



ATLANTIC DIVISION, NAVAL FACILITIES ENGINEERING COMMAND FALL PROTECTION PROGRAM INSTRUCTION

Atlantic Division NAVFACINST 5100.17A

From: Commanding Officer, Atlantic Division Naval Facilities Engineering Command

Subj: FALL PROTECTION PROGRAM

Ref:

- (a) NAVFAC Fall Protection Guide dated 21 September 2000
- (b) NAVFACENGCOM 5100.11J Safety and Health Program dated 17 January 2000
- (c) OPNAVINST 5100.23
- (d) 29 CFR 1910 General Industry Standard
- (e) 29 CFR 1926 Construction Industry Standard
- (f) USACE EM 385-1-1 Army Corps of Engineers Safety & Health Requirements Manual

Encl:

- (a) Authorized Employee Equipment Checklist
- (b) Fall Protection Equipment Inventory/Use Log
- (c) Fall Protection Authorized Employee Training Certificate

1. **PURPOSE.** Provide policy guidance for the implementation of the Fall Protection Program.

2. **BACKGROUND.** Falls from elevation are the leading cause of injuries and fatalities in the work place. Thousands of workers suffer injuries due to falls, resulting in lost time from work. Reference (b) directed all Navy activities to establish fall protection programs which includes identification and elimination of fall hazards, whenever practical, through engineering controls, training for personnel, proper installation and use of fall protection systems, and required rescue equipment and procedures.

3. **COMMAND POLICY.** All personnel must implement the fall protection program in accordance with the requirements of the applicable standards and regulations and utilize this instruction as the primary guide for the protection of workers exposed to fall hazards. Whenever performance of any task would allow a worker to fall a distance of 4 feet or more to lower level, the hazard shall be identified, evaluated and controlled and the worker shall receive adequate training if required and shall be protected from falling. The controlling regulations are the 29 CFR 1910 - General Industry Standard, and 29 CFR 1926 - Construction Industry Standard.

4. **SCOPE:**

The scope of this guide/instructions is to develop a program designed to protect government employees from falling off, onto, or through walking/working surfaces and to protect employees from being struck by falling objects. The guide identifies locations and situations where fall protection is required. These include but not limited to ramps, runways and other

walkways, excavations, hoist areas, holes, reinforcing steel and form work, leading edge work, unprotected sides and edges, overhand bricklaying and related work, roofing work, pre-cast concrete erection, wall openings, maintenance and construction of communication towers, and other walking/working surfaces. US Army Corps of Engineers (USACE), Safety and Health Requirements Manual EM 385-1-1, and 29 CFR 1926.500, Subpart M, the Construction Industry Standards sets a uniform threshold height of 6 feet (1.8 meters) where protection from falls is required for all employees.

According to the general industry standards, 29 CFR 1910, the height limit for providing fall protection to employees exposed to fall hazards is four (4) feet. The 29 CFR 1915 sets the height limit at five (5) feet.

All regulations and standards for fall protection and health and safety contain minimum requirements. "DoD 6055.1" Instructions does not preclude DoD components from prescribing supplementary requirements for special conditions over which the DoD component itself, or in coordination with other Federal agencies, exercise statutory authority for safety and health matters. Generally DoD Instructions 6055.1 does not apply to DoD contractors, except for inspection requirements.

The 29 CFR 1960 prescribes requirements for Federal employment occupational safety and health programs and contains provisions to assure safe and healthful working conditions for federal employees.

5. REGULATIONS/STANDARDS:

- US Army Corps of Engineers (USACE), Safety and Health Requirements Manual, EM 385-1-1, current edition, Shall be included and enforced on all DoD contracts involving construction, dismantling, demolition or removal work. Employees performing such work shall comply with all pertinent provisions of the latest version of the manual (FAR 52.236-13);
- 29 CFR, PART 1926, Subpart M Requirements, Fall Protection Requirements in the Construction Industry;
- 29 CFR, PART 1910, Occupational Safety and Health Standards;
- 29 CFR PART 1915, Occupational Safety and Health Standards for Shipyard Employment.
- 29 CFR PART 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.
- Department of Defense Directive 6055.1, Occupational Safety and Health Program;
- American National Standard Institute, ANSI Z359.1 (R 1999) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components;
- American National Standard Institute (ANSI) A10.32, Standards for Personal Fall Protection used in Construction and Demolition Operations;

- Navy Federal Guide Specification, NFGS-01525, Safety Requirements;
- OPNAVINST. 5100.23E, Shore Facilities;
- NAVFACINST 5100.11J.

