Council and the Space Suppliers Council.
