Purpose
The purpose of this procedure is to describe the policy, guidelines, and regulatory requirements that shall be followed to mitigate the risks associated with personnel working at heights. Specifications for fall protection equipment construction, inspection and use will also be outlined.

Scope
The following requirements/practices are detailed in this procedure:
- Job planning
- Rescue
- Securing Openings of Elevated Decks and Open Holes
- Barriers and Barricading

Fall prevention techniques using the following are detailed in this procedure:
- Fall protection systems
- Ladders
- Scaffolds
- Decking

Applicability
This procedure applies to all Fieldwood Energy employees including shelf, deep water, drilling, workover, completions, plug and abandonment, and construction activities on Fieldwood Energy locations.

In addition to employee requirements, contractors working on Fieldwood locations will:
- Comply with the procedure, however where there is a conflict with the procedure requirements noted herein and a contractor’s safety program, workers will comply with the stricter of the two.
- Ensure that equipment used meets or exceeds applicable regulations, standards, and guidelines.
- Ensure that their employees are adequately trained in the use, inspection, and maintenance of all fall protection equipment
- Have a written rescue plan in place, communicated and have available all equipment to execute a prompt, safe rescue/retrieval of personnel in a timely manner prior to starting work.
References - This table represents references consulted in development of this safe work practice

<table>
<thead>
<tr>
<th>Regulation/Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI A10.11</td>
<td>Personnel and Debris Nets</td>
</tr>
<tr>
<td>ANSI A10.22</td>
<td>Safety Requirements for Rope-Guided and Non-guided Workers' Hoists for Construction and Demolition Operations</td>
</tr>
<tr>
<td>ANSI A14.3</td>
<td>Fixed Ladders</td>
</tr>
<tr>
<td>ANSI Z359</td>
<td>Fall Arrest Systems</td>
</tr>
<tr>
<td>ANSI A14.1, A14.2, and A14.5</td>
<td>Safety Requirements for Portable Wood, Metal, and Reinforced Plastic Portable Ladders</td>
</tr>
<tr>
<td>ANSI/ SIA A92.2</td>
<td>Vehicle-Mounted Elevating and Rotating Aerial Devices</td>
</tr>
<tr>
<td>ANSI A92.3</td>
<td>American National Standard for Manually Propelled Elevating Aerial Platforms</td>
</tr>
<tr>
<td>ANSI A92.5</td>
<td>American National Standard Boom-Supported Elevating Work Platforms</td>
</tr>
<tr>
<td>ANSI A92.6</td>
<td>Self-Propelled Elevating Work Platforms</td>
</tr>
<tr>
<td>ASME B30.23</td>
<td>Personnel Lifting Systems</td>
</tr>
<tr>
<td>ASME B30.9</td>
<td>Slings</td>
</tr>
<tr>
<td>API RP 2D (5.2.4b)</td>
<td>Offshore Cranes</td>
</tr>
<tr>
<td>USCG 33 CFR Subchapter N</td>
<td>Part 142, (OCS Facilities)</td>
</tr>
<tr>
<td></td>
<td>Subpart B – Personal Protective Equipment, 142.42 Safety Belts and Life Lines</td>
</tr>
<tr>
<td></td>
<td>Subpart C – General Workplace Conditions, 142.87 Guarding of Deck Openings</td>
</tr>
<tr>
<td></td>
<td>Part 143, (OCS Facilities)</td>
</tr>
<tr>
<td></td>
<td>Equipment and Design, Subpart B, OCS Facilities 143.110 Guards and Rails</td>
</tr>
<tr>
<td>OSHA 3146</td>
<td>Fall Protection in Construction</td>
</tr>
<tr>
<td>29 CFR</td>
<td>1910.21–23 General Industry</td>
</tr>
<tr>
<td></td>
<td>1910.28 Safety Requirements for Scaffolding</td>
</tr>
<tr>
<td></td>
<td>1915 Maritime Industry</td>
</tr>
<tr>
<td></td>
<td>1917.119 Portable Ladders</td>
</tr>
<tr>
<td></td>
<td>1926.106 Working over or near Water</td>
</tr>
<tr>
<td></td>
<td>1926.450 Subpart L Scaffolds</td>
</tr>
<tr>
<td></td>
<td>1926.451 General Requirements</td>
</tr>
<tr>
<td></td>
<td>1926.500 Subpart M Construction Industry, Fall Protection</td>
</tr>
<tr>
<td></td>
<td>1926.1431 Hoisting Personnel</td>
</tr>
<tr>
<td></td>
<td>1926.1501 (g) Crane or derrick suspended personnel platforms</td>
</tr>
<tr>
<td>BSEE 30 CFR 250</td>
<td>Oil and Gas and Sulfur Operations in the Outer Continental Shelf</td>
</tr>
</tbody>
</table>

