

Fred I. Stahl and John Archea, *An Assessment of the Technical Literature on Emergency Egress from Buildings*. Washington, D.C.: National Bureau of Standards, 1977, 57 pp. (NBSIR 77-1313, order no. FB 273 944, NTIS, Springfield, Va.)

Whether it is called a review, comment or response, any published view of Stahl and Archea's work should include the recommendation that it be read widely — because it has important things to say about research and standards — and read carefully — because it fails to point out some pitfalls that have long plagued the literature on emergency egress.

The report could be regarded not as a comprehensive literature survey but rather a critical, in-depth introduction to a review of several subject areas covered in the literature. Stahl and Archea point out methodological problems and limits of applicability for several categories of research related to emergency egress. These categories are: field studies of use of circulation facilities in non-emergency conditions; laboratory studies of signage, lighting and visibility in simulated smoke conditions; and post-incident social surveys of occupant responses to and behavior in fire emergencies. They note that only some early findings of research in the first category (in particular a 1935 report based not so much on research as on committee decisions) have been applied to egress standards such as those adopted by the Occupational Safety and

Health Administration for which the assessment was done.

On the basis of their critical assessment of generic research areas, along with a somewhat less critical review of individual studies, the following categories of research are recommended for intensive investigation:

(1) research on access to exitways;

(2) resolution of the discrepancies between findings by Pauls and other investigators of the carrying capacity of exitways;

(3) continued research on egress signage, lighting, and visibility through smoke...; and

(4) definitive identification and description of emergency scenarios and response patterns.

Stahl and Archea have correctly identified several major areas (1,3,4) for intensive investigation; they could have even made a much stronger case for research in the first category. Their recommendation (2), however, is either badly worded or out of place in this list. Only a relatively simple study of the literature is required to identify causes of discrepancies in findings; for one thing the empirical data are very consistent and errors in drawing inferences are easily seen — something that a critical review of individual reports would have revealed. In other words, by concentrating on more complex methodological issues related to classes of research, Stahl and Archea may have missed an opportunity to break the circle in the egress literature in which some findings, not justified in the first place, are uncritically repeated and sometimes even embellished. Unfortunately, with repetition comes apparent legitimacy; thus it is the task of revising egress literature — not the investigation of discrepancies — that now will be intensive.

Although Stahl and Archea appear to have missed what this reviewer sees as an opportunity to set the methodological record straight on one simple point, their positive contribution on more far-reaching methodological issues far outweighs this failing. I hope that

they are given opportunities to extend the assessment begun with this report.

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