

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION National Policy



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SUBJ: Flight Standards Service Fall Protection Program (FPP)

The Flight Standards Service (FS) Fall Protection Program (FPP) is an element of the FS Occupational Safety and Health (OSH) Program. It establishes the minimum requirements for fall protection for FS employees. This program outlines the requirements that must be met to achieve an effective FPP.

If desired by responsible Flight Standards office management, this program may be enhanced to address local workplace conditions. Office-specific programs developed at the office level are allowed as long as they are equal to or more stringent than this FPP.

The requirements detailed in this document are based on Federal Aviation Administration (FAA) Order 3900.19, Federal Aviation Administration (FAA) Occupational Safety and Health (OSH) Policy, Chapter 4, Fall Protection; applicable portions of Occupational Safety and Health Administration (OSHA) Title 29 of the Code of Federal Regulations (29 CFR) parts 1910 and 1926; and industry consensus standards. FS management and employees must implement the requirements found herein.

Falls from elevated working surfaces (at or greater than 4 feet above the next level) present a significant risk of death or serious injury to workers. Falls from aircraft working surfaces, work platforms, ladder stands, and aerial devices are potential sources of serious injuries and fatalities. Falls are unplanned events and individuals who believe that they will be able to "catch" themselves and prevent the fall are generally mistaken.

Robert C. Carty

Acting Executive Director, Flight Standards Service

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Chapter 1. General Information

- 1. Purpose of This Order. The purpose of this order is to provide requirements and guidelines to protect Flight Standards Service (FS) personnel from falls while performing work-related duties on or near elevated working surfaces that are at or greater than 4 feet above the next level. This order applies to airport ramp operations and other industrial-type work locations. Additionally, this order assists in the identification and evaluation of fall hazards to which employees may be exposed, and to provide specific training as required by the Occupational Safety and Health Administration (OSHA) Fall Protection Standards. It is beyond the scope of this document to address slip/trip/fall hazards in office environments. Appendix A, Fall Protections Definitions, defines many of the terms used in this order.
- **2. Audience.** This program applies to all FS personnel, supervisors, and managers involved in aircraft surveillance activities and other work-related duties on or near elevated working surfaces that are at or greater than 4 feet above the next level.
- **3.** Where You Can Find This Order. You can find this order on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices, the Flight Standards Information Management System (FSIMS) at https://fsims.avs.faa.gov, and the Dynamic Regulatory System (DRS) at https://drs.faa.gov. Operators and the public can find this order on the FAA's website at https://www.faa.gov/regulations_policies/orders_notices, FSIMS at https://fsims.faa.gov, and the DRS.
- **4. What This Order Cancels.** FAA Order 3900.65, Flight Standards Service (AFS) Fall Protection Program (FPP), dated July 14, 2014, is cancelled.
- **5. Distribution.** This order is distributed to FS management in the Offices of Safety Standards and Foundational Business; all Safety Assurance offices, branches, and facilities; and FS employees involved with work in elevated areas.
- **6. Directive Feedback Information.** Direct questions or comments to the Mission Services Division (AFB-100) at 9-NATL-AVS-AFS-OSH@faa.gov. For your convenience, FAA Form 1320-19, Directive Feedback Information, is the last page of this order. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this order on FAA Form 1320-19.

Chapter 2. Roles and Responsibilities

1. Executive Director, Flight Standards Service (AFX-1). AFX-1 shall ensure resources are available to develop, implement, and maintain this program.

- 2. FS Office Management. FS office management shall:
 - a. Implement the requirements of this program.
- **b.** With the understanding that 99 percent of FS employees who perform work activities on elevated work surfaces at or greater than 4 feet from the next level will use the external industry workplaces' (e.g., maintenance, repair, and overhaul (MRO)) fall protection equipment, identify employees whose duties may require them to use fall protection equipment and ensure that these employees receive FS-provided fall protection training.

Note: Fall protection training provided by former employers or external industry workplaces does not qualify an individual to utilize fall protection equipment.

- **c.** Have the authority to determine, in the rare cases, whether there is a need for the acquisition of FAA-issued fall protection equipment and if so, contact the FS Occupational Safety and Health (OSH) Office prior to any purchases.
- **d.** Assign an Office Collateral Duty OSH (CDOSH) Point of Contact (POC). Their duties would include but are not limited to assisting as needed in the procurement, training, accountability, and maintenance of fall safety equipment acquired by the office.
- **e.** Ensure that the designated Office CDOSH POC has received FS-provided fall protection training.
 - **f.** Perform an annual self-evaluation of the office Fall Protection Program (FPP):
- (1) To ensure that users of fall protection equipment have received FS-provided fall protection training.
- (2) To ensure that users are properly using, storing, inspecting, and maintaining fall protection equipment, if provided by FS.
- (3) The evaluation shall be in writing and maintained at the responsible Flight Standards office. Send a copy of the office FPP evaluation to the FS OSH Office within 30 calendar-days of its completion.
- **g.** Request assistance from the FS OSH Office or Fall Protection Program Manager (FPPM) when needed.

