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Training



AIR FORCE OBSTACLE COURSE PROGRAM

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This AFI implements AFPD 36-22, *Air Force Military Training*. Use this instruction with Air Force Policy Directive (AFPD) 10-2, *Readiness*, and Air Force Instruction (AFI) 10-248, *Fitness Program*. It explains procedures and establishes requirements and guidelines for the construction, maintenance, inspection, and use of obstacle courses located on Air Force Installations. This instruction applies to the Air National Guard (ANG) and the Air Force Reserve Command (AFRC). Send Major Command (MAJCOM) supplements to HQ USAF A3 /5 for coordination and approval before publishing. Ensure that all records created as a result of prescribed processes in this publication are maintained in accordance with AFMAN 37-123, *Management of Records*, and disposed of in accordance with the *Air Force Records Disposition Schedule (RDS)* located at <https://afrims.amc.af.mil/>

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Chapter 1

INTRODUCTION

1.1. Purpose of the AFI. This instruction assigns responsibilities and prescribes policies and procedures for standardizing and modernizing Air Force (AF) physical training (PT) in concert with AFI 10-248, *Fitness Program* and sister-service directives. The AF will use PT Courses (PTC) and Conditioning Obstacle Courses (COC) to train Airmen realistically, consistent with current and future doctrine, threat analysis, and force structure. The AF will realize economy in developing these training ranges while ensuring these ranges support the training required by the fielding of new and improved ground warrior tactics, techniques, and procedures as well as published environmental, safety, and health guidance. Furthermore, it provides broad administrative, management and operational guidance for the AF Obstacle Course Program Manager (OCPM) and subordinate command level obstacle course programs. Deviations from this instruction are not authorized unless approved by AF OCPM. Submit proposed changes through your chain of command to AF/A3O-AS (AF OCPM), 1480 AF Pentagon, Washington DC 20330-1480 and AF/A3O-AS Workflow (scats.xoos@pentagon.af.mil) on AF Form 847, *Recommendation for Change of Publication*.

1.2. AF Obstacle Courses. The AF has developed two categories of courses defined as the Obstacle Course Program (OCP) to provide alternate PT, enhance confidence in physical abilities, build dynamic leadership problem solving under physical stress and to enhance understanding of teamwork while developing fundamental warrior ethos. The MAJCOM/A3 maintains overall responsibility and approval authority for Airmen utilizing obstacle courses within their Command.

1.2.1. Category I: PTC. This course is designed for every Airman in the AF with low obstacles that must be negotiated quickly. Running the course can be a test of the Airman's basic motor skills and physical conditioning. These courses should be run as an alternate form of physical conditioning. They provide an opportunity for an entire body workout within the normal AF PT program and should not be used as a pass/fail training tool unless specifically required by Air Force Specialty Code (AFSC) or unit. CAT I obstacles are designed for crawling, jumping, dodging, traversing, climbing, vaulting and balancing. These obstacles will not have an ORM severity assessment above negligible with a residual risk of Low after implementation of counter-measures IAW AFPAM 90-902, *Operational Risk Management (ORM) Guidance and Tools*.

1.2.2. Category II: COC. This course is designed with higher and more difficult obstacles than the PTC. The COC can be run for time or used to enhance the confidence, mental and physical abilities of the Airmen while cultivating the warrior ethos. If not used as a timed event; Airmen are encouraged, but not forced to complete each obstacle. CAT II obstacles will not have a potential fall distance above 14 feet without a direct connection to safety lines attended by a qualified, trained safety observer or a full-body-harness with lanyard attached to a supporting structure IAW Association of Challenge Course Technology or like standards. These obstacles will not have an ORM severity assessment above moderate with a residual risk of Low after implementation of counter-measures IAW AFPAM 90-902. CAT II obstacles not listed in **Attachment 3** must get AF OCPM approval prior to use IAW paragraph **5.3.3**. CAT I obstacles are approved for use on a CAT II course.

NOTE: MAJCOM/A3s may authorize the use of individual kit (load bearing equipment, rucksack, etc.) on all AF obstacle courses.

1.3. Alternate Insertion and Extraction (AIE) and mountaineering training walls. The AF has additional AIE and mountaineering operational requirements which are covered by other service and joint directives. These training aids (Fast Rope / Rappel Towers and Climbing Walls) will not be covered under this instruction and will remain under the operational directives and specific AFSC training and Standardization and Evaluation (Stan/Eval) guidance. These training aids, regardless of location, will remain available for those Airmen with documented training requirements.

1.4. Fire Training Facilities. The AF has additional fire training facilities which are covered by AFI 32-2001, *The Fire Protection Operations and Fire Prevention Program*. These fire training facilities are used for training specific to the Civil Engineering career field and will not be covered under this instruction.

1.5. Medical Readiness Training. AF medical personnel are required to train on stretcher carrying techniques in a variety of simulated terrain conditions IAW AFI 41-106, *Medical Readiness Planning and Training*. The Medical Readiness Training Site at Sheppard AFB TX maintains these training courses and they will not be covered under this instruction.

1.6. Academic Leadership and Development Courses. Academic Leadership and Development courses are designed to promote teamwork and camaraderie in the Professional Military Education environment. By definition these courses will not include any obstacles with a residual ORM assessment above negligible. Examples of this course are Project X, Leadership Reaction Courses, and Assault Courses currently being utilized by Air University and the United States Air Force Academy (USAF). These academic leadership and development courses will adhere to the following:

1.6.1. The course owner completes an inspection, identifies off-limits areas, and completes an ORM brief to mitigate training risk. Base safety assists as requested.

1.6.2. Base/installation commander (or equivalent) authorizes the use of the course after reviewing the conditions and risks associated with the training events.

1.6.3. Base/installation commander (or equivalent) ensures all instructors and safety observers are experienced with the training events, understand the ORM techniques, risk mitigation implementation procedures, and that they provide a safety and ORM brief to all participants prior to use.

1.6.4. Courses in question will be referred to the MAJCOM Obstacle Course Program Manager (OCPM) for clarification. If the MAJCOM OCPM is unable to provide the required guidance/clarification, the issue will be addressed to the AF OCPM.

1.7. Ropes Course. These are commercial "Challenge Courses" installed, operated and inspected in accordance with Association of Challenge Course Technology (ACCT) standards. These courses are specifically designed to build leadership, trust, team-building and problem resolution skills. Examples of these courses are the USAFA ropes course and the ropes course at select ANG installations and training sites. Ropes courses meeting these criteria are approved for use with the following oversight:

1.7.1. The course owner completes an inspection, identifies off-limits areas, and completes an ORM brief to mitigate training risk (any obstacles with a residual ORM assessment above negligible will not be used). Base safety assists as requested.

1.7.2. Base/installation commander (or equivalent) ensures all instructors and safety observers are experienced with the training events, understand the ORM techniques, risk mitigation implementation procedures, and that they provide a safety and ORM brief to all participants prior to use.

1.7.3. Use of off-base commercial Challenge Courses by the ANG requires approval through the MAJCOM OCPM (NGB).

1.7.4. Courses in question will be referred to the MAJCOM OCPM for clarification. If the MAJCOM OCPM is unable to provide the required guidance/clarification, the issue will be forwarded to the AF OCPM.

1.8. Sister-Services, Coalition Forces or Other Outside Agencies Requesting Use of AF Obstacle Course(s). Sister-service or coalition units may utilize existing AF obstacle courses using their applicable guidance and directives or this AFI. Outside agencies may utilize existing courses with base/installation commander (or equivalent) approval. These agencies will conduct operations in accordance with this instruction when lacking their own published guidance or directives.

1.9. AF Use of Sister-Service or Coalition Unit Obstacle Course(s). AF units may use Sister-service or coalition unit obstacle course(s) with MAJCOM/A3 approval. MAJCOM OCPMs will establish procedures for request/approval of Sister-service or coalition unit courses for unilateral AF use. Airmen who are attached to a sister-service, joint unit, or coalition unit, may utilize the course with, and under the direct control of that unit.

1.10. References. The primary guidance for this AFI was developed from Army FM 21-20, *Physical Fitness Training*. Obstacle designs were developed based on Department of Army Engineering Drawings 28-13-95, *Confidence Course Layout Plan*. Safety and ORM procedures are IAW AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*. AF PT standards are IAW AFI 10-248, *Fitness Program*.

1.11. Waiver Authority. MAJCOM/A3s, Direct Reporting Units (DRU) and Field Operating Agency (FOA) commanders have waiver authority for course operations under their control.

Chapter 2

OBSTACLE COURSE OPERATIONS

2.1. Program Overview. MAJCOM and subordinate units utilizing obstacle courses must comply with the requirements outlined below. This instruction lists mandatory qualifications along with training and currency requirements for Airmen overseeing the use and safety of obstacle courses and those airmen negotiating obstacle courses.

2.2. HAF Office of Primary Responsibility (OPR). AF/A3O-AS serves as the Air Staff focal point and OPR for the AF OCP and use of Sister-service, joint, coalition and Department of Defense (DoD) courses or other entity obstacle courses as defined by this instruction. All AF level OCP guidance requires coordination through AF/A3O-AS.

2.3. Obstacle Course Program Objectives.

- 2.3.1. Standardize course design, obstacle design, negotiation techniques, instructional courses and syllabi and desired learning objectives.
- 2.3.2. Increase physical fitness while developing warrior ethos.
- 2.3.3. Increase safety through structured risk management.
- 2.3.4. Ensure activity and incident reporting requirements are met.

2.4. Responsibilities. The HAF OCPM, working with MAJCOM, DRU and FOA OCPMs develops guidance for MAJCOM, DRU and FOA Commanders to manage their OCPs within their commands.

2.4.1. HAF OCPM Responsibilities. The Air Staff OCPM (AF/A3O-AS) oversees the entire AF OCP. The Air Staff OCPM should be a current qualified instructor and safety observer on CAT II AF obstacle courses, but at a minimum must have been a qualified instructor and safety observer within five years of assignment as the AF OCPM. AF OCPM is not required to maintain currency for instructor or safety observer duties. The AF OCPM will:

- 2.4.1.1. Publish AF policy and guidance for MAJCOM, DRU and FOA for obstacle course use.
 - 2.4.1.2. Advise AF leadership on all AF OCP issues.
 - 2.4.1.3. Brief/coordinate with Air Staff directorates and other officials or organizations on OCP operations, equipment, maintenance, funding and training issues.
 - 2.4.1.4. Monitor MAJCOM, DRU and FOA OCPs.
 - 2.4.1.5. Maintain AF master listing (for messages, emails, FAX numbers, etc) of all OCPMs and disseminate information periodically to promote vital cross-tell.
 - 2.4.1.6. Develop and maintain OCP Community of Practice on the AF Portal to facilitate coordination with all OCPMs.
- 2.4.2. HQ AF/SE (Chief of Safety).
- 2.4.2.1. Provide an annual statistical data analysis and recommendations on all mishaps involving course equipment or training to the OCPM.

