

Wiegmann, D., & Goh, J. (2002). Visual flight rules (VFR) flight into instrument meteorological conditions (IMC): A review of research with an eye toward prevention. *Aviation, Space, and Environmental Medicine*, 73(3), 298.

**VISUAL FLIGHT RULES (VFR) FLIGHT INTO INSTRUMENT METEOROLOGICAL
CONDITONS (IMC): A REVIEW OF RESEARCH WITH AN EYE TOWARD PREVENTION**

D. A. WIEGMANN AND J. GOH.

University of Illinois at Urbana-Champaign, Savoy, IL

Purpose. General aviation (GA) accident statistics indicate that visual flight rules (VFR) flight into instrument meteorological conditions (IMC), or unqualified flight into bad weather, is a major safety hazard within general aviation. Historically, very little research has been conducted to identify the factors that influence VFR pilots' decisions to risk flying into deteriorating weather conditions. Without an empirical understanding of these factors, decision-making training within pilot training programs has been based largely on common sense and intuition. Hence, such programs have been relatively ineffective in reducing the occurrence of such accidents. To address this issue, the FAA commissioned the University of Illinois to conduct both archival and laboratory research to empirically explore the factors that contribute to pilots' decision to "press on" into deteriorating weather. The purpose of this paper is to review the results of these research efforts. Theories of aeronautical decision-making that have emerged from these activities will be discussed. Implications for developing better aeronautical decision-making training programs will be explored.