

**Biography:**

David Woods (Ph.D., Purdue, 1979)

David Woods is Full Professor in Industrial and Systems Engineering and the Institute for Ergonomics at the Ohio State University. He has developed and advanced the foundations and practice of Cognitive Systems Engineering since its origins in the aftermath of the Three Mile Island accident in nuclear power. He has studied data overload in control centers, critical care medicine, and inferential analysis. He has studied team work between people and automation, through field studies in anesthesiology and aviation and cooperative work systems in space mission operations and health care. He has designed new concepts for aiding cognitive work and applied them in many different complex work domains. His work on how to make systems resilient to improve safety is based on this body of results, including accident investigations in nuclear power, medicine, and space operations. Multimedia overviews of his research are available at url: <http://csel.eng.ohio-state.edu/woods/> and he is co-author of the monographs *Behind Human Error* (1994), *A Tale of Two Stories: Contrasting Views of Patient Safety* (1998), *Joint Cognitive Systems* (2005; 2006), and *Resilience Engineering* (2006).

Dr. Woods has served on National Academy of Science and other advisory committees including recently Aerospace Research Needs (2003), Engineering the Delivery of Health Care (2005), and Dependable Software (2006). He has testified to U.S. Congress on Safety at NASA and on Election Reform. He was one of the founding board members of the National Patient Safety Foundation, Associate Director of the Midwest Center for Inquiry on Patient Safety of the Veterans Health Administration, and advisor to the Columbia Accident Investigation Board. He currently directs the OSU Consortium on Information Analysis and Comprehension.

Dr. Woods has been President of the Human Factors and Ergonomic Society. He is a Fellow of that society as well as the American Psychological Society and the American Psychological Association. He has shared the Ely Award for best paper in the journal *Human Factors* (1994), a Laurels Award from Aviation Week and Space Technology (1995) for research on the human factors of highly automated cockpits, the Jack Kraft Innovators Award from the Human Factors and Ergonomics Society (2002), an IBM Faculty Award (2005) and five patents for computerized decision aids.

Current research projects address cross checks across agents, event recognition, engineering resilience, distributed re-planning, human-robot coordination, perspective taking, and support for information analysis being carried out in security, emergency response, space, and medical contexts.