2.4.2.2. Coordinate on any changes to the OCP.

2.4.2.3. Provide technical assistance on request to OCP mishap investigation boards and other safety related matters.

2.4.2.4. Coordinate OCP safety concerns with Sister-service safety offices when necessary.

2.4.3. HQ AF/SG (Surgeon General). Provides recommendations on medical requirements and qualifications to participate in AF OCP.

2.4.4. HQ AETC/A2/3 (Director of Intelligence & Air, Space and Information Operations). Provides guidance on development of OCP Instructor (OCPI) qualification/currency and the OCP Safety Observer (OCPSO) qualification/currency IAW the Job Qualification Standards (JQS) to meet validated mission requirements set forth via OCPM, MAJCOM, DRU and FOA. The OCP will be managed by qualified OCP instructors, safety observers and participating airmen attempting the obstacles.

2.4.5. MAJCOM/A3 DRU and FOA. Each MAJCOM, DRU, and FOA maintaining or utilizing obstacle courses will assign an OCPM and send a letter of appointment signed by the MAJCOM/A3 or equivalent to the AF OCPM. MAJCOM/A3s, through their installation commanders and safety offices, share responsibilities for the safety and welfare of the OCP execution. The critical nature of obstacle course maintenance and operations demands careful oversight of each aspect of test, procedural development, equipment acquisitions, training and execution. MAJCOM, DRU and FOA OCPMs will:

2.4.5.1. Set up command-specific OCPs according to their operational need, MAJCOM/ DRU/ FOA instructions, applicable AFIs and Joint References.

2.4.5.2. Disseminate safety and operational information as required.

2.4.5.3. Maintain instructor and safety observer qualifications IAW paragraph 4.2.

2.4.5.4. Establish the frequency and standards for program evaluations and Staff Assistance Visits (SAVs). Establishes SAV members as required, and in coordination with MAJCOM functional area managers, conducts evaluations during Unit Compliance Inspections, or as needed.

2.4.5.5. Ensure accurate and timely submission by subordinate units of any directed or required safety/incident reports.

2.4.5.6. Review all subordinate units' safety incidents or other directed reports. Ensure all required follow-up actions are accomplished.

2.4.5.7. Project and coordinate formal training requirements with MAJCOM functional area managers and training POCs. If necessary, schedule instructor/safety observer training to meet mission requirements.

2.4.5.8. Review and validate MAJCOM OCP annually IAW MAJCOM guidance.

2.4.5.9. Ensure units operating procedures comply with this instruction. If a unit has a mission specific requirement requiring deviation from the guidance in this instruction, follow proper procedures to request a waiver through command channels to the appropriate MAJCOM, DRU or FOA commander having waiver authority. If the waiver is granted; maintain copies of all waivers and newly defined procedures and forward to the AF OCPM IAW paragraph 5.3.3.

2.4.5.10. Participate in OCP incident investigations as required.

2.4.6. MAJCOM Safety Office. Work with their respective MAJCOM OCPMs to ensure the compliance with the intent of this instruction. MAJCOM safety office will ensure local safety offices:

2.4.6.1. Conduct annual reviews of sister service/coalition courses used by their command and report findings in writing to MAJCOM/A3. This ensures all courses meet the intent of this instruction and established Air Force safety standards. The reviews will be conducted with MAJCOM/A3/A7/SG personnel to ensure Air Force personnel are not exposed to unsafe conditions. If unsafe conditions exist, the inspecting MAJCOM will:

2.4.6.1.1. Document the results of the inspection and corrective action(s) necessary to resolve the unsafe condition(s). Coordinate with the sister service to resolve the discrepancies identified. If the service takes corrective action to resolve the noted discrepancies no further action is need. However, if the service decides the actions are not needed consideration should be given to making the specific obstacle or the entire course off limits to Air Force personnel.

2.4.6.1.2. Notify the using unit of the findings and recommendations for corrective actions.

2.4.6.2. Maintain records of safety inspections, notify OCPM (if not present during inspection) if courses do not meet requirements and recommend placing any courses not meeting the requirements outlined in this instruction off-limits to USAF personnel. Results of inspections conducted by local safety offices will be forwarded to MAJCOM/SE and A3.

2.4.7. Installation Commander (or equivalent).

2.4.7.1. Implements HHQ policies and procedures. Recommend changes/deviations IAW with paragraph [1.1](#).

2.4.7.2. Implements OCP continuation training to ensure all Airmen demonstrate “hands-on” proficiency.

2.4.7.3. Ensures:

2.4.7.3.1. Care, use, and organizational-level inspection and maintenance of the OCP takes place IAW this instruction.

2.4.7.3.2. Instructors and safety observers are properly trained and current.

2.4.7.3.3. Course(s) are properly secured (IAW paragraph [5.6.1](#).) and marked to prevent unauthorized use.

2.4.7.3.4. Course(s) are certified IAW the requirements for use and inspection criteria delineated in this instruction, and maintain operational/safety certification for use to include funding for routine maintenance or upgrades.

2.4.7.4. Reviews OCP improvement reports and operational hazard reports that affect the OCP course(s).

2.4.7.5. Appoints base-level OCPM, OCPI, and OCPSO, as needed.

2.4.8. Base OCPM will:

2.4.8.1. Maintain the memorandum of appointment from installation commander on file.

2.4.8.2. Upon appointment and after repairs to the obstacle course have been performed; request a joint safety inspection of the obstacle course with the installation safety office and Civil Engi-

neer (preferably a structural engineer). The result of this inspection will be maintained by base OCPM for a period of two years.

2.4.8.3. Develop a training plan to certify all instructors qualified to open and run the obstacle course. This training plan must be approved by the MAJCOM OCPM. All certified instructors will be issued an AF IMT 483, Certificate of Competency and the certification numbers will be maintained on file by the OCPM. Training and certification will be IAW **Chapter 4**.

2.4.8.4. Maintain a safety training brief for presentation to all participants. The safety training brief will meet the minimum requirements outlined in **Chapter 3** and **Attachment 4**.

2.4.8.5. Maintain an obstacle course schedule. Any unit requiring use of the obstacle course will contact the OCPM for scheduling their personnel.

2.4.8.6. Inform the installation commander (or equivalent) of recommended corrective actions for findings identified during any inspection.

2.4.8.7. Maintain documented inspections with results of inspections and the corrective actions necessary to resolve the unsafe conditions on file IAW chapter three.

2.4.9. Obstacle Course Program Officials. Other than the base OCPM, there are two officials that may be required depending on the category of the course involved.

2.4.9.1. Obstacle Course Program Instructor (OCPI). OCPIs are required for all AF obstacle course operations and must be current and qualified IAW Chapter four and certified IAW paragraph 2.4.9.3 above. Instructors will:

2.4.9.1.1. Be present at the obstacle course while in use.

2.4.9.1.2. Conduct an opening serviceability and safety inspection IAW chapter three and **Attachment 7**.

2.4.9.1.3. Ensure all required safety equipment outlined in **Chapter 3** is present and operational before allowing people to participate in the obstacle course.

2.4.9.1.4. Conduct safety training and a walk-through demonstration covering all obstacles to be used during the day's training.

2.4.9.1.5. Ensure all individuals participating in the obstacle course meet the minimum requirements outlined in Chapter four, for the type course being negotiated.

2.4.9.1.6. Ensure adequate amounts of drinking water are available at the course.

2.4.9.1.7. Ensure medical support requirements identified in **Chapter 3** are readily available prior to commencing CAT II obstacle course activities.

2.4.9.1.8. Remove any participant who is not following established training/safety procedures.

2.4.9.2. Obstacle Course Program Safety Observer (OCPSO). Must be current and qualified IAW **Chapter 4** for CAT II course operations. Safety observers are not required for CAT I courses. Safety observers will:

2.4.9.2.1. Ensure safe course operations by assisting the instructor as required.

2.4.9.2.2. Maintain close surveillance of course and participants and remove individuals from the course that exhibit signs/symptoms of heat stress, heat exhaustion or heat stroke.

2.4.9.2.3. Ensure spectators are kept at a safe distance and do not interfere with course negotiation.

2.4.10. Civil Engineering Squadron (CES) responsibilities. CES will provide a representative to perform walk-through with base OCPM and safety of fence annually and after any maintenance has been performed.

2.4.11. Installation Safety Office and/or Safety Office of Owning Agency will:

2.4.11.1. Annually and after major repairs to an obstacle or alterations to the course have been performed, participate in a joint safety inspection covering the obstacle course and procedures used.

2.4.11.2. Provide OCPM with a copy of findings identified during annual, spot or post construction inspections and ensure the installation commander is advised of matters affecting the safety and health of his/her personnel.

2.4.11.3. Notifies OCPM and installation commander of any closed obstacles immediately and in writing within five duty days of the inspection.

2.4.11.4. Documents results of inspections and the corrective actions necessary to resolve the unsafe conditions.

2.4.12. Squadron/Unit Commander Unit commanders with Airmen participating in the AF OCP will:

2.4.12.1. Implement HHQ policies and procedures.

2.4.12.2. Oversee unit OCP.

2.4.12.3. Ensure instructions, regulations; manuals, procedures, and Technical Orders (TOs) pertaining to OCP are maintained IAW MAJCOM, DRU, and FOA directives.

2.4.12.4. Implement ORM program IAW this instruction for obstacle course participants.

2.4.12.5. Ensure unit personnel are trained and current on the intended course prior to use.

2.4.12.6. Ensure the OCPM conducts a pre-course safety inspection prior to personnel negotiating any obstacles.

2.4.12.7. Provide participating Airmen the opportunity to "crawl, walk, and then run" the obstacle prior to beginning negotiation of the entire course IAW this instruction.

2.4.12.8. Provide Airmen opportunity for debriefing course negotiation and to document lessons learned to enhance the OCP.

2.4.12.9. Review improvement reports and operational hazard reports that affect OCP equipment and procedures.

2.4.12.10. Comply with all reporting requirements IAW this and other applicable directives.

2.4.12.11. Appoints Obstacle Course Team Leader

2.4.13. Obstacle Course Team Leader Will:

- 2.4.13.1. Ensure Airmen participating in the OCP are properly trained (qualified and current IAW **Chapter 4**) and equipped to conduct OCP operations.
- 2.4.13.2. Conduct ORM IAW AFPAM 90-902, *Operational Risk Management (ORM) Guidance and Tools*, using **Attachment 6** as a guide and brief all participants and personnel involved in the OCP operation.
- 2.4.13.3. Provide specific guidance concerning mission and training objectives, limitations and safety to personnel under their control.
- 2.4.13.4. Ensure Airmen are properly briefed at each obstacle to include:
 - 2.4.13.4.1. Training intent of the obstacle.
 - 2.4.13.4.2. All safety factors,
 - 2.4.13.4.3. Defining and demonstrating how to “navigate” the obstacle.
- 2.4.13.5. Ensure correct procedures and safety measures are followed during obstacle course operations.
- 2.4.13.6. Document all OCP operations to track Airmen qualification(s) and currency IAW NOTE to paragraph **4.3**.
- 2.4.13.7. Debrief all participants and provide lessons learned and recommended course improvements to local chain of command.
- 2.4.14. Airman negotiating obstacle Course(s). Participants will:
 - 2.4.14.1. Comply with all directives and guidance dealing with the OCP and this instruction, see paragraph **4.3**.
 - 2.4.14.2. Ensure their supervisors are aware of any condition that would preclude OCP participation.

