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| UNIT OVERVIEW |
| **Course** Helicopter Crewmember, S-271 |
| **Unit** 10 - Field Exercise |
| **Time** TBD |
| **Objective**  1. Prepare a cargo load  2. Use proper procedures for passenger transport, loading /unloading internal and external loads  3. Marshall the helicopter using hand signals.  4. Demonstrate compass and stick/pencil method to assess tree heights. |
| **Strategy**  This field exercise will help students to perform the duties of the HECM through hands-on application of the concepts taught in the previous units. This field exercise is not optional and each student will be assessed on their performance of the series of tasks practiced in the field exercise. |
| **Instructional Method(s)**   * Facilitate and Demonstrate operation procedures * Additional qualified instructors to serve as coaches |
| **Instructional Aids**   * Helicopter/Pilot carded to perform the specific exercise * Outdoor location (large enough to accommodate exercise stations). * Fireline Handbook, PMS 410-1 * IRPG * IHOG   In the event a helicopter is not available, the classroom can be utilized. Arrange chairs to resemble the seating of a helicopter. For loading and unloading passengers. |
| **Exercise**   * Helicopter hands-on stations |
| **Evaluation Method**   * Observation * Student Field Exercise Evaluation Performance * After Action Review (AAR) |
| **Outline**  I. Exercise Briefing  II. Exercise Stations |
| **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: 10 - Field Exercise

| OUTLINE | AIDS & CUES |
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| Present Unit Objectives.  Introduce coaches and their exercise station.  i. field exercise briefing  The purpose of this field exercise day is to provide the students with actual hands-on experience, helicopter operations and to safely conduct helicopter functions they will be required to perform in the field. Students should complete this day with complete confidence in their performance of the duties of a helicopter crewmember.  Coaches will be assigned to each station to assist and oversee the student performance. Coaches will evaluate student’s performance by initialing the field exercise evaluation indicating that the function has been performed successfully.  Students will need to successfully complete all items listed on the field exercise evaluation a minimum of two times (twice) to complete the course.  ii. exercise stations  Divide students into equal groups and rotate groups through each of the exercise stations.  Initial the student’s field exercise evaluation indicating the student successfully completed the exercise.  Record additional remarks and/or recommendations on the student’s field exercise evaluation.  Exercise station 3 and 4 could be conducted simultaneously to accomplish both exercises if desired.  Discuss emergency procedures with pilot and students. Ensure everyone involved knows and understands what is expected of them.  **Exercise Station 1 – Cargo Load**  Purpose: To have students prepare a cargo load for sling operations. Students should leave this station with the ability to identify hazardous materials and the knowledge to properly prepare a cargo load by following procedures.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Fiber tape, duct tape, electrical tape, and packaging materials, and card board boxes. * Cargo hook, cargo nets, lead lines, and swivels * Longline with remote hook * Scales   Instructions:  1. Interject as needed to assist group as they prepare a cargo load. Ensure students perform the following:   * Wear appropriate PPE * Inspection * Identify hazardous materials (notify pilot of any hazardous materials) * Packaging, weighing, securing and rigging * Liquid containers in upright position * Manifesting * Obtain pilot approval * Load and unload cargo   Each student should build a minimum of three loads. This should be done in groups of two students per load. Loads that are constructed should be different, example:   * One standard cargo net load * One light-weight cargo net load * Slingable tank, fold-a-tank, or plywood/lumber load.   Initial the student’s field exercise evaluation indicating the student successfully completed the exercise.  Record additional remarks and/or recommendations on the student’s field exercise evaluation.  2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  **End of Exercise.**  **Exercise Station 2 – Passenger Transport**  Purpose: To have students prepare passengers for helicopter transport operations. Students should leave this station with the ability to comfortably and accurately prepare passengers for helicopter transport by following established procedures.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Passengers (divide students up to be passengers) * Manifest forms for each student. * IRPG (Helicopter Passenger Briefing)   Instructions:  1. Instructors walk students through the process of manifesting, securing equipment, loading and unloading. Reinforce the importance of ensuring the overall safety of passengers.  