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#### Book Review

#### BOOK ON U.S. NOISE REGULATORY POLICY IS TIMELY ADDITION TO SCHOLARSHIP, KIRSCH SAYS

[Following is a review by attorney Peter Kirsch, of the Denver firm Kaplan Kirsch & Rockwell, of a new book by acoustical experts Sanford Fidell and Vincent Mestre that provides the context and analysis necessary to understand contemporary U.S. aircraft noise regulatory policy.]

Sanford Fidell and Vince Mestre's *A Guide to U.S. Noise Regulatory Policy* is an especially timely addition to scholarship in the field of airport noise. As FAA considers a congressionally mandated evaluation of changes to its noise threshold of significance (65 dB DNL) and its metric of choice (DNL), it is especially useful to understand the history of noise assessment and measurement in the United States.

Fidell and Mestre provide a useful explanation of how the key components of airport noise assessment came to be – the metrics for measuring aircraft noise, the bases for standards for aircraft engine noise, and the methods of evaluating whether noise should be considered to be significant. They also explain how policymakers have dictated a balancing among competing social objectives in which a heavy thumb is placed on the scale in favor of aviation.

Fidell and Mestre's monograph is less a guide to existing policy than a thorough and scientific examination of how U.S. policy came into being. For anyone who needs to understand why airports and the industry is so dependent upon the DNL metric and the 65 dB DNL threshold, for example, their book offers an indispensable academic foundation.

It is hardly surprising, given Fidell's long-standing and outspoken criticism of both the metric and the threshold, that the book contains a cogent and persuasive explanation of the flaws in both. He explains how both the metric and, especially, the threshold came about almost serendipitously but have both become so enshrined in federal policy that they both have taken on a meaning and significance far beyond what was originally intended.

Fidell and Mestre's analysis of changes to airport noise policy is particularly compelling – as they explain, the current noise regulatory policy is technically obsolete and logically indefensible. They raise an intriguing argument that the policy was never technically or logically particularly sound and they leave the reader with no doubt that whatever policy underpinning – however weak – that once existed is fifty or more years out of date. They accurately observe that policy decisions based upon 1970's technological conclusions, regardless of their validity at the time, are certainly inappropriate in the 2020s.

One of the pillars of the book is the premise that one-size-fits-all is not an appropriate basis for national decision making, even if there is wisdom in having a consistent national noise policy.

Fidell and Mestre accurately observe that there is enormous variability in community reactions to airport noise but the existing federal policy that relies on a single metric and a single threshold of significance takes no account of that variability.

While the book provides valuable insight – and substantial technical explanation which may be more sophisticated than most readers can easily digest – it does not provide nearly enough explanation for how the narrow objective of the early efforts to develop a single national noise metric and national threshold of significance has morphed into the almost talismanic importance of 65 dB DNL.

While Congress did direct the FAA to develop a single metric and threshold for purposes of noise compatibility planning in the late 1970s, the FAA has adroitly taken that directive far beyond Congress' original intent. The effect is that FAA now mandates a single metric and threshold for all purposes at all times for all airports, and FAA has effectively convinced the courts that its expertise deserves deference in that decision.

This monograph is a valuable addition to literature on the understanding of the technical and scientific bases for existing noise policy and provides a thoughtful and compelling criticism of many elements of that policy. It would be refreshing if federal policy makers were to read and understand the Fidell – Mestre monograph as they move forward with considering noise policy changes.

A Guide To U.S. Aircraft Noise Regulatory Policy

Fidell, S.; Mestre, V.

2020, XIV, 144 p. 21 illus., 15 illus. in color., Hardcover

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