Chapter 3

SAFETY PROCEDURES

3.1. Considerations Prior to Use. This chapter outlines safety requirements and areas for consideration prior to any obstacle course use by AF personnel.

3.2. Operational Risk Management. The installation commander will appoint an installation OCPM for all issues pertaining to the course. The installation commander will ensure an ORM analysis is initially accomplished and documented upon appointment and updated whenever procedures, obstacles, or conditions of the course change.

3.2.1. Application of ORM is an important element for protecting our Airmen. The ORM process provides leaders and individuals a systematic approach to make risk decisions.

3.2.2. An effective ORM assessment is critical to obstacle course management. OCPMs and course officials must analyze and attempt to anticipate as many hazards and associated risks as possible before allowing personnel to attempt to negotiate the obstacle course. Risk is the potential for injury or loss, and is present at every obstacle course. It is measured by several factors including the potential severity and the probability of occurrence. Hazards are conditions that have the potential to negatively impact course negotiation by participants. To manage risk, identify potential hazards, then, take the steps necessary to prioritize and mitigate the potential hazards. Risk management is based on an accurate perception and includes all probable options. Risk decisions must reflect controls guaranteeing the minimum risk necessary for safe obstacle course management and desired training accomplishment. **Attachment 6** provides the ORM matrix/considerations for the OCP. Further guidance on how to conduct an ORM can be found in AFPAM 90-902, *Operational Risk Management (ORM) Guidance and Tools*.

3.3. Medical Considerations. Airmen have a cardiovascular screening annually during their physical health assessment and have an additional screen prior to their AF fitness test. Assuming they pass all components of their AF fitness test and have no profile limiting physical performance, they are cleared to negotiate the course. The OCPI and OCSO have the authority to pull anyone from the course they feel are not fit to participate, e.g. physically disabled/injured, unfit, exhausted, or acutely ill and taking medication that may interfere with performance etc.

NOTE: Standard line of duty determination will apply to ANG personnel IAW AFI 36-2910, *Line of Duty (Misconduct) Determination*.

3.4. Climate Considerations. Refer to AFPAM 48-151, *Thermal Injury* (<http://www.e-publishing.af.mil/pubfiles/af/48/afpam48-151/afpam48-151.pdf>) for detailed considerations.

3.4.1. Hot Temperature. Individuals in hot climates should be given time to become acclimated to the local climate prior to attempting to negotiate any category course. The level of humidity should also be taken into consideration. The wet bulb globe temperature index (WBGTI) may be used to determine when the course may be used and what precautions are to be taken during training. When using the course during hot weather, course officials should be aware of personnel displaying the following symptoms:

3.4.1.1. HEAT CRAMPS – muscle cramps of the abdomen, legs, or arms.

3.4.1.2. HEAT EXHAUSTION – head ache; excessive sweating; weakness; dizziness; nausea; muscle cramps; and pale, clammy skin.

3.4.1.3. HEATSTROKE – profuse sweating; collapse or unconsciousness that is sudden or preceded by headache, dizziness, fast pulse, nausea, vomiting, and mental confusion. **Heat stroke is a medical emergency, call for medical support immediately.**

3.4.2. Cold Temperature. When training on the obstacle course during cold weather, course officials will ensure the obstacles are not wet, or icy, and the landing areas are not frozen. Participants must wear appropriate hand protection to prevent cold related injuries and allow for positive grip. During periods of extreme temperatures, the training period will be kept to the minimum necessary to reduce personnel exposure to the elements.

3.4.3. High Altitude. Several factors must be considered when training in high altitudes. As the altitude increases, blood oxygen levels decrease. The resulting lower red blood oxygen levels can induce certain problems. Increased heart rate and breathlessness are common. In extreme cases, unconsciousness can result when the brain is denied oxygen. Additional time should be added to a preconditioning program when preparing to complete a course in higher altitude areas.

3.4.4. Rain. When conducting OCP training in the rain, check Airmen for hypothermia. Ensure participants wear proper clothing for the elements while allowing safe negotiation of the obstacles. Ensure Airmen wear proper footwear. Conduct a pre-inspection of the course to check for washouts or changes in the course that would cause potential problems. Conduct ORM to mitigate any newly identified hazards prior to negotiating the course. If identified hazards cannot be mitigated to an acceptable level, the obstacle will be placed off-limits.

3.5. General Safety Precautions. OCPMs, OCPIs, OCPSOs, and participants will ensure safety precautions are taken to prevent injury on obstacle courses. The following minimum safety requirements must be met prior to using the obstacle course:

3.5.1. Annual and pre-use inspections will be accomplished. At a minimum, inspections will address: each obstacle being used, paths between obstacles, construction, protruding nails, sharp edges, rotten logs/poles, condition of fall protection and pads, landing pits and areas, overgrown weeds/vegetation and other hazards.

3.5.2. Obstacles with safety, design, or construction deficiencies that cannot be corrected prior to start of training will be placed off limits until corrected. These obstacles will be clearly marked as off-limits utilizing orange cones and signs on both entry and exit to/from the obstacle. All participants will be advised which obstacles are off-limits prior to course negotiation and pointed out during the course demonstration IAW paragraph [2.4.13.4](#). After major repairs are made to any obstacles a safety inspection must be conducted by the personnel listed in [Attachment 5](#) and paragraph [2.4.9.2](#) above (base OCPM, base safety office, CES representative) using the checklist found in [Attachment 5](#).

3.5.3. Rake and refill landing/fall areas under obstacles, as needed, before each use.

3.5.4. Personnel will conduct warm-up exercises as outlined in paragraph [A4.11](#) before they are allowed on the course.

3.5.5. Ensure all obstacles have the correct number of properly trained safety personnel present IAW [Attachment 5](#).

3.5.6. Consider postponing training on the course when weather conditions may affect footing or handhold surfaces unless it is mission essential or directed by the commander.

3.5.7. Ensure medical personnel and equipment are readily available within acceptable response time to CAT II courses. Medical coverage consists of trained personnel equipped with emergency lifesaving and stabilization equipment and the means to transport injured personnel to appropriate medical facilities.

3.5.8. Ensure a primary and backup means of communication are available and operational. At a minimum the OCPI must have the ability to summon immediate help by landline, radio or cellular phone.

3.5.9. Participants should not be allowed to negotiate obstacle courses if they have donated blood within the previous 72 hours.

3.6. Negotiating Obstacles. Participants must be instructed in the proper technique for negotiating each obstacle. The technique to be used must be explained and demonstrated in detail, with emphasis on avoiding injury. Alternate methods of obstacle negotiation to those listed in [Attachment 3](#) may be authorized as long as they do not increase the safety risk or significantly alter the procedure described. The decision to negotiate any obstacle is left to the discretion of the participant.

3.7. Safety Requirements. The following minimum safety requirements must be in place and used whenever the obstacle course is in use. OCPI and OCPSO (when required) will be qualified IAW [Chapter 4](#) and perform the duties outlined in [Chapter 2](#) of this instruction:

3.7.1. The OCPIs and OCPSOs must ensure spectators are kept a safe distance away from each obstacle and ensure they do not interfere with participant's progress.

3.7.2. The OCPI must have the ability to summon immediate help by landline, radio, or cellular phone for both CAT II courses.

3.7.3. The obstacle course should not be used during limited visibility unless adequate lighting is provided and an ORM assessment is conducted covering the conditions. Unit commanders should make this determination balancing the risk to Airmen against realistic training to meet unit mission requirements.

3.7.4. No rings, jewelry, watches, or breakable items will be allowed on the obstacle course. Rings which cannot be removed must be completely taped over to ensure no edges are exposed which may cause a snag hazard.

3.7.5. All participants will wear appropriate battledress (utility) uniform with the sleeves down.

3.7.6. Open toed footwear is prohibited.

3.8. Equipment Requirements. The following are the minimum safety equipment requirements for the safe operation of an obstacle course. Units may need to add to this list to meet unique local requirements.

3.8.1. OCPI must have a copy of this instruction and OCPM approved safety briefing.

3.8.2. Radio or telephone communication must be present to summon immediate help.

3.8.3. First aid kit to treat minor injuries.

3.8.4. Drinking water must be available.

Chapter 4

TRAINING AND CURRENCY REQUIREMENTS

4.1. Readiness. Fitness has a direct impact on operational readiness. Total readiness includes technical, mental, and physical readiness. Without technical readiness, individuals lack the knowledge and skills to accomplish their assigned duties. Without mental and physical readiness, there is no confidence or stamina to accomplish the mission.

NOTE: All recruits entering BMT will meet requirements of AFI 10-248, Para 6.1., and will not attempt the obstacle course prior to the 4th week of training at BMT. This will ensure three full weeks of supervised PT before negotiating the obstacle course.

4.2. Instructor and Safety Observer Training. All instructors and safety observers will maintain the following minimum training requirements:

NOTE: These currency requirements only apply to the minimum number of safety observers required by Attachment 3.

4.2.1. Self Aid Buddy Care

4.2.2. Demonstrate “hands-on” proficiency by successful completion of every obstacle that they are required to teach (CURRENCY: Re-test annually).

4.2.3. Principles of OCP operations (IAW this instruction)

4.2.4. Principles of OCP maintenance requirements (IAW this instruction)

4.2.5. Demonstrate proficiency in completing Obstacle Inspection Checklist IAW **Attachment 5** (CURRENCY: Re-test annually).

4.2.6. Principles of conducting an ORM (Ref AFPAM 90-902)

4.2.7. Command and local mishap/incident notification procedures (Standardized form)

4.2.8. Demonstrate to the OCPM the ability to effectively train and instruct participants on tactics, techniques and procedures IAW **Attachment 3** (CURRENCY: Re-test annually ICW **4.2.4.** above).

NOTE: Proof/tracking of OCPI/OCPSO qualification and currency should be maintained on enlisted/officer “AF Form 623A, “OJT Training Record,” or AF Form 797, “Job Qualification Standard Continuation/Command JQS” IAW Job Qualification Standards. As a minimum this must be maintained in the base/installation ancillary training data base and kept on file by the OCPM or designated representative.

4.3. Airmen Qualifications and Currencies. Airmen negotiating obstacle courses will attain/maintain the following qualifications and currencies:

4.3.1. Be within fitness standards and able to pass all phases of the AF physical fitness test when they arrive for training on any obstacle course.