6. **RESPONSIBILITIES.**

a. **FALL PROTECTION PROGRAM MANAGER/QUALIFIED PERSON (QP)**

shall:

- (1) ensure the designated Competent Persons receive adequate training commensurate with their duties within the fall protection program,
- (2) set the guidelines for the safety office to implement and maintain the command policies and the fall protection program,
- (3) ensure that all personnel exposed to fall hazards and involved in the implementation of the fall protection program are adequately trained,
- (4) ensure the investigation and reporting of a fall mishap comply with the requirements set forth in ref (d),
- (5) ensure fall hazard assessment and surveys are completed,
- (6) ensure that fall protection and prevention plans, rescue and escape plans are adequately prepared and used.
- (7) See the QP duties and responsibilities addressed under reference (a), Section 5, page20
- (8) the QP will be trained on how to design, select, certify, evaluate and analyze fall protection systems.

b. **ROICC SAFETY FALL PROTECTION COMPETENT PERSON**

shall:

- (1) Ensure individuals using fall protection equipment have been authorized by the employee's supervisor.
- (2) Ensure individuals using the fall protection equipment meet the qualification requirements.
- (3) Maintain the equipment inventory with log of use.
- (4) See the CP duties and responsibilities addressed under reference (a), Section 5, page 20
- (5) the CP will be trained on different types of fall protection systems, hazard ranking systems and risk assessment, various fall arrest/restraint and positioning systems, inspection and record

keeping of fall arrest equipment, inspection and identification of fall hazards, and installation and inspection proper anchoring and tie-off points.

c. **AUTHORIZED PERSON (End User):**

shall:

- (1) not work in any fall hazard area without being adequately trained and the competent person has authorized him to proceed with the type of work, or activity,
- (2) be adequately trained in the fall protection equipment selection, use rescue, storage and maintenance,
- (3) not work in any fall hazard area without first reviewing and fully understanding the FP &P plan and Rescue and evacuation plan,
- (4) shall not proceed with work assignments without having the proper fall protection equipment and or systems
- (5) Use fall protection equipment when exposed to any unprotected fall height of six feet or greater.
- (6) Use equipment only after authorization from employee supervisor

7. **WORK PLACE ASSESSMENT/SURVEYS.**

- a. Surveys of the work areas shall identify all fall hazards that exist at a specific location within buildings and facilities. This information will be used by the fall protection program manager/QP for fall hazard elimination and/or protection of authorized persons from falling while performing various work tasks. The survey will provide pertinent information as to the type of fall hazard that will be encountered. All hazards shall be evaluated in accordance with reference (d). This evaluation will enable the Program Manager/QP to develop solutions to those hazards that present the greatest risk of exposure and potential for injury.
- b. Assessment of work place hazards shall be conducted by a team made up of individuals including authorized users and CP.
- c. See Reference (a), NAVFAC Fall Protection Guide, Appendix A.

8. **FALL HAZARD PREVENTION AND CONTROL. (Site Specific)**

- a. With regard to the order of control measures and solutions to fall hazards and project hierarchy and desirability, the QP should consider the order of control measure specified in Reference (d), Chapter 5,
- b. System Design Requirements- *See Reference (a),*
- c. Fall Protection and Prevention Plan (FP&PP)-preparation – *See Reference (a), the plan should be site specific*

9. **EDUCATION AND TRAINING REQUIREMENTS.**

a. Fall Protection Training Requirements for AUTHORIZED PERSON (END USER):

Training will include hands-on training on the safe use and limitations of the equipment, nature of fall hazards, application limits, proper anchoring and tie-off techniques, Estimation of free fall distance, deceleration distance and total fall distance, methods of inspection, storage and care of the equipment and systems, familiarity with the applicable fall protection regulations and standards and rescue/self rescue techniques. The authorized person will receive a minimum of 2 hours of training or as appropriate in addition to having completed the NAVFAC 40-Hour Construction Safety Hazard Awareness Course (a prerequisite).

b. Training includes:

- a. The nature of the hazards in the work areas.
- b. The correct use and operation of guardrails, personal fall arrest systems, safety net systems, warning line systems and other protection to be used.
- c. The correct procedures for erecting, maintaining and disassembling and inspecting the fall protection system to be used.
- d. The limitations of the use of mechanical equipment during performance of work on low-sloped roofs.
- e. The correct procedure for handling and storage of equipment and materials and erection of overhead protection.
- f. The role of employees in the fall protection plans.
- g. The OSHA fall protection standard.
- h. The USACE EM 385-1-1 requirements.
- i. The equipment manufacturer use and care instructions.
- j. Safety monitor not authorized.
- k. Guard rails, Safety nets, PFAS hierarchy.

