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Vortragstitel Facing Human Factors in Air Traffic Control: A New Approach to Include

Ergonomic Requirements in Workstation Design

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Abstract The HERA (Human Error in ATM) analysis shows a distinctive occurrence in

incidents wherein the visual perception of information plays a key role in German air traffic control. The reasons can be partially traced back to workstation design, where basic ergonomic rules and principles are not sufficiently followed in some cases. In retrospective however, it is difficult if not impossible to determine why a

cases. In retrospective however, it is difficult if not impossible to determine why a system engineer came to a non-ergonomic design solution. Therefore an explorative, qualitative study was conducted to analyze how system designers work and reach certain decisions. It was found that although employees are willing to address human factors and show a high level of empathy to those performing air traffic control tasks, organizational aspects and the non-ergonomic focus in educational background make it difficult to do so. To improve the current situation knowledge acquisition, knowledge application, and knowledge transfer were identified as the most relevant factors during system design. Therefore this paper suggests the development and implementation of a Design Process Guide, a

software tool that offers a contextual and process oriented access to ergonomic

information.