Definitions

- **Anchorage** – a secure point of attachment for lifelines, lanyards, or deceleration devices.
- **Body Harness** – Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with means for attaching it to other components of a personal fall arrest system.
• **Competent Person** – A person capable of identifying and correcting predictable fall hazards in their work environment. A competent person for this procedure will be trained and experienced in fall hazards, fall/rescue equipment and procedures.

• **Controlled Access Zones** – An area in which certain work may take place without the use of guardrail systems, personal fall arrest systems, and where access to the zone is controlled.

• **Deceleration Device** – Any mechanism, such as a rope grab, rip stitch lanyard, specially woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall or otherwise limit the energy imposed on an employee during fall arrest.

• **Deceleration Distance** - the additional vertical distance a falling victim travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee’s body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

• **Free fall** - the act of falling before a personal fall arrest system begins to apply force to arrest the fall.

• **Free fall distance** - the vertical displacement of the fall arrest attachment point on the employee’s body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance, and lifeline / lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline / lanyard extension before they operate and fall arrest forces occur.

• **Guardrail system** - a barrier erected to prevent employees from falling to lower levels.

• **Lanyard** – A flexible line of rope, wire rope, or straps which generally has a connector at each end for connecting the body harness to a deceleration device, lifeline, or anchorage.

• **Leading Edge** – The edge of a floor, roof, or formwork for a floor or other walking / working surface (such as the deck), which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed to be an “unprotected side and edge” during periods when it is not actively and continuously under construction.

• **Lifeline** – A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

• **Open Hole** – a hole that is 2 inches or more at its greatest distance, located in any walking or working surface.

• **Personal Fall Arrest System** – A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body harness, and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.
• **Rope Grab** – A deceleration device that travels on a lifeline and automatically by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

• **Rescue Plan** – A pre-determined plan of rescuing a potential fall victim including the means, methods, equipment, and resources necessary to execute a safe, prompt rescue depending upon the worst-case scenario.

• **Safety Monitoring** – A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

• **Self-Retracting Lifeline/Lanyard** – A deceleration device containing a drum-wound line, which can be slowly extracted from or retracted onto the drum under slight tension during normal employee movement, and which after onset of a fall, automatically locks the drum and arrests the fall.

• **Standard Railing (handrail)** – Shall consist of a top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches nominal from upper surface of top rail to floor, platform, runway, or ramp level and shall meet OSHA 29 CFR 1910.23 requirements.

• **Standard Stair Railing (handrail)** – Shall be of construction similar to a standard railing but the vertical height shall be not more than 34 inches nor less than 30 inches from the upper surface of top rail to surface of tread in line with face of riser at forward edge of tread and shall meet OSHA 29 CFR 1910.23 requirements.

• **Twin Lanyard** – Two lanyards sharing a common shock absorbing device.

• **Unprotected sides and edges** - any side or edge, 4 feet or more above adjacent floor or ground level, (except at entrances to points of access) e.g., floor, roof, ramp, or runway, where there is no wall or standard rail system at least 42 inches high.

• **Walking / working surface** - any surface, whether horizontal or vertical, on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork, and concrete reinforcing steel, but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.

**Roles and Responsibilities – Person in Charge or Project Supervisor**

• Understanding and complying with this procedure.

• Evaluating the potential elevated work hazards at Fieldwood Energy facilities/sites, qualifying the level of risk of each job, and establishing the required safeguards.

• Ensuring that personnel assigned to work at heights and/or in proximity to an open hole requiring fall protection are properly trained according to the requirements of this policy.

• Re-evaluating the potential elevated work hazards when changes in work areas may affect the safeguards required.

• Monitoring work areas for compliance with this procedure and required safeguards.

• Ensuring any additional precautions are included as necessary in permits.
• Evaluating the need for a rescue plan as an integral part of pre-planning a job which requires the use of fall protection.