NOTE: At the USAFA, the Commandant of Cadets is the decision authority for approving cadets to participate on obstacle courses as part of military training. Cadets will be thoroughly screened for

the physical capability to safely negotiate obstacles prior to participating on any course. All non-cadet participants will comply with 4.3.1.

4.3.2. Comply with specific guidance concerning mission and training objectives, limitations and safety as directed by the OCPI.

4.3.3. Comply with correct procedures and safety requirements during OCP operations.

***NOTE:* All OCP training and operations are documented/maintained/tracked in personal enlisted/officer OJT records on “AF Form 623 A “OJT Training Record” or AF Form 797 “Job Qualification Standard Continuation/Command JQS” IAW Job Qualification Standards to track Airmen qualification and currency. As a minimum this must be maintained in the base/installation ancillary training data base and kept on file by the OCPM or designated representative.**

Chapter 5

COURSE LAYOUT, DESIGN AND MAINTENANCE

5.1. Standardized Course Design. This chapter prescribes the requirements for the layout, design and maintenance for AF obstacle courses.

5.2. Course Layout. Obstacle courses will be laid-out with safety as the primary focus.

5.2.1. CAT I course layout should take advantage of existing natural obstacles and terrain where possible. Consideration should be given to presence of existing structures, erosion potential, accessibility and possible hazards such as overhead utilities.

5.2.2. Possible CAT II course layout is contained in [Attachment 2](#). At a minimum, consideration should be given to fatigue as Airmen negotiate the course with positioning of the most difficult obstacles at or near the start.

5.3. Design. Obstacles should be designed for safe negotiation while challenging various physical aspects of the individual negotiating the course.

5.3.1. CAT I obstacles are designed for crawling, jumping, dodging, traversing, climbing, vaulting and balancing. CAT I obstacles will not exceed four feet in height (above ground) and will have an ORM assessment of negligible IAW AFPAM 90-902.

5.3.2. CAT II obstacles will not have a potential fall distance above 14 feet without a direct connection to safety lines attended by a qualified, trained safety observer or a full-body-harness with lanyard attached to a supporting structure IAW Association of Challenge Course Technology or like standards. These obstacles will not have an ORM assessment above “moderate” with a residual risk of “negligible” after implementation of counter-measures IAW AFPAM 90-902.

5.3.3. [Attachment 3](#) contains the list of CAT II obstacles approved for AF obstacle courses. Non-CAT I qualifying obstacles that do not exceed CAT II design criteria, but are not listed in [Attachment 3](#), must be approved for use by the AF OCPM prior to being listed in a MAJCOM supplement to this instruction. AF OCPM approved additions will be added into future revisions of this AFI. MAJCOM suggested obstacles not included in [Attachment 3](#) will be forwarded to the AF OCPM and include the following minimum information:

NOTE: Obstacles exceeding CAT II criteria listed in paragraph [1.2.2](#), are not authorized on AF Obstacle Courses. These obstacles will be placed off-limits until removed permanently.

- 5.3.3.1. Instructions for negotiating the obstacle.
- 5.3.3.2. Number of personnel allowed on the obstacle at one time.
- 5.3.3.3. Number of safety personnel required.
- 5.3.3.4. ORM assessment with mitigation factors identified.
- 5.3.3.5. Special safety considerations or equipment.
- 5.3.3.6. Specify type of fall zone protection equipment, if required.
- 5.3.3.7. Digital photo (file) of the obstacle.

5.3.4. Obstacle design specifications are contained in the U.S. Army Corp of Engineers' web page at <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

The following link provides additional information on inspections and fall zone criteria.

<http://www.tradoc.army.mil/tpubs/pams/p385-1.pdf> (Appendix C).

5.4. OCP Course Inspections. Consider frequency of use and effects of the local climate on the obstacles to determine the frequency of inspections by the OCPM. The OCPM performs course inspections using the **Attachment 5** checklist. After repairs to the obstacle course have been performed, request a joint safety inspection of the obstacle course with their unit safety monitor, installation safety office, and CES (preferably a Structural Engineer). The results of this inspection will be filed by the OCPM for the life of the obstacle.

5.5. Maintenance. OCP Course(s) maintenance will only be performed by qualified personnel trained to perform structural maintenance. This maintenance may be performed by base civil engineer or by a contractor qualified to perform such a task. Self-help maintenance of obstacles is authorized but, the obstacle will remain off limits until certified by a qualified structural engineer.

5.5.1. Obstacle Course Records.

5.5.1.1. Maintenance and inspection logs. The OCPM will maintain maintenance and inspection logs for individual obstacles and for the overall course under the Records Information Management System (AFRIMS). As a minimum, the logs will include:

5.5.1.1.1. A detailed checklist for course and obstacle inspection, see **Attachment 5**.

5.5.1.1.2. A record of all inspections, hazards, deficiencies, and maintenance conducted on the course.

5.5.1.1.3. A record of all deficiencies/safety hazards and any actions taken to lessen the unsafe condition. This must be tracked until the problem is completely fixed. Any countermeasures to mitigate risks to personnel must also be listed.

5.6. Security. The installation commander will work in concert with the OCPM to develop a security strategy protecting the structural integrity of the OCP course(s) and prevent unauthorized use. As a minimum, the OCP course will:

5.6.1. Develop a single point of entry into OCP compound secured with a lockable chain link or solid construction fence. Courses that are located within a secure training complex (i.e. USAFA Jacks Valley) are exempt from the requirement for individual fences around each course.

5.6.2. Post "Authorized use only" signs with the OCPM contact information.

5.7. Funding. OCP funding is a MAJCOM responsibility.

5.8. Adopted Forms:

AF IMT 847, *Recommendation for Change of Publication*

AF IMT 623A, *On-the-Job Training Records-Continuation Sheet*

AF IMT 797, *Job Qualification Standard Continuation/Command JQS*

RICHARD Y. NEWTON III, Maj Gen, USAF
Asst DCS, Operations Plans & Requirements

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

29 CFR 1926, *Occupational Safety and Health Standards for the Construction Industry*

AFI 10-248, *Fitness Program*

AFI 32-2001, *The Fire Protection Operations and Fire Prevention Program*

AFI 36-2910, *Line of Duty ((Misconduct) Determination*

AFI 41-106, *Medical Readiness Planning and Training*

AFI 90-901, *Operational Risk Management*

AFI 91-202, *USAF Mishap Prevention Program*

AFI 91-204, *Safety Investigations and Reports*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*

AFMAN 37-123, *Management of Records*

AFOSH Std 91-501, *Air Force Consolidated Occupational Safety Standard*

AFPAM 48-151, *Thermal Injury*

AFPAM 90-902, *Operational Risk Management (ORM) Guidance and Tools*

AFPD 10-2, *Readiness*

AFPD 36-22, *Air Force Military Training*

ANSI A10.11-1989, *American National Standards for Personnel and Debris Nets dated 19 April 1999*

Department of the Army Engineering Drawings 28-13-95, *Confidence Course Layout Plan*

Field Manual (FM) 21-20, *Physical Fitness Training*

TRADOC Pamphlet 385-1, *The TRADOC Model Safety Program and Self-Assessment Guide*

Abbreviations and Acronyms

ACCT—Association of Challenge Course Technology

AETC—Air Education and Training Command

AFI—Air Force Instruction

AFOSH—Air Force Occupational Safety and Health

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Specialty Code

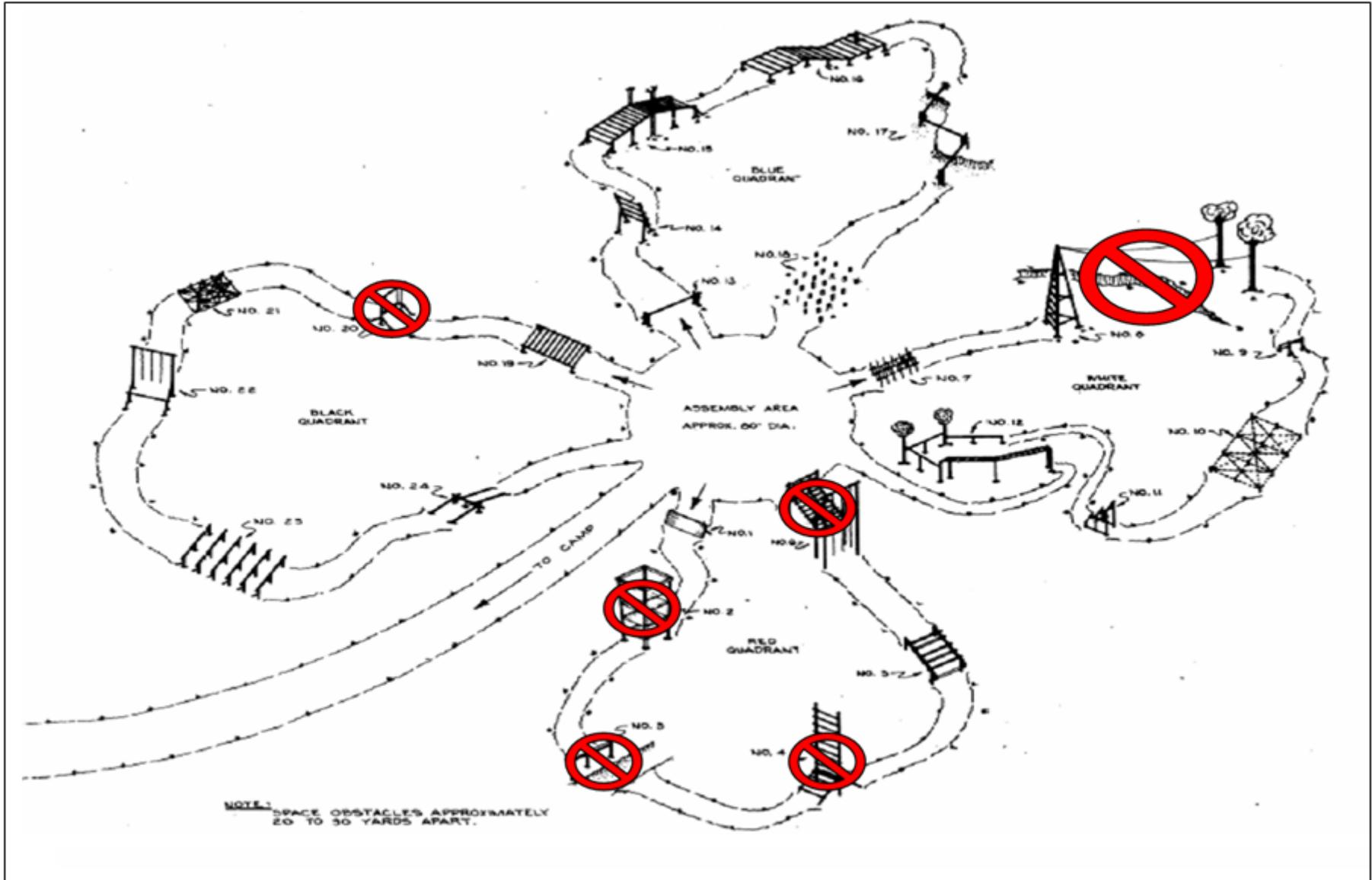
AIE—Alternate Insertion Extraction

BMT—Basic Military Training
CC—Confidence Course
CES—Civil Engineer Squadron
COC—Conditioning Obstacle Course
DoD—Department of Defense
DRU—Direct Reporting Unit
EC—Executive Committee
FOA—Field Operating Agency
HHQ—Higher Headquarters
IAW—In Accordance With
ISO—In Support Of
MAJCOM—Major Command
OCPI—Obstacle Course Program Instructor
OCP—Obstacle Course Program
OCPM—Obstacle Course Program Manager
OCPSO—Obstacle Course Program Safety Observer
OI—Operating Instruction
OPCON—Operational Control
OPR—Office of Primary Responsibility
ORM—Operational Risk Management
POM—Program Objective Memorandum
PT—Physical Training
PTC—Physical Training Course
RDS—Records Disposition Schedule
SAV—Staff Assistance Visit
Stan/Eval—Standardization and Evaluation
TACON—Tactical Control
TCS—Task Conditions and Standards
TO—Technical Order
USAFA—United States Air Force Academy

