



Human Factors Methods Database

This project will update, develop and integrate the Human Factors design and evaluation methods database that was developed by the HFI DTC over five years ago. New methods, updated methods and technical aids that have been developed for the methods will be included in the revised version.

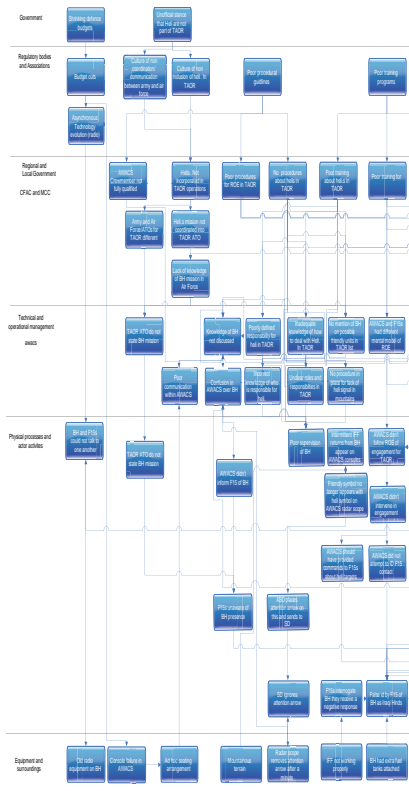


Fig. 1 AcciMap from Black Hawk shootdown in 1994.

This project involves a systematic update of the existing database to include a plethora of the latest methods. A meticulous literature review of all contemporary developments in Human Factors methods as well as methods from other domains is being undertaken. Sources for the review include Human Factors books, journals from both the Human Factors domain as well as complementary domains such as engineering, using academic search engines etc.

Over fifty methods have already been identified for inclusion in the updated version of the methods database. The updated database will be based upon state of the art development in Human Factors theory and the correlating methods. These methods will represent an increased understanding of each of the subject areas due to these theoretical developments.

An example of such theoretical developments can be seen within the domains of human error and cognitive task analysis. Cognitive mapping has become popular in both domains and has given rise to numerous methods employing cognitive mapping techniques. Figure 1 is an extract of an AcciMap, a cognitive mapping tool, exploring the American Black Hawk helicopters shot down by American F15 fighter jets in Iraq in Operation Provide Comfort during the Persian Gulf War in 1994.

Overall the modernised methods database will provide a thorough account of the most up to date methodologies based upon the newest developments within the human factors domain. Increased knowledge of methods, and method updates will ensure that the updated database will include improvements in numerous areas including accuracy, reliability and comprehensiveness. The addition of new technical aids and tools to help conduct the methods will improve the usability of the methods as well as decrease the time, cost and training needs associated with the methods.

Military Benefit:

The initial database was well received and was incorporated into Defence Standard (Def Stan) 00-250, as well as Maritime Acquisition Publication (MAP) 01-011 ensuring that system development and procurement is aided by relevant human factors methods. The update will ensure the most up to date methods are used improving comprehensiveness, accuracy, reliability and lowering the time, cost and training associated with methods. In summary the update will ease the use of these human factors methods whilst at the same time increasing the benefits of employing them. The database can be exploited throughout the MOD Unified Customer.

