

Incorporating Human Factor Concepts in the Lifecycle of Aerospace Systems

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Abstract. This paper explains the need for a thorough understanding of the integration of human factors during all phases of a product's lifecycle in aerospace systems. The analysis is performed from a systems perspective, where humans are the nucleus of the system needed to accomplish a goal, rather than isolated parts looking to complete a single task. The lack of human factor considerations in early design phases triggers human errors during the assembly and test phases, creating increase in cost and slip on schedule. The paper proposes different measures that can be incorporated to current aerospace programs that deal with human safety. It also provides approaches for entrepreneurs and rising aerospace companies to be able to integrate human factor concepts in the development of their products. If human factor requirements are taken into account, costly errors at the manufacturing stage can be reduced when small errors are found early in the program.