Hazard Prioritization Procedure (Illustration)

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|  | **OPTION 1 (Basic)** | **OPTION 2 (Advanced)** |
| **Criteria** | Prioritization in relation to the Hazard’s worst possible consequence (incident severity) category. | Prioritization in relation to the Risk Index (severity & likelihood) category of the Hazard’s worst possible consequence. |
| **Methodology** | a) Project the Hazard’s worst possible consequence  b) Project this consequence’s likely occurrence classification ie it will be deemed to be an accident, serious incident or incident?  c) The Hazard’s prioritization is thus:   |  |  | | --- | --- | | **Projected Consequence** | **Hazard Level** | | Accident | Level 1 | | Serious Incident | Level 2 | | Incident | Level 3 | | a) Project the Risk Index number (based on the Severity & Likelihood matrix) of the hazard’s worst possible consequence (Refer sample matrix in SMM Fig1-11, chpt 1).  b) With reference to the related Tolerability matrix, determine the Risk Index’s Tolerability category ie Intolerable, Tolerable or Acceptable (or equivalent terminology/ categorization)  c) The Hazard’s prioritization is thus:   |  |  | | --- | --- | | **Projected Risk Index** | **Hazard Level** | | Intolerable/ High Risk | Level 1 | | Tolerable/ Moderate Risk | Level 2 | | Acceptable/ Low Risk | Level 3 | |
| **Remarks** | This Option 1 takes into consideration the severity of the Hazard’s projected Consequence only. | This Option 2 takes into consideration the severity & likelihood of the Hazard’s projected Consequence – a more comprehensive criteria than Option 1. |

**Note:**

From a practical viewpoint, Option 1 would be more viable than Option 2 for the purpose of a simpler and faster classification system. The purpose of such a classification system is to facilitate hazards sorting and prioritization for risk mitigation action. Once each hazard is classified, it would be apparent that they may be sorted as Level 1, 2 and 3 hazards. Priority or attention for risk mitigation may then be assigned according to their level 1/ 2/ 3 classification, as appropriate.

Hazards may need to be categorized and sorted by areas (eg flight operations, maintenance, workshops, etc) or by sectors (eg ATS, AGA, AMO. OPS, etc) as applicable, before the above hazard prioritization process. Hazards which are deemed to be purely Work-Workplace (occupational safety) related with no impact on aviation systems safety may need to be separately processed for action by relevant function of the organization responsible for industrial/ occupational safety systems.

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