The Evolution of Unique Interiors and Their Effect on Cabin Safety

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Historically, transport category aircraft cabin interior configurations have included simple seats, crew bunks, hat racks/stowage bins, galleys, simple galley inserts, closets, partitions and lavatories on multiple passenger decks. The classic driver for interior configurations was functionality.

Today, and as we look to the future, far reaching ideas are inspiring concept developments which are intended to create an innovative, inviting, and delightful cabin interior to reinvent the passenger flying experience for the 21st Century and beyond. As we explore the drivers for these innovations such as material obsolescence, operational efficiencies and airline differentiation, we can identify some 'new norms' in cabin designs such as exclusive seats, apartments, suites, showers, connectivity features, cabin systems, passenger entertainment, state-of-the-art cooking technology, and "destination areas" to name a few. Airlines are compelled to develop cabin interior configurations that are conceptually far reaching, enabling market differentiation, thus enticing more passengers to fly with them. As these cabins evolve, the added integration and complexity of the designs is presenting new challenges with respect to cabin safety.

Our Industry's aviation safety record has historically seen significant improvements as a direct result of research driving regulation development and compliance activity. However, without continued and focused research, we can only assume the increasing safety trend for cabin designs of the future.

This presentation will explore how an integrated approach to cabin safety research can facilitate unified yet flexible rule making enabling continued airline differentiation in cabin interior designs and correspondingly continued improvements in our aviation safety record. Research and rule making that enable customer differentiation while empowering our industry to strive for cabin safety excellence is required. We must challenge ourselves to think beyond today's regulations and methods. What can the industry do to continue to improve safety yet support the Airlines in their quest for differentiation? We will probe how expanded research, rulemaking, and removing organizational boundaries can facilitate integration of designs, training and operations for system efficiencies in these designs for the 21st Century and overall increases in cabin safety.