Attachment 2

RECOMMENDED CAT II OBSTACLE COURSE LAYOUT

Figure A2.1. Recommended CAT II Layout



Attachment 3

CAT II OBSTACLE NEGOTIATION & CONSIDERATIONS

A3.1. Swing, Stop and Jump / Rope Swing

Figure A3.1. Swing, Stop and Jump / Rope Swing



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.1.1. To successfully negotiate this obstacle you must approach the obstacle from a short run, grasp the rope at shoulder height and swing your body forward until over the wall. Release the rope once balanced on the wall and jump forward to the ground.

A3.1.2. Number of personnel allowed on obstacle. No more than three participants are allowed on this obstacle at one time.

A3.1.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.1.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of participants improperly swinging and striking logs or falling.

A3.1.5. Special safety considerations and equipment. Due to the possibility of lower extremity injuries, participants must be briefed to swing high enough to ensure they do not strike any part of their body against the horizontal log/wall. Participants must also ensure a straight swing to avoid support poles/braces. They must ensure their knees are bent slightly when landing to absorb the impact. The support braces should be padded.

A3.1.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" saw-

dust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.2. Easy Balancer



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.2. Easy Balancer.

A3.2.1. To successfully negotiate this obstacle you must walk up the inclined log and down the decline side using the following technique. Place your feet on the log to be crossed, hold your arms out from your sides at shoulder level and fix your eyes on the log approximately five yards in front of your feet. Walk the log by placing first one foot then the other on the center of the log, moving forward using your arms to maintain balance.

A3.2.2. Number of personnel allowed on obstacle. One per log.

A3.2.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.2.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to steep angle of the logs and the possibility of falling to the ground or landing on a support log.

A3.2.5. Special safety considerations and equipment. Participants must be briefed that the logs are designed to move and they must ensure that they have positive footing while progressing through this obstacle. As participants progress through this obstacle they may help their teammates.

A3.2.6. Fall zone protection is not required for this obstacle. Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.3. Reverse Climb



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.3. Reverse Climb.

A3.3.1. To successfully negotiate this obstacle you must approach the underside of the climbing ladder. With your hands reach up and grasp the highest rung you can reach with your hands under the log towards your face. Pull up with your arms and step up with your feet to the next rung. Move one hand up to the next rung followed by the other hand, pull yourself up and step to the next rung. Continue this process until reaching the top rung. Move your feet to one rung below the top and swing one leg at a time over the top until standing one rung down from the top on the opposite side. Descend the rungs on this side in a similar manner.

A3.3.2. Number of personnel allowed on obstacle. Two participants are allowed on the obstacle at a time.

A3.3.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.3.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of losing grip and falling to the ground or hitting other logs.

A3.3.5. Special safety considerations and equipment. Participants must be briefed to ensure they have a positive grip and footing before progressing to next log during climb up or down the obstacle. Support braces will be padded.

A3.3.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.4. Weaver



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.4. Weaver (2' to 9" High)

A3.4.1. Completing the Obstacle. Four utility poles cross members rising from ground to 10'. If you fell into one of the water obstacles, do not attempt. Cross members spaced 2' apart, painted alternately yellow and green. Weave to the top by crawling under the yellow cross member then over the green cross member. Keep body parallel to the cross member facing up while negotiating this obstacle. Place heels on utility pole; **DO NOT** hook boots for leverage. Hang by your arms at the top; drop feet first into the pit. Only one attempt at this obstacle.

A3.4.2. Number of personnel allowed on obstacle. A maximum of 10 per obstacle (space 2 pole between personnel)

A3.4.3. Number of Safety personnel required for the obstacle. 1 Safety Observer per obstacle (Cadre). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.4.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of losing grip and falling to the ground or hitting other logs.

A3.4.5. Special Considerations and equipment. WET TRAINEE WILL NOT ATTEMPT THIS OBSTACLE! Trainees are to have at least two spaces between them, prior to starting the obstacle. Do

not allow trainees to lock their feet or legs under the wood for leverage. Trainees are to go under the yellow, over the green. Ensure trainees bend their knees when they jump into the rubber pit. Trainees must walk out of the pit and proceed to the next obstacle with a wingman.

A3.4.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.5. Low Belly Over



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.5. Low Belly Over.

A3.5.1. In order to successfully negotiate this obstacle you must mount the lower log getting both feet on top into a crouching or standing position. Once fully on top of the lower log, grasp over the top of the higher log with both arms keeping belly area in contact with the higher log. Swing your legs over the log one at a time and lower yourself to the ground. Do not jump from the top log.

A3.5.2. Number of personnel allowed on obstacle. No more than one.

A3.5.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.5.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling from 8' to the ground or striking the other log.

A3.5.5. Special safety considerations and equipment. Participants must be briefed to gain their balance prior to jumping to the top log, and to jump high enough to get both arms around the top log. They should also be briefed to protect the upper torso when jumping to the top log.

A3.5.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>.

Figure A3.6. Dirty Name or Climber



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.6. Dirty Name or Climber

A3.6.1. In order to successfully negotiate this obstacle, participants must mount the lowest log and jump to the next higher log without falling to the ground. Once they have recovered their balance, they move to a standing position on the second log and jump to the third log in the same manner as with the belly over obstacle. Using a reverse grip on the top log they will roll over to a hanging position and drop to the ground.

A3.6.2. Number of personnel allowed on obstacle. One at a time.

A3.6.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.6.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling from 8' to the ground or striking the other log.

A3.6.5. Special safety considerations and equipment. Participants must be briefed to gain their balance prior to jumping to the top log, and to jump high enough to get both arms around the top log. They should also be briefed to protect the upper torso when jumping to the top log.

A3.6.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.7. Tarzan



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.7. Tarzan.

A3.7.1. To successfully negotiate this obstacle you must mount the lowest log and maintain your balance while walking the length of it. Reaching the end of the lower log, you must mount the higher log and walk along maintaining balance until reaching the horizontal ladder. Begin traversing the horizontal ladder by releasing one hand at a time, swinging forward and grasping a more distant rung each time. Upon reaching the last rung, hang with your arms fully extended and drop to the ground landing on your feet with knees slightly bent to absorb impact on landing..

A3.7.2. Number of personnel allowed on obstacle. No limit.

A3.7.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.7.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling to the ground or striking other logs.

A3.7.5. Special safety considerations and equipment. Participants must be briefed to keep balance and if they fall, to fall naturally away from the obstacle.

A3.7.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.8. Inclining Wall or Reverse Incline Wall



A3.8. Inclining Wall or Reverse Incline Wall.

A3.8.1. To successfully negotiate this obstacle you hook one elbow over the wall, locking your arm in place by pulling up until the top of the wall is under your armpit. Grasp the top of the wall with your other hand. Draw your leg that is closest to the wall up toward your abdomen as far as possible, then swing the outside leg over the wall. Your body is then carried over with a rolling motion. A variation of this leg action can be used by Airmen who are unable to draw up the leg as described. While hanging with both legs fully extended, start a swinging motion with your legs together. When your legs have enough momentum, swing the outside leg over the wall with a vigorous kick, then follow with your body. Once over the wall either slide down the incline or jump down the incline to the ground.

A3.8.2. Number of personnel allowed on obstacle. No more than two at a time.

A3.8.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e., One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.8.4. Level of safety risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling to the ground.

A3.8.5. Special safety considerations and equipment. Participants must be briefed to ensure they have a positive grip and footing when trying to maneuver over the top.

A3.8.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.9. High Jump



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.9. High Jump.

A3.9.1. To successfully negotiate this obstacle you must climb the logs in stair-stepper fashion without using hands until reaching the platform at the top. Stand on top of the platform and jump off the platform, forward and into the recovery area. Be sure to flex your knees on landing to avoid ankle or leg injury.

A3.9.2. Number of personnel allowed on obstacle. No more than two at a time.

A3.9.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.9.4. Level of safety (severity) risk for this obstacle. This obstacle has a moderate safety risk. The distance from the top of the obstacle to the ground is approximately 10'. Possible injuries include ankle injury on landing and slipping on steps.

A3.9.5. Special safety considerations and equipment. Participants must be briefed to flex their knees on landing to avoid injury. Do not attempt this obstacle with an injured leg. Jump forward off the platform at the top of the obstacle, never backward. This obstacle will not be used when it is wet.

A3.9.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" saw-

dust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.10. Cable Crossing



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.10. Cable Crossing.

A3.10.1. Completing the Obstacle. Two cables – rope above each: 41' across, 4' deep pond. Approach the obstacle in column of twos, facing away from one another, 5 trainees at a time. Place feet on the cable, hands on the rope. Lean forward and side step, keeping the soles of your boots in contact with the cable.