Have students take turns individually for this exercise. Students who turn is not up will serve as passengers being prepared for passenger transport. Instructor interjects as needed to assist student. Ensure students perform the following:   * Wear appropriate PPE * Manifest each passenger * Passenger Safety Briefing (as a group) * Loading Procedures after Safety Briefing. * In-Flight Precautions * Unloading Procedures * Use the IRPG to assist them   2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  **End of Exercise**  **Exercise Station 3 – Bucket Exercise**  Purpose: To have students become familiar with bucket deployment, bucket checks, and bucket storage.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Collapsible bucket * Bucket carrying bag   Instructions:  1. Instructor will demonstrate methods before having students attempt this exercise.  Have students take turns individually for this exercise. Give the student instructions on what obstacles you would like them to assess.  Interject as needed to assist student. Ensure students perform the following:     * Wear appropriate PPE * Deploying bucket * Bucket checks * Bucket troubleshooting * Re-packaging bucket for internal transport   2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  End of Exercise  **Exercise Station 4 – Tree Height Assessment**  Purpose: To have students become familiar with utilizing stick and compass methods for determining tree heights and length of long-line in order to ensure safety. Students should leave this station with the ability to assess tree heights using both procedures.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Sticks or pencils * Compasses * Standing trees * Obstacles   Instructions:  1. Instructor will demonstrate methods before having students attempt this exercise.  Have students take turns individually for this exercise. Give the student instructions on what obstacles you would like them to assess.  Interject as needed to assist student. Ensure students perform the following:     * Wear appropriate PPE * Pencil or stick method * Compass method * Determine length of long-line * Are reasonably accurate   Instructor will need to pre-determine tree height prior to exercise.  2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  **End of Exercise**  **Exercise Station 5 – Marshalling and Radio Communication**  This exercise is to be completed during live helicopter hover hook-up and longline training.  This exercise is in conjunction with Station 6 Cargo hook-up  Purpose: To have students guide the pilot flying the helicopter with the use of established helicopter hand signals and radio communication for arrival and departure to and from landing spot, and for hover hook-ups for long line operations. Students should leave this station with the ability to comfortably and accurately guide and command a helicopter by following established procedures.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Helicopter and pilot * PPE * Radio with helicopter frequency * IRPG (Helicopter Hand Signals)   Instructions:  1. Pilot will need to be briefed on the intention of this exercise and informed to follow the hand signal given by the student.  The instructor will need to demonstrate marshalling procedures first before having students attempt the exercise.  Have students take turns individually for this exercise. Give the student instructions on what you would like for them to have the helicopter do. Maneuver the helicopter so that most of the hand signals are used.  Instructor interjects as needed to assist student. Ensure students perform the following:   * Wear appropriate PPE * Ensure and maintain eye contact with pilot * Check for obstacles and obstructions before signaling pilot to take off and land * Use approved hand signals * Radio contact has been established * Would have provided for fire protection if needed. * Use the IRPG to assist them   2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  **End of Exercise**  **Exercise Station 6 – Cargo Hook-up (Long-line and Hover Hook-up)**  This exercise is in conjunction with Station 5 Marshalling and communication  Purpose: To have students become familiar with the operation of cargo hook and/or remote hook. By following ground hook-up procedures, hover hook- up procedure and long-line remote hook procedures. Students should leave this station with the ability to comfortably and accurately hook cargo to the helicopter by following established procedures.  Time: TBD  Format: Students work in small groups of 3 to 5  Materials Needed:   * Helicopter and pilot * PPE * Remote electric hook with protective cage * One section of long line * Swivel * Lead line   Instructions:  1. Instructor must demonstrate one complete cycle first before having students attempt this exercise.  Have students take turns individually for this exercise. Give the student instructions on what hook up procedure you would like for them to do.  Interject as needed to assist student. Ensure students perform the following:   * Wear appropriate PPE * Inspect swivel * Inspect hook * Inspect line   2. When finished, gather group for a short AAR.  3. Answer any questions or concerns.  4. Have group move on to the next exercise station.  **End of Exercise** | HO-10-1 |