10. **AUDITS AND PROGRAM EVALUATION**

- a. The FP program shall be evaluated periodically to determine the success of the program. The program manager shall collect and compare fall mishap data and near misses compare to establish metrics.

11. **INSPECTION STORAGE CARE AND MAINTENANCE OF THE EQUIPMENT**

- a. See reference (a) Section 6.0

12. **RESCUE SYSTEMS/PLANS**

- a. See reference (a)
- b. Provisions shall be made for the rescue of employees who have fallen into a net or are suspended by personal fall arrest equipment. Such provisions shall take the form of

ladders, lifts, ropes, combined fall arresting/retrieval body harnesses, etc. If the rescue is likely to endanger the individual who has fallen, or rescuers, call 911 or your station rescue services number to initiate the rescue process.

13. FAILURE TO FOLLOW THE FALL PROTECTION PLAN PROGRAM

- a. All employees who are exposed to a fall hazard as defined by this plan shall follow the program and any safety training requiring fall protection. If there is a question regarding a specific fall protection situation, PLEASE consult your immediate supervisor. Failure to follow the basic guidelines of the Fall Protection Plan Program may result in disciplinary action. Each ROICC office that has employees covered by this program shall take the necessary disciplinary action for employees who knowingly violate the plan.

14. FALL PROTECTION SELECTION

Prior to the selection of any fall protection method, the strength of the walkway/working surface shall be evaluated by a competent person or supervisor. The walking/working surface shall be capable of supporting the expected loads, including a safety factor. OSHA generally encourages the employer to select engineering control first when attempting to control a hazard. Examples of engineering controls include guardrails, barriers, and covers. Section 1926.501 lists the acceptable fall protection methods for various situations.

15. POSITIONING DEVICES

Positioning devices, such as belts are not recognized as fall protection equipment under the cognizance of this program and shall not be used. Combination fall protection and position devices are available from some manufacturers. See section 1926.502 (e) regarding positioning device requirements.

16. THE SAFETY MONITOR

The use of a Safety Monitor fall protection system as used in roofing work is not authorized.

Encl (A)

FALL PROTECTION EQUIPMENT USER CHECKLIST:

(To be completed by the Authorized Employee prior to each use and provided to supervisor)

A. Equipment:

| | Accept | Unsat |
|---|--------|-------|
| 1) D-rings – cracks, distortion, corrosion, pitting or excessive wear → | | |
| 2) Buckles – distortion, sharp edges or cracks → | | |
| 3) Body Harness – Burns, damage due to chemicals, cuts, abrasion to the material. Broken stitches. One of the best ways to check the material is to hold sections of the material between the hands and bend the material into a U shape to look for damage. → | | |
| 4) Keepers and Snap Hooks – make sure they operate correctly. Do not rely on the sound of the latches, they must be connected. → | | |
| 5) Retractable lines – they should operate smoothly. The rope or cable should not be damaged. A quick pull of the line should cause the line to lock. The retractable lifeline assemblies shall be returned to the factory for recertification as specified by the manufacturer. IN most cases, the manufacturer specifies an annual inspection. Check the date on the unit for the last certification. → | | |
| 6) Lanyard – (rope, webbed, or cable) Look for cuts, frayed parts, damaged fibers, and the condition of connections. There should be no knots in the line. A knot can result in a substantial reduction in strength. → | | |
| 7) Shock Absorber – Check for ripped stitches, signs of impact loading and connection. → | | |
| 8) Provided anchor points have been evaluated by a competent person for their ability to support a 5,000 lb load per person. → | | |
| 9) If in mobile equipment (JLG, Snorkel, Scissor lift) Has the mobile equipment been inspected (checklist) by the competent person? → | | |
| <u>Administrative:</u> | | |
| 1) I have approval from my supervisor? → | | |
| 2) I am trained in the safe use of the equipment. → | | |

Employee signature: _____ Date: _____

Encl. (C)



ANTIC DIVISION
NAVAL FACILITIES ENGINEERING
COMMAND
NORFOLK, VIRGINIA

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presents this certificate to

SAMPLE

who has successfully completed the
ROICC EMPLOYEE FALL
PROTECTION TRAINING

given at

LANTDIV

January 14-18 2002

William J. Garrett

Signature

18 January 2002

Date