Human Factors Engineering II

Discussion Questions for Working Minds

Crandall, B., Klein, G., & Hoffman, R.S. (2006). *Working Minds: A Practitioner's Guide to Cognitive Task Analysis*. Cambridge: The MIT Press.

III. Putting CTA Findings to Use

Chapter 11. The Role of Cognitive Requirements in System Development

1. What is Cognitive Systems Engineering (CSE) and what does Decision-Centered Design (DCD) have to do with it?
2. What is a Decision Requirements Table (DRT), what information does it contain, and how does it relate analysis to design?
3. What is the rationale for using tough cases, rather than routine cases, in DCD?
4. Relate the DCD process to the Human Machine Systems Engineering (HMSE) process used in IE 545. What are the similarities and differences?
5. Develop your own summary of the DCD process, being sure to include a synopsis of the Critical Decision Method (CDM, pp. 73-83) in it.
6. What do you see as the main strengths and weaknesses of DCD?