A3.10.2. Number of personnel allowed on obstacle. Five

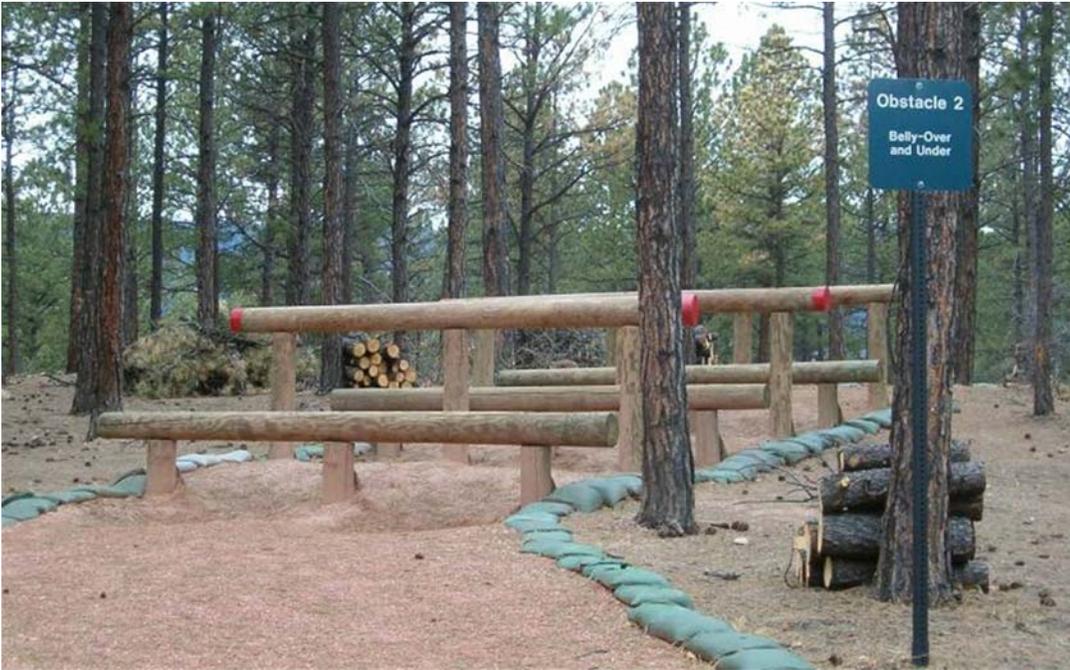
A3.10.3. Number of Safety personnel required for the obstacle. 1 Safety Observer (Cadre). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.10.4. Level of risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of taking in water or slipping and falling when exiting the water.

A3.10.5. Special Considerations and equipment. Trainees are inclined to talk on obstacle. Keep noise to a minimum.

A3.10.6. Fall zone protection. This obstacle must have a minimum of 30", but no more than 48" of water under the entire length of the rope being traversed. If water is not present or at the appropriate depth, this obstacle will not be used. Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.11. Belly Over and Under



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.11. Belly Over and Under.

A3.11.1. To successfully negotiate this obstacle you must crawl under the lower log and jump up to the higher logs, swing your hips and leg over the top and land on both feet on the other side. Repeat until through the obstacle.

A3.11.2. Number of personnel allowed on obstacle. No more than two.

A3.11.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.11.4. Level of risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling to the ground.

A3.11.5. Special safety considerations and equipment. Participants must be briefed to carefully progress through the logs and to use caution when sliding over the high logs and ensure they lead with their feet to prevent landing on their side or back.

A3.11.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stdgdn/StdIndex.aspx?id=13>

Figure A3.12. Net Climb

NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.12. Net Climb.

A3.12.1. To successfully negotiate this obstacle approach the net placing both hands on the net above your head. Climb like you would a ladder, leaning back slightly to keep you balance. Take your time and maintain three point of contact with the net at all times. When you reach the top, pull yourself onto the platform maintaining a strong grip throughout. Drop feet over the other side and place them on the net prior to releasing either hand grip. Reverse the previous climbing action until reaching the ground.

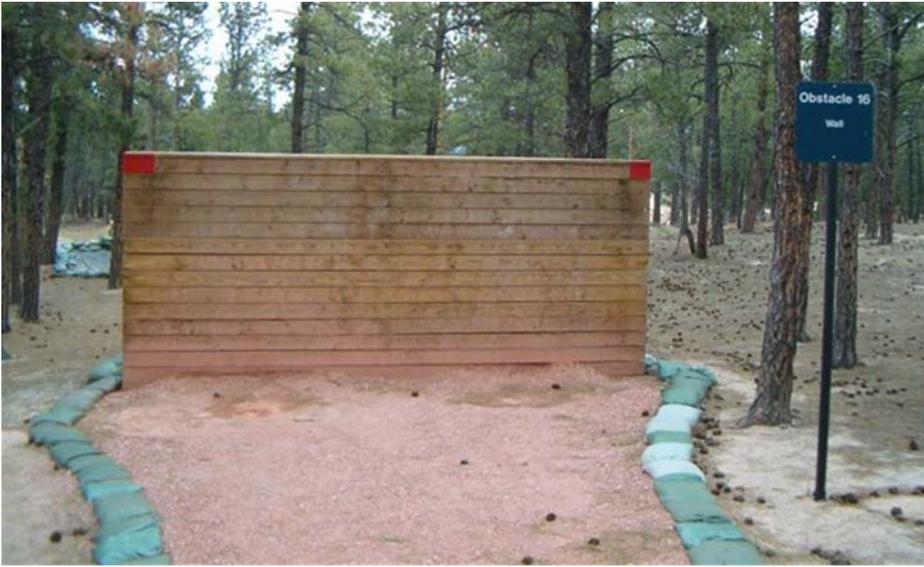
A3.12.2. Number of personnel allowed on obstacle. No more than two at a time.

A3.12.3. Number of safety personnel required for the obstacle. This obstacle requires a minimum of one safety observer on the top of the obstacle to assist participants that may have difficulty moving over the top. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.12.4. Level of risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling to the ground.

A3.12.5. Special safety considerations and equipment. Participants must be briefed to ensure they have a positive grip and footing at all times, and to maintain three points of contact with the cargo net as they progress through the obstacle.

A3.12.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stdgdn/StdIndex.aspx?id=13>

Figure A3.13. The Wall

NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.13. The Wall.

A3.13.1. In order to successfully negotiate this obstacle, participants will need to approach the wall at a jog to build momentum and jump up grasping the top of the wall. Once your hands have grasped the top of the wall, pull up with your arms and push with the toes of your feet until able to throw one leg over the wall. From this position, on the stomach, slide the other leg over the wall and lower yourself to the ground with your hands.

A3.13.2. Number of personnel allowed on obstacle. No more than two.

A3.13.3. Number of safety personnel required for the obstacle. Obstacle will be negotiated using the wingman concept (i.e. One person negotiates the obstacle while wingman watches then they switch.). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.13.4. Level of risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling to the ground.

A3.13.5. Special safety considerations and equipment. Participants must be briefed to watch for other participants to avoid kicking them in the head and to use caution when sliding over the top of the wall ensuring they lead with their feet to prevent landing on their side or back.

A3.13.6. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.14. Horizontal Ropes

NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.14. Horizontal Ropes.

A3.14.1. In order to successfully negotiate this obstacle, participants will walk up to edge of the obstacle and turn their back to the water. Grasp rope with hands and swing feet up onto rope/hook around ankles to keep rope from bumping back of legs. Pull yourself hand-over-hand along rope to tape on opposite side of pool. Don't stop if you do drop into water, you won't drown if you stand up and walk out. Once your hands touch the tape drop your feet only, walk forward till completely on obstacle drop hands and walk off of obstacle. Make sure of your footing to ensure you don't fall back into pit. If you drop into the pool, stand up it is only 3' deep, walk to the edge and someone will assist you out.

A3.14.2. Number of personnel allowed on obstacle. No more than four.

A3.14.3. Number of safety personnel required for the obstacle. A minimum of one safety observer will be present and able to assist participants that fall into the water if required. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used in lieu of the wingman method.

A3.14.4. Level of risk (severity) for this obstacle. This obstacle has a moderate safety risk due to possibility of falling into the water; slipping on exit.

A3.14.5. Special safety considerations and equipment. Participants must be briefed that if they fall into the water to simply stand and walk out. The water is shallow but will break a fall.

A3.14.6. This obstacle must have a minimum of 30", but no more than 48" of water under the entire length of the rope being traversed. If water is not present or of the appropriate depth this obstacle will not be used. Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.15. Drop Zone



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.15. Drop Zone (5'1" High)

A3.15.1. Completing the Obstacle. One section; three lanes. Approach the ramp with arms parallel to the ground and follow designated arrows; no more than three trainees on the obstacle at a time. Trainees will walk to the top of the obstacle. Stop at the top of the obstacle; make sure the pit is clear. If there is a trainee in the rubber pit, wait until the trainee has cleared. Once the pit is clear, slightly bend your knees and put your arms down and jump into it. Walk down the utility pole. If you fall off the utility pole, proceed to the next obstacle.

A3.15.2. Number of personnel allowed on obstacle. Three at a time

A3.15.3. Number of Safety personnel required for the obstacle. 1 Safety Observer (Cadre). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be.

A3.15.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to possibility from fall above 4'.

A3.15.5. Special Considerations and equipment. DO NOT allow trainees to place their hands on the wooden ramp when they jump down. Tell trainees to bend their knees when they jump. Knee and ankle injuries are the most common with this obstacle.

A3.15.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stdn/StdIndex.aspx?id=13>

Figure A3.16. Vertical Climb



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.16. Vertical Climb (12' 9" High)

A3.16.1. Completing the Obstacle. Two sections; two lanes each section. Approach rungs, climb to the top near the large utility pole. Pivot over on your stomach, head to the red, move to the middle 4x4 and climb down. Once a trainee is climbing down, the next one may start.

A3.16.2. Number of personnel allowed on obstacle. Eight (four ascending/four descending)

A3.16.3. Number of Safety personnel required for the obstacle. 1 Safety Observer. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used.

A3.16.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling to the ground.

A3.16.5. Special Considerations and equipment. Ensure trainees put head to the red. There will be 8 trainees on the obstacle at a time. Four on the front and four on the back. Trainees must go up the

front, next to the utility poles, and down the backside next to the 4X4. Ensure trainees use the wingman concept, and they walk out of the rubber pit. The possibility exists for falling injuries.

A3.16.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.17. Tower



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.17. Tower (12' High)

A3.17.1. Completing the Obstacle. Four lanes, 13' high. Walk up to the obstacle, climb up utility poles to the top. Sit on the top platform, turn 180° around and immediately grasp the rope with both hands. When clear, use hands and feet, grasp rope above knot and swing out descending hand-under-hand. Look down to make sure previous trainee clears pit before swinging out. **DO NOT** panic or let go of the rope.

A3.17.2. Number of personnel allowed on obstacle. 4, 1 per lane

A3.17.3. Number of Safety personnel required for the obstacle. 1 Safety Observer (Cadre). Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used.

A3.17.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling to the ground.

A3.17.5. Special Considerations and equipment. Trainees must sit down on the top ledge, and then spin around. Trainees **MUST NOT LET GO OF THE ROPE FOR ANY REASON!** Tell trainees to keep their feet and hands on the rope. Trainees must walk out of the pit and proceed to the next obstacle with a wingman. The potential exists for falling/ankle injuries.