• Ensuring inspections are performed by their personnel.

• Removing from service any equipment subjected to the forces of a fall.

• Ensuring the Working from Heights and/or Open Hole Permit (Section D, Chapter 6, Part A) is completed prior to beginning work from heights or opening of hole(s).

• Ensuring the Fall Rescue Plan/Checklist (Section D, Chapter 6, Part C) is completed prior to beginning work from heights or opening of hole(s).

Responsibilities - Employee or Contract Personnel

• Understanding and following the requirements of all applicable Safe Work Practices.

• Immediately reporting of potential fall hazards to their Supervisors.

• Bringing any questions or concerns about the type of personal fall protection equipment or system installation on any job to the attention of supervision.

• Inspecting the personal fall protection system anchor points, connecting means, lanyards, harnesses, etc. prior to use. This inspection should be thorough and any problems should be immediately brought to the attention of supervision.

• Reporting any fall to supervisors immediately.

• Removing from service any equipment subjected to the forces of a fall or have been inspected and found to contain deficiencies or defective components.

Requirements - Methods of Fall Prevention

All personnel must be able to recognize where fall hazards exist, which may include the following:

• Uneven surfaces
• Obstacles or clutter
• Elevated work areas
• Inadequate handrails
• Inadequate barricades around a deck opening or edge
• Improper climbing equipment
• Fall protection equipment failures
Requirements - Hazard Control Hierarchy (Hazards Analysis)

<table>
<thead>
<tr>
<th>Order</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eliminate fall hazards (ex. reposition equipment and valves through engineering to avoid working at heights</td>
</tr>
<tr>
<td>2</td>
<td>Use traditional fall protection design (ex. handrails, and guardrails) on permanent platforms</td>
</tr>
<tr>
<td>3</td>
<td>Work from temporary or moveable platforms that are properly secured</td>
</tr>
<tr>
<td>4</td>
<td>Use fall restraint systems (ex. barricades or restraint lines that prevent personnel from reaching the fall hazard)</td>
</tr>
<tr>
<td>5</td>
<td>Use fall arrest systems, ladder climbing systems, or other systems designed to “catch” personnel when the possibility of a fall cannot be prevented</td>
</tr>
</tbody>
</table>

Requirements - Fall Protection Requirements by Situation

A fall arrest system is a system that will stop a worker’s fall before the worker contacts the surface below. The following are situations where 100% continuous attachment fall arrest systems are required:

- Working at or above 6’ above a working surface not protected by handrails or guardrails (measured from the deck to where an individual is standing or sitting to perform work)
- Working near or above handrails or guardrails where the potential to fall from a height greater than or equal to 6’ of the working surface.
- Ascending or descending uncaged ladders to a height greater than or equal to 6’ where the deck above does not contain adequate fall prevention (ex. no guardrails, handrails, or lift gate above)
- Ascending or descending uncaged ladders to a height at or above 20’
- Ascending or descending ladders with or without cages regardless of height, where a risk assessment has determined that a fall protection system is required.
- Performing stationary maintenance on a ladder at or above 6’ from the next level while working equal distance as the height from a protected side or edge.
- Where exposure to an open hole exists
- Working over water or at the bottom level (ex. +10 deck) while performing work tasks such that creating an open hole is part of the work (ex. changing grating)
- Working from a lifted basket over a deck (ex. spider or engineered and approved work basket)
- Work on scaffolds, both suspended and erected. In certain instances on erected scaffolds inspected by competent person to be in compliance with all necessary safeguards (ex. fully enclosed hand rails, mid-rails, access gate enclosure, toe boards, and no open holes as stated in definition above) the use of fall protection once in the confines of the erected scaffold may allow for removal of fall protection dependent upon risk assessment. At no
time will workers be allowed to remove fall protection while working on a suspended scaffold.

- When working at a height greater than or equal to 6' but less than 20', the use of a self-retracting lanyard or lanyard of suitable length to prevent impact to object(s) or working surface below.
- At no time will a worker be allowed to be left alone while working at heights where fall protection is required.

Requirements - Fall Protection Systems

The Lanyard is part of a fall arrest system when used with an approved shock absorber and attached to the fall arrest attachment of a full body harness and is designed to connect a worker to an anchorage. Lanyards must be ANSI Z359.1 approved. Lanyards must have a shock absorbing device integral to them. Shock absorbers shall allow for a maximum deceleration distance of 3.5 feet, and limit fall arrest forces to 900 lbs. All snap hooks integral to lanyards shall be of the self-locking/self-closing design. Lanyards shall be capable of supporting 5,000 lbs.

- Lanyards shall have self-closing, self-locking snaphooks and/or carabiners to reduce the possibility of rollout. Do not use snaphooks or connectors that will not completely close when attached.
- Connect the middle snap hook of the twin lanyard to the back D-ring of an approved full body harness. Connect the snap hook at the end of one leg to an initial anchorage. Connect the snap hook at the end of the other leg to a secondary anchorage before moving and/or disconnecting from the initial anchorage.

Self-Retracting Lanyard (SRL)

- SRL’s shall be installed using approved connectors (e.g., carabiners or anchor pads/straps), to an anchor point capable of supporting 5,000 lbs. The attachment point of the SRL shall be at the dorsal D-ring of the harness. Users of SRL’s shall not connect the snap hook of their lanyard to the snap hook of a SRL. SRL’s should be used when the potential free fall distance is greater than 6 feet, or when the height of the walking/working surface is less than 12 feet from ground level.
- The Suspension Trauma Safety Step is suggested and designed to reduce the potential for suspension trauma following a fall in a full body harness. The loops of the safety step provide a means for the user to place load on the legs while suspended in the harness.
Fall Rescue Equipment

Where the requirement to use fall protection exists, so does the requirement to have adequate fall rescue equipment on site exists as well. This includes all equipment as specified within the required fall rescue plan including (but not limited to) ladders, rescue poles, manual & auto decent devices, tripods, block and tackle devices, additional beam sliders/clamps designated for rescue, etc.

Horizontal Lifeline

Horizontal lifelines shall be designed, installed, and used under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of two. If the above criteria for horizontal lifeline systems cannot be met, a pre-engineered and tested horizontal lifeline system shall be used in lieu of a make-shift horizontal lifeline.

Vertical Lifeline

When vertical lifelines are used, each employee shall be attached to a separate lifeline. Components of the vertical lifeline system shall be capable of supporting 5,000 lbs. The attachment point of the fall arrestor shall be at the dorsal D-ring of the harness. When permanently installed ladder climbing systems are used, the fall arrestor shall be attached at the chest D-ring of the harness.

Requirements - Anchor Point

An anchor point is a secure point of attachment for lanyards, lifelines, or other components of a personal fall arrest system. Anchor points shall be capable of supporting 5,000 lbs. per employee attached, or shall be designed with a safety factor of at least two by a qualified person.
An anchor point should be as directly overhead as possible, or attachment to the anchor point should be chosen as to not allow a free fall of greater than 6 feet. In cases where the anchor point is lower than the attachment point of the harness, a shorter lanyard or other fall arrest device (i.e., retractable lifeline) should be used.

**Requirements - Inspection**

Personal fall arrest systems shall be inspected prior to each use. Check the fall-arrest force indicator before each use. All stitches through the fold must be intact. Inspect all webbing (straps) and stitching for cuts, fraying, pulled or broken threads, abrasion, excessive wear, altered or missing straps, burns, UV damage, and heat and chemical exposures. Inspect all parts for deformation, cracks, corrosion, deep pitting, burrs, sharp edges, cuts, nicks, exposure to excessive heat or chemicals or other damage. Check for missing, loose, or improperly functioning parts. Inspect all labels. They must be present and legible.

**Requirements - Cleaning**

Clean the harness and lanyard with a solution of water and mild laundry detergent. Dry hardware with a clean cloth and hang to air dry. Do not speed dry with heat. Excessive accumulation of dirt, paint, or other foreign matter may prevent proper function of the harness and, in severe cases, weaken the webbing. To clean quick connect buckles remove foreign material with a cotton swab. In dusty environments, fine particles can prevent proper function of the buckle. Dip the buckle in clean water to flush fine particles. Remove excess water and allow to air dry.

