

Requirement ID: 638

Sponsor Organization: AFS

POC: Les Vipond

Requirement Title: Human Error Risk Analysis in Aviation Maintenance and Flight-line Operations

Funded Requirement:

- FY02: No
- FY03: No
- FY04: No
- FY05: No

Requirement Statement: Current systems to capture human error in aviation maintenance have mixed reviews. Most focus on proximate causes and immediate circumstances, while others use a task analytic approach to examine distal events. However, these approaches do not uncover all of the “latent conditions” such as teamwork or inadequate supervision that effectively “set the stage” for “active failures” to occur. Furthermore, they do not provide for human error risk assessments based upon exposure, severity of outcome, number of operations, etc.<sup>527</sup>

Background: A taxonomic framework suitable for use as a training vehicle, investigator reference, database structure, etc. An analysis of a range (major to minor) of Part 121 organizational mishaps obtained from the commercial airlines, rework facilities, transient lines, etc. A documented risk assessment process suitable for Part 121 organizations A human factors risk assessment for problems identified in the Part 121 analyses Product: This research will provide a multi-dimensional framework to support the investigation, reporting, and analysis of commercial aviation maintenance incidents. It will also generate a process to identify human factors problems, determine present trends, and estimate associated risks in commercial aviation. Driver: AOA Performance Plan(2000) G-1.0.1.h/FAA Strategic Plan(2000) Initiative 47: ASAP AC 120-56/FAA National Aging Aircraft Program Plan Deliverable: Risk Analysis

Output:

Regulatory Link: