CHAPTER 23. JOB HAZARD ANALYSIS

2300. PURPOSE. This chapter establishes minimum requirements for conducting job hazard analyses (JHA’s) at FAA facilities.

2301. BACKGROUND.

   a. The FAA is committed to providing for the occupational safety and health of personnel, preventing accidental loss of material resources (e.g., property damage), and avoiding interruptions to essential services resulting from accident and other incidents. An effective occupational safety and health program must include procedures to evaluate job hazards and to eliminate or control the related risks to employees or FAA property. Although identification of possible property damage losses is important, the primary objective of a JHA is to identify the risk of injury associated with systems or equipment, a task or series of tasks, and to recommend solutions to reduce the risk to a standard or acceptable level.

   b. A JHA facilitates the discovery and evaluation of hazards that exist in the workplace and the selection of control measures to reduce or eliminate the hazard. Once the hazards have been identified, an evaluation by technically qualified safety personnel (as defined in Chapter 1, para. 11h) will determine the priority for the establishment of appropriate control measures. Based on the potential severity and risk of injury or property damage, hazards shall be promptly eliminated or controlled.

   c. OSHA standard 29 CFR 1910.132(d) requires that the FAA assess the workplace to determine if the hazards that require the use of personal protective equipment (PPE), such as head, eye, face, hand, or foot protection, are present or are likely to be present. This requirement is also covered in Chapter 25, FAA Personal Protective Equipment, of this order. If hazards or the likelihood of hazards are found, the FAA shall select appropriate PPE and require that affected employees use properly fitted PPE suitable for protection from these hazards. In addition, the FAA must certify, in writing, that a workplace hazard assessment has been performed that identifies the workplace evaluated, the person certifying the evaluation, and the dates of the evaluation. A JHA will satisfy these requirements.

2302. SCOPE. This chapter applies to all FAA personnel who may encounter health and safety hazards while performing their assigned work duties.

2303. GOALS AND OBJECTIVES.

   a. The primary goal of a JHA is to break down potentially hazardous jobs into their basic sequential job tasks in order to better identify which tasks are most closely associated with the hazard(s). When the hazards have been identified, then the associated steps will be reviewed to determine what can be done to make them safer to perform. Region and center management must consider all potential for exposures and the likelihood of accidents in their operations when determining the priorities.

   b. Ultimate responsibility for implementing a JHA program rests with region and center management in accordance with their responsibilities as outlined in Chapter 1 of this order.

   c. The responsibility for conducting JHA’s rests with technically qualified safety personnel. Supervisors and other applicable personnel, at the worksite or facility, shall participate since they have the best knowledge of day-to-day job tasks and any related problems. Completed JHA’s are to be reviewed by the Regional and Center Safety and Health Managers (R/COSHM).

2304. TRAINING. Prior to any FAA employee being required to conduct a JHA, he/she shall receive training in the JHA process. JHA’s shall be conducted by technically qualified safety personnel who have the experience and training to identify hazards in the workplace.
2305. STEPS IN THE JHA PROCESS.

   a. Select the job(s), tasks, operations or processes to be analyzed by reviewing injury and illness data. Initial JHA’s should be scheduled for those with the highest rates. Where accident data is lacking, a review of the nature of the job and the equipment and/or materials being used can help to determine which jobs should receive a JHA.

   b. Break the job down into individual steps and list each step on the FAA JHA Worksheet (Figure 23-1). Note: The Worksheet may be tailored to the needs of the organization provided the minimum information shown on the form is retained.

          (1) Prior to breaking the job down into individual steps, the evaluator should examine the location where the job is being performed to determine if there are any apparent hazards, such as poor lighting, live electrical contacts, improperly stored materials or waste, adjacent operations that may affect the safe operation of the job under review, etc. These should be annotated on the JHA Worksheet.

          (2) A critical component of this step is to list all of the tasks required to perform the job on the JHA Worksheet. The evaluator should start by interviewing appropriate personnel who are familiar with the job and/or equipment. The intent of the interviews is to determine the orderly sequence of job tasks and any perceived hazards. Note: OSHA Publication 3071, Job Hazard Analysis, provides useful examples of the level of detail needed in a JHA.

          (3) Visual observations shall be made, where possible, of employees performing the actual job tasks.

   c. Identify all hazards and potential hazards associated with each step and thoroughly document the findings on the JHA Worksheet. Refer to OSHA Publication 3071 for examples.

   d. Review the JHA Worksheet to ensure it is thorough, accurate, and that the job is broken down into a sufficient number of steps.

   e. Evaluate the hazards and develop solutions.

          (1) Once the hazards are identified, they will be evaluated to determine what control measures are necessary.

          (2) Apply the Hierarchy of Control Measures. These are approaches that can be taken to reduce or eliminate hazards. They should be considered in the following order of precedence.

              (a) Elimination - removing the hazard or hazardous work practice from the workplace. This is the most effective control measure.

              (b) Substitution - substituting or replacing a hazard or hazardous work practice with a less hazardous one. For example, substitution of a less hazardous or toxic solvent for a highly flammable or carcinogenic solvent.

              (c) Engineering control - if the hazard cannot be eliminated or substituted, an engineering control is the next preferred measure. This may include modifications to tools or equipment such as providing guards to machinery or equipment, or providing local exhaust or general ventilation to control emissions of toxic or hazardous gases, vapors, or particulates.
(d) Isolation - isolating or separating the hazard or hazardous work practice from people not involved in the work or the general work areas. This can be done by marking off hazardous areas, or by installing screens or barriers.

(e) Administrative control - includes introducing work practices that reduce the exposure to workers. Some examples include limiting the amount of time a person is exposed to a particular hazard, demarcating exclusion areas and establishing physical access controls to prevent workers from entering hazardous areas, and ensuring proper training of employees.

(f) Personal protective equipment - should be considered when other control measures are not feasible or as an interim control until one of the other described controls can be implemented. For more information, see Chapter 25, FAA Personal Protective Equipment.

d. Repeat the JHA process as necessary, by evaluating new equipment or work processes, reviewing accident records, and periodically reevaluating the suitability of previously selected personal protective equipment and/or engineering controls.

2305. RECORDS. Records of JHA’s shall be maintained in accordance with applicable OSHA requirements. Where OSHA requirements are lacking, the records shall be maintained in accordance with approved records retention requirements in FAA Order 1350.15.
Figure 23-1. JOB HAZARD ANALYSIS WORKSHEET\(^1\)

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<thead>
<tr>
<th>TASK OR JOB STEP</th>
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\(^1\) This worksheet will meet the minimum for hazard assessment requirements of OSHA’s personal protective equipment standard, 29 CFR 1910.132.