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| UNIT OVERVIEW |
| **Course** Helicopter Crewmember, S-271 |
| **Unit** 6 – Risk Management |
| **Time** TBD |
| **Objective**  Demonstrate the ability to apply Risk Management techniques to helicopter operations. |
| **Strategy**  This unit will help students to apply Risk Management techniques to helicopter operations and proficiency checks. This will be accomplished through lecture, discussion, and hands-on exercise. |
| **Instructional Methods**   * Facilitation/informal lecture with PowerPoint * Group exercise |
| **Instructional Aids**   * Personal computer with LCD projector and presentation software * Fireline Handbook, PMS 410-1 * IRPG * IHOG |
| **Exercise**   * Risk Management Matrix |
| **Evaluation Method(s)**   * Review and discuss group exercise. |
| **Outline**  I. Risk Assessment and Management  A. What is Risk Assessment?  B. What is Risk Management? |
| **Aids and Cues Codes**  The codes in the Aids and Cues column are defined as follows:  IG – Instructor Guide IR – Instructor Reference  SW – Student Workbook SR – Student Reference  HO – Handout Slide – PowerPoint |

# UNIT PRESENTATION

COURSE: Helicopter Crewmember, S-271

UNIT: 6 – Risk Management

| OUTLINE | AIDS & CUES |
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| Unit Title Slide.  Present Unit Objective.  This unit combines the IHOG and IRPG Risk Management Processes.  i. risk assessment and management  A. What is Risk Assessment?  Risk assessment is the process which associates “hazards” with “risks.”  Risk assessment is the initial part of the risk management process which includes:   * Identifying know hazards and * Analyzing the degree of risk associated with each hazard   B. Risk Management Process  Risk management is a continuous systematic process of identifying and controlling risk in all activities according to established parameters.  This process includes detecting hazards, assessing the risk, and implementing and monitoring risk controls to support effective, risk based decision making.  Risk management is a 5-step cyclical process individuals can use to determine if a mission should be performed and to identify hazards that need to be mitigated.  Refer students to Chapter 3 of the IHOG (Operational Planning) 4Ms and Risk Assessment Matrix. Answer any questions they may have.  1. Step 1 – Identify Hazards/Situational Awareness  What are hazards?  They are potential sources of danger that could be encountered while performing a task or mission.  Here are some potential hazards associated with any mission:   * Weather * Terrain – landing areas * Wires * Military training area * Take-off and landing weights * Training and proficiency level   Risk Factor that determine hazards are generally divided into four categories: The 4Ms   * Method * Medium * Man * Machine   2. Step 2 – Assess the Hazards/Hazard Assessment  How should hazards be assessed?  Each hazard should be identified and analyzed by examining:   * Effect – the potential effect of the hazard on personnel and equipment. * Probability – The probability that the hazard will occur.   How to determine the risk?   * Determine the risk associated with each hazard you have identified. * Determine the risk associated with the combined hazards you have identified.   3. Step 3 – Develop Controls Make Decision/Hazard Control  What is a risk decision?   * It is a decision arrived at by weighting the risks of performing the mission against the benefits of performing the mission.   Be aware that the impulse will be to get the job done even during non-emergency operations. Avoid taking a mission-oriented attitude when evaluating the risk of a helicopter operation.  Objectively evaluate the risk of performing the operation and consider the possibility of using alternative methods to accomplish the mission.  Who should make a risk decision?  Decision should be made at the level of command that corresponds to the degree of risk associated with that mission.   * Extreme High/High Risk Decision (In red and orange)– An extremely high or high-risk decision, which potentially involves the safety of the aircraft and pilot, should be evaluated through the chain of command to the highest level of responsibility for the operation (i.e., the Operations Section Chief on a fire or the Line Manager for a project mission). * Medium Risk Decision (in green) – A medium-risk decision, which potentially involves extra cost or delays, should be evaluated at a somewhat lower level of command such as the Air Operations Branch Director or the Project Aviation Manager. * Low Risk Decision (in blue) – A low-risk decision, which potentially involves little or no effect on the personnel or equipment should be evaluated and determined at the Helibase Manager or Helicopter Manager level.   4. Step 4 – Implement Controls/Decision point  What are controls?  A control is any kind of action that is taken to mitigate the risks that have been identified. These controls can range from writing a special-use action plan to simply conducting a short safety briefing. Examples:   * Brief the pilot * Brief personnel * Weigh and prioritize loads * Evaluate helispot   5. Step 5 – Supervise  How do you supervise control actions?   * **Brief** – to ensure that all personnel know what they are supposed to do. * **Follow-up** – on instruction to see that people are doing what is expected. * **Update** – and evaluate the plan continually. * **Adjust** – or make changes as unforeseen issues arise. * **Debrief** – after mission is completed. * **Incorporate** – lesson learned for future use.   Ask students if they have any questions about the 5-step process of assessing and managing for risk.  Refer back to the IHOG if necessary.  Review Unit Objectives.  Hand out unit quiz. Correct quiz as a class. | Slide 6-1  Slide 6-2  Slide 6-3  Slide 6-4  Slide 6-5  Slide 6-6  Slide 6-7  Slide 6-8  Slide 6-9  Slide 6-10  Slide 6-11  Slide 6-12  Slide 6-13  Slide 6-14  Slide 6-15  Slide 6-16  Slide 6-17  Slide 6-18  Slide 6-19  Slide 6-18  Slide 6-19  Slide 6-18  Slide 6-19  Slide 6-20  Slide 6-21  Slide 6-22  Slide 6-23  Slide 6-24  Slide 6-25  Slide 6-26  HO-6-1 |