

Abstract zum Seminarvortrag am 21. Juni 2016

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Alles im Blick – Identifikation von Blickbewegungsmustern bei der Überwachung im Team

By a look in the eye – The link between eye tracking measurements and operational monitoring in teams

The increasing complexity of automated systems requires teams of operators monitoring those systems appropriately. Usually, there is no direct need for action. Nevertheless, operators must be able to monitor accurately and efficiently. The DLR projects Aviator and COCO (Collaborative Operations in COntrol rooms) investigates psychological requirements on operational monitoring and decision making for members of control room teams.

Workshops with experienced pilots and air traffic controllers suggested that there is a crucial new requirement for humans operating in man-machine settings: 'operational monitoring', which "includes using one's senses to follow meaningful information from various sources (e.g. an automated system) responsibly, even when there is no direct need for action.

Psychophysiological studies support the idea that eye movements offer an appropriate means for measuring the acquisition of visual information. As our department is responsible for personnel selection of trainees for ATC and for the cockpit, our objective is to select candidates - in the long term - on the basis of eye movements.

In the course of this presentation an insight into the link between eye tracking measurements and operational monitoring of experts, job applicants and teams of operators.