A3.17.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/stddgn/StdIndex.aspx?id=13>

Figure A3.18. Pole Over



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.18. Pole Over (7' 7" High)

A3.18.1. Completing the Obstacle. Approach the pull up bar and grab it with both hands. Face the vertical utility pole and grab the horizontal bar with both hands. Use your feet to climb up the utility poles while pulling your body up and over the pull up bar. You may also place your foot in front of the utility pole for leverage to help you get over the top of the bar. Land feet first in the sand and continue by low crawling under the utility pole, then immediately stand up. Step onto the next utility pole and with both hands reach out and grab the pull-up bar in front of you. Swing your lower body up toward the parallel bars and lock your feet onto the top of the bars. Wrap your arms around the parallel bars and pull your self up so that you are now in a sitting position on the bars. Without changing your position, slide down the metal bars until you reach the two parallel utility poles, stand up placing one foot on each pole. Walk down the poles and place both hands on the horizontal utility pole and spring up onto it flat on your stomach, keeping your head to the red. Pivot on your stomach and land feet first into the sand below. Lay flat with your on the sand, and low crawl under the last utility pole all the way to the end. Use the inside of your knees and elbows to move yourself down the lane. Keep your head down and belly against the sand.

A3.18.2. Number of personnel allowed on obstacle. 4

A3.18.3. Number of Safety personnel required for the obstacle. 2 Safety Observers. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used.

A3.18.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling and hitting head/torso on pole.

A3.18.5. Special Considerations and equipment. - Trainees must use their feet and legs as leverage to get over the pole over bar. Trainees are only allowed two swing attempts on the monkey bar before they go around to the sand low crawl area. Ensure trainees keep their stomach in contact with the sand. When you have reached the end of the sand, use the brushes to brush the sand off your uniform.

A3.18.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.19. Enforcer



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.19. Enforcer (12' 9" High)

A3.19.1. Completing the Obstacle. Two sections, two lanes per section. Climb up 8' rope ladder, head towards red. Walk across 4"X4"s using handrails. STOP and LOOK for other trainees before proceeding. Walk up 45° inclining cross members, 18" apart. Lay flat on your stomach on the top platform; head to red and feet to the inside. Using hands and feet, descend down the 14' ladder.

A3.19.2. Number of personnel allowed on obstacle. 4 per side.

A3.19.3. Number of Safety personnel required for the obstacle. 1 Safety Observer. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used.

A3.19.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling to the ground.

A3.19.5. Special Considerations and equipment. Trainees are to walk across the wooden platform 4x4's. Ensure trainees place their head to the red. The potential exists for falling off of the obstacle ladder and having head, neck or back injuries

A3.19.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.20. The Tubes



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.20. The Tubes (10' 1" High Deck)

A3.20.1. Completing the Obstacle. Three metal tubes on top of an 8' high deck. Climb up the ladder. Crawl through the 12 foot tube, stand on deck, and reach out, grab fireman's pole and slide down into rubber pit.

A3.20.2. Number of personnel allowed on obstacle. 1 trainee per tube/lane.

A3.20.3. Number of Safety personnel required for the obstacle. 1 Safety Observer. Courses designed with multiple lanes may run these lanes simultaneously. In these cases, additional safety observers may be used.

A3.20.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling to the ground.

A3.20.5. Special Considerations and equipment. WET TRAINEES WILL USE THE FAR RIGHT LANE. Ensure trainees have both hands and feet wrapped around the fireman's pole as they slide down. Trainees must walk out of the pit and proceed to the next obstacle with a wingman. The potential exists for ankle injuries while sliding down fireman's pole into rubberized pit.

A3.20.6. Fall zone protection. Fall zone around and under the obstacle must be constructed of material that is capable of absorbing the impact of someone falling off the obstacle (18" sand, 12" ground rubber, or 24" sawdust). Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Figure A3.21. Monkey Bars



NOTE: Picture may not clearly depict fall zone or additional safety precautions (i.e. padding). Refer to sub-paragraphs 5 & 6 below for safety requirements.

A3.21. Monkey Bars (26' long, with 16 bars/Approximately 2' drop into water)

A3.21.1. Completing the Obstacle. Horizontal steel ladder 26' long with 16 bars, crossing pond 3' deep. Start and finish at the black boxes placed at the end of the obstacle. Hand walk the ladder to the other side, both hands grasping every rung. Keep at least two bars between you and the other trainees. **DO NOT** pass or run into anyone. If you fall in, stand up and move to the middle between monkey bars, then walk towards the ladder.

A3.21.2. Number of personnel allowed on obstacle. Maximum of 8 trainees on long set.

A3.21.3. Number of Safety personnel required for the obstacle. 1 Safety Observer per bar and 2 swimmers (trainees).

A3.21.4. Level of risk (severity) for this obstacle. This obstacle has a moderate risk due to the possibility of falling into the water and taking in water or slipping on exit.

A3.21.5. Special Considerations and equipment. WET TRAINEES WILL USE THE SHORT SET OF MONKEE BARS. Ensure trainees are at least two rungs apart before the next trainee attempts obstacle. Trainees must touch every rung with both hands. They cannot skip rungs. Ensure that there are two swimmers at the pond prior to trainees getting on the obstacle. The potential exists for head, neck or back injuries if trainees fall off bars onto the platform.

A3.21.6. Fall zone protection. This obstacle must have a minimum of 30", but no more than 48" of water under the entire length of the rope being traversed. If water is not present or at the appropriate depth, this obstacle will not be used. Design and construction standards can be found at: <http://www.hnd.usace.army.mil/std/dgn/StdIndex.aspx?id=13>

Attachment 4

OBSTACLE COURSE SAFETY BRIEFING

A4.1. Obstacle courses are not playgrounds. The obstacles are difficult and require your full attention. Personnel have been seriously, and in a few instances, fatally injured while attempting an obstacle. To prevent occurrences of this nature we must make safety "our primary concern."

A4.2. Remain alert. Personnel on the course are to be constantly alert for any unsafe acts or conditions (loose bolts, protruding nails, excessive splinters, loose or frayed ropes, rotten or split lumber). If any unsafe conditions are noted, you must notify an instructor immediately.

A4.3. Participation. Participants are encouraged to attempt all obstacles, but have the right to decline any obstacle that may be too difficult.

A4.4. Instructor intervention. Instructors will intervene and stop you from completing an obstacle, or the entire course, if they determine you are overly fatigued, appear to have a fear of an obstacle, or are negotiating an obstacle in an unsafe manner. Do not argue with the instructors if they stop you, they are doing so in your best interest.

A4.5. Non-interference with obstacle negotiation. No one may attempt to make an obstacle more difficult by shaking ropes, rolling logs, etc., or attempt to humiliate participants into attempting an obstacle.

A4.6. No horseplay on the course. Horseplay or deliberate unsafe acts will not be tolerated on the course. Anyone involved in such activities will immediately be removed from the course and reported to their commander.

A4.7. Uniform. All personnel should wear BDU/ABU shirts, trousers (with belt), socks, and properly laced ankle-supporting boots. Additionally, a good pair of gloves is recommended to prevent rope burns while running the course. Tight clothing and rubberized or plastic suits are not to be worn. Extra items are not to be carried or strapped to the body unless approved by the installation commander.

A4.8. Weather assessment. Prior to conducting training, the senior leader will access Air Force approved weather sources for current and forecasted conditions to include wind speed. If it is raining the senior ranking instructor will make an operational risk management decision on the determination to continue or stop training.

A4.9. Work / rest cycle. Work and rest cycles today are ____/____. It is recommended you drink a minimum of ____ quarts of water per hour. Water is located at _____ locations along the obstacle course

A4.10. Minimum physical fitness requirements. Personnel attempting to negotiate the course must be within fitness standards and able to pass all phases of the AF physical fitness test when they arrive for training on any obstacle course.

NOTE: At the USAFA, the Commandant of Cadets is the decision authority for approving cadets to participate on obstacle courses as part of military training. Cadets will be thoroughly screened for

the physical capability to safely negotiate obstacles prior to participating on any course. All non-cadet participants will comply with A4.10.

A4.11. Minimum warm-up / cool-down. Obstacle course participants will conduct a minimum of five minutes of warm-up and stretching exercises prior to and after negotiating the course. These events will be led by either the OCPI or OCPSO.

A4.12. No jewelry. Individuals will remove all jewelry, Camelbacks, backpacks, and empty all pockets prior to negotiating the course (EXCEPTION: MAJCOM/A3s may authorize competitions using CAT II courses and the use of individual kit (load bearing equipment, rucksack, etc.) on all obstacle courses.).

A4.13. Medication. If anyone is on medication or has any physical reasons why they do not feel comfortable attempting the course, they should say so at this time.

A4.14. Walk thru. The senior OCPI and OCPSO (if required) will conduct a walk through with all participants and brief/demonstrate the following for each obstacle:

A4.14.1. Definition of the obstacle

A4.14.2. Out-of-Bounds areas

A4.14.3. Any additional ground rules

A4.14.4. Number of personnel allowed on obstacle at one time

A4.14.5. How to negotiate the obstacle (see paragraph 3.6.)

A4.14.6. Safety considerations

A4.14.7. A demonstration will happen at each obstacle

A4.14.8. If participating Airmen are still in question; they may receive additional instructions and/or conduct a “walk-through” rehearsal prior to negotiating the obstacle course.

Attachment 5

OCP COURSE MAINTENANCE CHECKLIST

ITEM	YES	NO	REMARKS
5.1. COURSE INSPECTION: (Installation Safety Office, OCPM, Civil Engineering Flight)			
5.1.1. Are the obstacles substantially built with sharp points and corners eliminated?			
5.1.2. Are joints butted or joined together in such a manner that there are no gaps?			
5.1.3. Are the structural members sound and free of significant deterioration?			
5.1.4. Are the obstacles free of large splinters, burrs, protruding nails, screw heads and other hazards?			
5.1.5. Are all support bolts (including rope supporting eye bolts) free of corrosion and equipped with washers or back plate to prevent being pulled through the wood?			
5.1.6. Are the eye-bolts, that secure a rope to a support beam, secured in such a manner that there is no risk of the eye bolt separating from the obstacle (ie: cotter keyed, double nut, tack welded, etc)?			
5.1.7. Do all ropes meet the following criteria?			
5.1.7.1. Ropes in good condition with no abnormal wear, powdered fiber between strands, broken or cut fibers, discoloration or rotting? NOTE: Ropes will not be masked with tape that prevents inspection			
5.1.7.2. Eye splices contain at least 3 full tucks?			
5.1.7.3. Spliced strand ends extend 6 inches beyond last full tuck (or tapered and spliced into body of rope using 2 additional tucks)?			
5.1.7.4. Is the eye portion of an eye splice, large enough to provide an included angle of not greater than 60 degrees at the splice when the eye is placed over a support? Ref: 29 CFR 1926.251(d)			
5.1.8. Wire rope (wire support cables). Are wire ropes?			
5.1.8.1. In serviceable condition?			
5.1.8.2. Free of corrosion?			