**Requirements – Removal from Service**

Equipment which is damaged or in need of maintenance must be tagged “UNUSABLE” and removed from service. Corrective maintenance (other than cleaning) and repair, such as replacement of elements, must be performed by the manufacturer. Do not attempt field repairs. For harnesses that have quick connect buckles, a light penetrating oil can be applied to the locking tabs to ensure smooth operation. Wipe any excess oil off with a clean rag.
Requirements - Storage
Store the fall arrest system in a cool, dry and clean place out of direct sunlight. Avoid areas where heat, moisture, light, oil, and chemicals or their vapors or other degrading elements may be present. Equipment which is damaged or in need of maintenance should not be stored in the same area as usable equipment. Heavily soiled, wet, or otherwise contaminated equipment should be properly maintained (e.g. dried and cleaned) prior to storage. Prior to using equipment which has been stored for long periods of time, an inspection should be performed. For harnesses with quick connect buckles, store the harness with the buckles connected.

Requirements - Accessing the Work Area at Height
- Prior to working at heights, all applicable job safety planning documents including permits, checklists, rescue plans, and job safety analysis will be conducted and approved.
- Tools and other materials shall not be carried by hand while climbing a ladder. For more information regarding ladder usage refer to (Section D, Chapter 13, Scaffolding and Ladders) in the Safe Work Practices section of the SEMS Portal.
- Special precautions shall be taken when wet or other slippery conditions exist.
- Vertical beams shall not be climbed.
- When using stairs, one hand shall be free to use the handrails.
- Climbing on equipment such as pumps, exchangers, valve hand wheels, transformers, electric motors, hand rails, structures, or any other facilities not designed for climbing should be avoided. Climbing on conduit, cable trays, or other equipment not capable of supporting the weight of a person is prohibited.
- Adequate support should be available when walking in pipe bands to provide a safe walking/working surface without causing damage to the piping, insulation, or heat tracing.
- Personal fall protection must be used and anchored to a designated anchor point when using, traveling on, or working from mobile work platforms such as:
  - Spiders,
  - Manlifts,
  - Scaffolds,
  - Scissor-lifts and/or
  - Man baskets

Requirements – Unplanned Open Hole Reporting
When any open hole is found, personnel should immediately barricade the hole, if it is safe to do so.

If the open hole affects any means of egress notify your immediate supervisor and Compliance Coordinator verbally and by email as soon as possible.
Requirements - Hole Covers

Covers of sufficient structural integrity with a sure fit are the preferred method of correcting open holes.

- The covers must be capable of supporting at least twice the weight of anticipated work load, materials or equipment that may be imposed on the cover at any one time.

- The cover should not protrude above the walking surface so as to cause a tripping hazard. Covers that protrude less than 1 inch above the plane of the walking surface and contain beveled edges are acceptable.

- The cover shall be secured to prevent accidental displacement by wind, equipment or employees.

- The cover should be distinguishable by color coding (different color than surroundings) or be labeled as “Hole” or “Cover”.

Requirements - Open Hole Attendant

- Prior to performing all work where planned open holes will be present, the Open Hole Attendant will ensure that the Working at Heights and/or Open Hole Permit is in place and approved.

- Open holes lacking a cover or protective barrier shall be constantly attended to by an Open Hole Attendant (person with a specific duty to keep other workers from accessing the area. Also referred to as a “hole watch”).

- Open hole attendants must not be assigned additional duties and be present for all jobs involving open holes as there will be occasions where the hole will be unguarded by a cover or protective barrier (such as during cover removal or construction of barrier).

- An open hole attendant may be used in lieu of hard barricading only under the following situations and after safety analysis and approvals (ex. JSA and open hole permit) have been performed:
  - removing a hole cover and dropping a piece of equipment to a lower deck and then
immediately replacing the cover

- The open hole attendant shall wear fall protection at all times, and any personnel working within 6’ of the horizontal leading edge shall wear the same.

**The following are not adequate barriers for open hole protection.**

- Cables without adequate anchoring or posting. Proper tensioning should not allow cables to be moved up or down more than six inches.
- Light ropes, red danger or yellow caution tape, flagging tape (surveying tape), or similarly weak materials.
- Wooden railings using less than 2” by 4” stock.
- Construction fencing used without properly anchored or posted restraining cables.

**Requirements - Handrails/Guardrails of Deck Openings**

Openings in decks accessible to personnel must be covered, guarded, or otherwise made inaccessible when not in use. The manner of blockage shall prevent a person’s foot or body from inadvertently passing through the opening.

