

The Office of Standards Enforcement (OSE) of the NHTSA has initiated a compliance evaluation program that created a commercial revolution in the assessment of Quality Control activity by suppliers. This program enforces the work of the Office of Crash Avoidance (OCA) which must follow the Congressional mandate to issue minimum safety standards. Many persons not directly involved in new vehicle safety standards are unaware that the OCA/OSE interpretation of "minimum" would invalidate the use of many AQL (acceptable quality level) sampling plans, e.g., MIL-STD 105. Most sampling plans had been used throughout the automotive industry to establish nominal performance levels with permissible deviations. These sampling plan results were understood, accepted and agreed upon when negotiated by supplier and customer in commercial contracts. NHTSA determined, in the case of safety-related products, to not accept sampling techniques as proof of compliance to a minimum standard unless there was sufficient overdesign incorporated in the acceptance values to assure 100% compliance.

The equipment manufacturers were not at first aware of the compliance consequences when the industry "nominal" design value became the NHTSA "minimum" value - essentially making 50% of the old product noncomplying. The Director of the Office of Standards Enforcement, Francis Armstrong, presented a paper entitled "The Issues of Complying with Federal Motor Vehicle Safety Standards and Other Requirements" in January 1969. See Appendix 3 for excerpt. This paper has a very clear illustration [its Fig. 7] of the significance of the change the suppliers had to make in their designs to assure compliance if all design sampling plans were employed for manufacturing control. The paper should be a part of the technical reference material in any design document for vehicle equipment suppliers or vehicle manufacturers of products

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