ITEM	YES	NO	REMARKS
5.1.8.3. Less than 10% of the total number of wires are broken in any length equaling 8 rope diameters?			
5.1.8.4. Free of signs of deterioration/excessive wear?			
5.1.8.5. Are the wire ropes properly tensioned?			
5.1.8.6. Are rope wire clips placed so that the “U” section is in contact with the dead end of the cable?			
5.1.8.7. Are sufficient wire rope clips used? (Table H-20 of the ref. or IAW the manufacturer’s recommendation.) Ref: 29 CFR 1926.251(c)(5)			
5.1.9. Is chafing gear used where appropriate?			
5.1.10. Cargo netting. Are nets?			
5.1.10.1. Securely anchored both top and bottom?			
5.1.10.2. Serviceable condition with no frayed ends or missing sections?			
5.1.11. When barbed wire is used, is the wire under sufficient tension to prevent undue sagging?			
5.1.12. When metal pipes are used in the construction of obstacles, are they secured so as not to spin or rotate when gripped?			
5.1.13. Are the surfaces of the pipes checked to ensure they are free of corrosion and contain no sharp edges?			
5.1.14. Landing areas:			
5.1.14.1. Do landing areas contain the appropriate type of fall protection material such as wood mulch, double shredded bark mulch, uniform wood chips, or rubber chips?			
5.1.14.2. Do the landing areas contain at least one of the following non-compressed depth of fall protection material: 18 inches sand 12” shredded rubber 24” sawdust IAW para. A2.4 http://www.tradoc.army.mil/tpubs/pams/p385-1.pdf			
5.1.14.3. Is the landing area large enough to accomplish its intended purpose?			
5.1.14.4. Are all landing areas free of obstructions, not sunk in or full of water?			
5.2. MAINTENANCE: (Base Civil Engineering Squadron)			

ITEM	YES	NO	REMARKS
<p>5.2.1. Have the courses been placed on a regularly scheduled inspection/maintenance program. (Normally on a quarterly basis and covers such items as: inspection, repair (as required), replacement/repair of any padding used, replenishment of wood mulch, etc.)?</p> <p>Ref: AFI 36-2202,</p>			
<p>5.2.2. Are the courses inspected periodically by a qualified engineer (time intervals to be established by the engineer based on type of structure, climatic conditions, etc)?</p>			
<p>5.2.3. Are copies of the engineer's inspection reports (and maintenance repair records) kept on file?</p> <p>REF: AFI 36-2202,</p>			
<p>5.3. TRAINING: (User)</p>			
<p>5.3.1. Is the course inspected for safety hazards prior to each use?</p> <p>Ref: AFI 36-2202</p>			
<p>5.3.2. Have all landing areas been loosened up prior to use and, if a large number of participants are on hand, have arrangements been made to loosen up the material at intervals throughout the usage?</p> <p>REF: AFI 36-2202</p>			
<p>5.3.3. Are medical personnel and an emergency vehicle readily available within acceptable response time to the CAT II site?</p>			
<p>5.3.4. Are primary and secondary means of communications available at the site?</p> <p>Ref: AFI 36-2202,</p>			
<p>5.3.6. Are personnel adequately briefed on safety hazards?</p> <p>Ref: AFI 36-2202,</p>			
<p>5.3.7. Do all participants wear long sleeved shirts and long trousers while negotiating all obstacles?</p> <p>Ref: AFI 36-2202,,attachment A4.7.</p>			
<p>5.3.8. Are warm up exercises conducted before personnel negotiate the course?</p> <p>Ref: AFI 36-2202, Atch A4.11.</p>			
<p>5.3.10. Is the negotiation of the higher and more difficult obstacles under the supervision of an OCPI or OCPSO?</p> <p>Ref: AFI 36-2202, Attachment 5</p>			

ITEM	YES	NO	REMARKS
5.3.11. Is training postponed when weather conditions have caused the footing or handhold surfaces to become slippery? Ref: AFI 36-2202, para 3.5.6.			
5.3.12. Are personnel instructed in the proper technique of negotiating each obstacle? Ref: AFI 36-2202, para 3.6.			
5.4. OBSTACLE COURSE: (User)			
5.4.1. Are personnel given the opportunity to watch a demonstration of the obstacle negotiation techniques? Ref: AFI 36-2202, para 3.6.			
5.4.2. Does the technique instruction include a detailed demonstration as well as an explanation that includes emphasizing the avoidance of injury? Ref: AFI 36-2202, para 4.2.			

References

29 CFR 1926, Occupational Safety and Health Standards for the Construction Industry

ANSI A10.11-1989, American National Standard for Personnel and Debris Nets dtd 19Apr89

 Printed Name/Grade

 Signature/Date

SAMPLE ORM FOR CAT II OBSTACLE COURSES

OBSTACLE NAME	RISKS IDENTIFIED	POTENTIAL INJURY FROM RISKS	RISK	COUNTER-MEASURES	RESIDUAL RISK
[Description of activity involved in overcoming the obstacle.]	[List all risks for all areas. There is no magic number of risks for each obstacle.]	[Describe what the potential Injury would be, i.e. what would/could happen for each risk.]	[What is the risk associated with the hazard?]	[What can be done to mitigate the risk?]	[After implementation of counter-measures.]
<p>1. General Hazards</p> <p>There are a variety of general hazards common to many of the obstacles. The guidelines in this section apply to all obstacles.</p>	<p>1. Poorly maintained equipment; loose or severely worn or deteriorated parts.</p> <p>2. Sharp points, corners, and edges.</p> <p>3. Protrusions and projections of assembly points. Bolts, screws, nails, etc., should not protrude or project into the actual playing area for participants.</p>	<p>1. Falls resulting from failure of components; splinters.</p> <p>2. Lacerations, punctures, tears and cuts</p> <p>3. Lacerations, punctures, entanglement</p>	<p>1. Moderate</p> <p>2. Moderate</p> <p>3. Negligible</p>	<p>1. Inspect equipment prior to use, after heavy usage, and periodically throughout event. Establish a regular maintenance program.</p> <p>2. All components which participants contact should be smooth and free of splinters. All corners, metal and wood, should be rounded. All metal edges should be rolled or have rounded capping.</p> <p>3. Ensure there are no protrusions in the playing area. All bolts, nails, etc., should be recessed. Participants should not have any material in their pockets. Remove all jewelry from person.</p> <p>4. The OC Instructor will conduct a thorough briefing and demonstration on all obstacles prior to participants beginning the course.</p>	<p>1. Low</p> <p>2. Low</p> <p>3. Low</p>

OBSTACLE NAME	RISKS IDENTIFIED	POTENTIAL INJURY FROM RISKS	RISK	COUNTER-MEASURES	RESIDUAL RISK
<p>2. Incline Wall</p> <p>Participants approach the underside of the wall, jumps up and grasp the top, and pull themselves up and over. They slide or jump down the incline to the ground.</p>	<p>Fall 6.6ft from top of wall to ground level.</p>	<p>Bruises, contusions, shin splints, splinters, strains and sprains</p>	<p>Moderate</p>	<p>Place loose sand, wood chips, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall.</p>	<p>Low</p>
<p>3. Low Belly Over</p> <p>Participants mount the low log, jump onto the high log. They grasp over the top of the log with both arms, keeping the belly in contact with it. They swing their legs over the log and lower themselves to the ground.</p>	<p>Fall from height of 8 ft.</p>	<p>Bruises, contusions, strains and sprains</p>	<p>Moderate</p>	<p>Place loose sand, wood chips, sawdust, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall.</p>	<p>Low</p>
<p>4. Swing Stop and Jump</p> <p>Participants gain momentum with a short run, grasp the rope, and swing their bodies forward to the top of the wall. They release the rope while standing on the wall and jump to the ground.</p>	<p>Height of landing 4.6ft</p>	<p>Rope burns, bruises, strains, contusions</p>	<p>Moderate</p>	<p>Place loose sand, wood chips, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall. Obstacle should not be used during inclement weather.</p>	<p>Low</p>

OBSTACLE NAME	RISKS IDENTIFIED	POTENTIAL INJURY FROM RISKS	RISK	COUNTER-MEASURES	RESIDUAL RISK
5. Weaver Participants move from one end to the obstacle to the other by weaving their bodies under one bar and over the next.	Falls from 14 feet at highest point of obstacle.	Head injury, bruises, contusions, sprains, and strains	Moderate	Place a cushion of considerable girth beneath the apex. Place loose sand, wood chip, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall.	Low
6. Easy Balancer Participants walk up an inclined log, transition to a declined log and maneuver back to the ground.	Slips, trips, and falls resulting from trying to transverse the 4.0 ft.	Bruises, contusions, sprains or scrapes	Moderate Loose	sand, wood chips under and around the obstacle where participants may fall.	Low
7. Reverse Climb Participants must climb an inverted log ladder.	Slips or fall from 10' (highest point)	Head injury, bruises, contusions, sprains, and scrapes	Moderate Loose	sand, wood chips under and around the obstacle where participants may fall.	Low
8. Dirty Name Participants mount the low log, jump onto the middle log. Grasp over the top of the middle log with both arms, and come to a balanced standing position. Jump to highest log in same manner. Swing their legs over the log and lower to the ground.	Fall from height of 10 ft.	Bruises, contusions, strains and sprains	Moderate	Place loose sand, wood chips, sawdust, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall.	Low

OBSTACLE NAME	RISKS IDENTIFIED	POTENTIAL INJURY FROM RISKS	RISK	COUNTER-MEASURES	RESIDUAL RISK
<p>9. Tarzan Participants mount lowest log and maintain balance while walking the horizontal log. Climb the next log and traverse the ladder one rung at a time, releasing one hand and swinging forward.</p>	<p>Fall from max height of 10 ft.</p>	<p>Bruises, contusions, strains and sprains</p>	<p>Moderate</p>	<p>Place loose sand, wood chips, sawdust, shredded tires, or unitary synthetic materials under and around the obstacle where participants may fall.</p>	<p>Low</p>

Attachment 7

OBSTACLE COURSE PRE-FLIGHT CHECKLIST

All items listed below will be accomplished and adhered to prior to and during use of the OCP Course.
1. OCP course maintenance checklist must be completed and signed. All safety issues and/or obstacles deemed unsafe have been marked as off-limits and briefed to participants.
2. All holes larger than two-feet (2') in diameter in the normal path for negotiating the obstacle are marked by orange cones
3. Base Weather contacted for current/projected weather to include wind speed
4. Base OCP Course owner have been notified of unsafe obstacles
5. All participants received safety briefing
6. Radio check conducted with Base Ops
7. Receive all physical fitness assessment sheets completed by all participants requesting to accomplish high-risk obstacles
8. Video and/or demonstration of all obstacles was presented
9. High risk obstacle safety personnel identified and are current
10. Medical support is readily available within acceptable response time to the CAT II course
11. All personnel have been briefed on emergency procedures
12. Emergency vehicle capable of transporting an individual in the prone position is on-site and location briefed to all individuals
13. First-aid kit on hand
14. Sufficient water has been made available. Location(s) briefed to individuals
15. Inclement weather actions briefed to all personnel.

As the Confidence Course Senior Leader, I affirm that all above actions have been completed and complied with prior to and during use of the confidence course.

 Printed Name/Grade

 Signature/Date