- Every open-sided floor or platform 4 feet or more above adjacent floor or ground level shall be guarded by a standard railing on all open sides except where there is entrance to a ramp, stairway or fixed ladder.
- The railing shall be provided with a toe board wherever, beneath the open sides; persons can pass, there is moving machinery or there is equipment with which fall materials could create a hazard.
- Every flight of stairs having four or more risers shall be equipped with standard stair railings.
- Any open hole that is created must be barricaded with hard pipe, cable or construction fencing in conjunction with cable to prevent personnel from inadvertently falling through.
- The top of the barricade must be at least 42 inches in height and shall have a middle railing.
- Hard barricades must be able to withstand a load of at least 200 pounds applied in any direction at any point of the rail.
- Shall have a 4” kick plate at the bottom if personnel are working below the opening (a standard handrail pipe can be used at the bottom as long as it is no more that 4” from the top of the pipe to the decking).
- Any open hole that cannot be barricaded immediately after exposure must be monitored by an open hole attendant (see below guidelines)
Requirements - Potential to Fall to the Water

The following are applicable when a fall hazard exists with the potential for a fall to the water at all times and under all conditions:

- Use of fall protection and a USCG approved type I or V personal floatation device is required when working outside a hand/guardrail system or near an unprotected leading edge including ladder work.
- Communication must be maintained throughout the duration of the job and included in safety/rescue planning (Ex. Radio and Buddy System).
- Job safety planning, work authorization, and rescue planning are contingent upon identifying risk factors such as winds, sea conditions including current, fog, or low light conditions.
- The job tasks below will require a designated stand-by vessel capable of performing rescue in the event of a fall into the water.
  - Erecting, modifying, or dismantling any type of scaffold over water at night
  - Conducting rope access operations at night
  - Repositioning or moving single point suspension scaffolding (ex. “walking a spider”) at night

Note: Performing work activities on fully enclosed scaffolding that has been inspected by a competent person may not require a stand-by rescue vessel unless risk assessment identifies the need. In the event of working near or over water where changing environmental variables present additional hazards, the work will be stopped and resumed when the supervisor deems safe to do so.

Requirements - Fall Rescue Plan/Checklist

The purpose of the Fall Rescue Plan/Checklist is to reduce risk to personal health after a fall event. The rescue plan should also minimize the amount of at-risk behavior of the rescuer during the rescue attempt, and help ensure that the rescue is conducted promptly and in a safe manner.

- The Rescue Plan/Checklist must be planned and communicated in advance to all members of the work team in order to assist in the prompt, safe retrieval of a person who has fallen from an elevated work surface and is suspended in a full body harness. This includes self-rescue or mechanically aided rescue.
- The Plan should always be based on the “worst case” scenario, such as an incapacitated or unconscious fall victim. If a safe rescue can’t be achieved under these circumstances, then work from heights should not be performed.

The following must be considered when planning a rescue and completing the Fall Rescue Plan/Checklist:

- Have alternatives to using fall arrest equipment been considered?
- Is worker fall arrest equipment available and in good condition?
• Is rescue equipment available and adequate for rescue (weight ratings, length, connection type, etc.)?
• Has all fall arrest and rescue equipment been inspected?
• Are workers and rescuers familiar with the use of the rescue equipment?
• If work is over water at night, is there a capable rescue craft on standby?
• Have emergency response procedures been established in the event fallen worker is injured?
• Have anchor points been identified that can support 5000#?
• Have communication devices been identified and tested?
• Have the hazards of working from heights and fall been addressed in the JSA for this work?

Preventing Suspension Trauma

All users of personal fall protection systems, and others involved with work at a height, should be aware of the following precautions that might need to be taken in the event of personnel being in a suspended position after a fall from a height.

• The longer the person is suspended without moving, the greater the chances are of suspension trauma developing and the more serious it is likely to be. Therefore, an injured person hanging in a harness awaiting rescue should be removed from upright suspension as quickly as possible. This is particularly important for a person who is motionless.

Requirements - Training

Personnel who might be exposed to fall hazards shall be trained in but not limited to the following:

• Identifying potential fall hazards.
• Identifying proper anchor points.
• Using the correct procedures for inspecting and utilizing personal fall protection equipment.
• Proper selection and donning of adequate personal fall protection equipment.
• Use of rescue equipment and procedures.

Competent Person shall be trained and have skills/knowledge in the following:

• The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection and rescue systems to be used.
• Identifying potential fall hazards.
• Identifying proper anchor points.
• Development of rescue planning including procedures and required equipment.