

**Abstract**

This paper reviews literature related to heuristic cognitive strategies as they are used by flight crews. A review of heuristic and naturalistic cognition is presented. An example set of heuristics and cognitive biases are presented and where possible exemplified by 19 airline accidents. The paper suggests two tentative research designs which could be pursued to quantitatively study heuristics and its impact on aviation decision making. The paper concludes that aviation pilot training would benefit by introducing pilots to the concepts and constructs of heuristic thinking.