

Human-Centred Automation of Threat Evaluation in Future Fighter Aircraft

Tove Helldin, Göran Falkman
tove.helldin@his.se, goran.falkman@his.se

Informatics Research Centre
University of Skövde
Box 408
SE-54128 Skövde

Abstract: It has long been considered crucial to develop decision support systems that aid fighter pilots achieve their goals. Such systems often require automation of tasks formerly performed manually by the pilots, in situations characterized by huge amounts of (possibly uncertain and incomplete) sensor data and contextual information, time-pressure and dynamically changing tasks. Thus, careful investigations must be performed so as to develop such systems that provide accurate support for their users. This paper reports on the findings concerning research within the field of human-centred automation as well as presents empirical results concerning the applicability of automation guidelines when designing information fusion based support systems in the fighter aircraft domain.