3. FS Occupational Safety and Health (OSH) Office. The FS OSH shall:

a. Be responsible for the establishment of the FS-wide FPP and have responsibility for ensuring this FPP is current with the FAA, OSHA, and other applicable standards and regulations.

- **b.** Support the implementation of fall protection requirements by FS offices and evaluating the responsible Flight Standards offices regarding the implementation of this program.
- **c.** Serve as the point of contact (POC) regarding technical aspects of the FS FPP and provide consultation to any FS offices regarding issues relating to fall protection and implementation of the FPP requirements.
- **d.** Designate FS FPPMs to oversee the program Service-wide and to provide the necessary technical support to the FS offices.
- **e.** Perform Safety Hazard Analyses (SHA) with the FS FPPMs of FS work environments for hazards and conditions to determine the configuration of fall protection systems, such as fall arrest, climbing protection, and rescue, and post findings on the FS OSH website (https://my.faa.gov/org/linebusiness/avs/offices/afx/work/osh.html).
 - **f.** Evaluate the effectiveness of the FPP and audit training completions.

4. FS Fall Protection Program Managers (FPPM). The FS FPPMs shall:

- **a.** Serve as the technical subject matter expert (SME) in the FS OSH Office for the FPP and assist the Office CDOSH POCs with implementation support.
- **b.** Be trained to the competent person level and maintain certification in accordance with American National Standards Institute (ANSI) requirements.
- **c.** Perform annual program evaluation of the FPP to ensure its effectiveness and make changes to program requirements, if needed, based on evaluation findings.
- **d.** Develop, initiate, and assess all fall-protection-related training to ensure it meets the requirements and intent of this FPP.

5. Office Collateral Duty OSH (CDOSH) Point of Contact (POC). The Office CDOSH POC shall:

- **a.** Serve as the office's focal point for fall-protection-related questions and activities.
- **b.** Receive FS-provided fall protection training that meets the basic requirements of a competent person and become familiar with the mandatory requirements contained in this FPP.
- **c.** With assistance from the FS FPPM, assess the work conditions expected for the FS employees and determine if FS will provide the fall protection equipment or if they will use the external industry workplace's equipment.

d. Contact the FS OSH Office if any fall protection equipment is requested in his or her office.

- **e.** Inspect and maintain FS-provided fall protection equipment (if applicable), including inspection prior to issuing and upon its return for damage or defects, and ensure it is properly stored.
- **f.** Coordinate the FS-provided fall protection training, perform or arrange for annual evaluation of the office FPP, and maintain appropriate recordkeeping and documentation.

6. FS Employees. FS employees shall:

- **a.** Become familiar and comply with the requirements contained in this FPP if their job may expose them to fall hazards from elevated working surfaces at or greater than 4 feet above the next level, requiring the use of fall protection equipment.
- **b.** Not use fall protection equipment until they have received FS-provided fall protection training.
 - **c.** Use fall protection systems in accordance with training received.
- **d.** Become familiar with the SHA reports on the FS OSH website (https://my.faa.gov/org/lin ebusiness/avs/offices/afx/work/osh.html).
- **e.** Not subject themselves to fall hazards on or near unprotected elevated working spaces that are at or greater than 4 feet above next level, use defective fall protection equipment, or perform any function that they feel may expose them to potential injury.
- **f.** Perform the prior-to-use inspection on any fall protection equipment for damage or defects and follow the guidance contained in this FPP and provided in the training.

Chapter 3. Fall Protection Program Requirements

1. Unsatisfactory Condition Report (UCR).

- **a. Background.** No employee is expected to perform work activities that subject them to an unsafe or unhealthful work condition. If an employee is potentially exposed to an unsafe or unhealthful condition or a fall hazard, he or she must not perform the task until the hazard is remediated. If it cannot be corrected or there are no alternative measures that can be taken to address the hazard, the employee must not complete the activity.
- **b. UCR Reporting.** Preferably, the hazardous condition should be discussed with the supervisor to abate the unsafe condition. However, any employee or employee representative who believes that an unsafe or unhealthful working condition exists shall have the right to make a report of the unsafe or unhealthful working condition to an appropriate agency safety and health official and request an inspection of the workplace.
- c. Filing a UCR. Although you may convey the unsatisfactory condition verbally to your supervisor, it is recommended that you file a UCR. This report may be submitted electronically or in writing on FAA Form 1800-1, Unsatisfactory Condition Report. The electronic UCR form can be found in the intranet favorites under AVS Resource Links or by going to https://smis.faa.gov/UCR/UCR_user_prompt.asp. Refer to FAA Order 1800.6, Unsatisfactory Condition Report, for further instructions.
- 2. Aviation Safety (AVS) OSH Policy Statement. Per the AVS OSH Policy Statement, "Employees who determine their duties cannot be performed due to unsafe work activities or working environments must disengage from the activity or work environment and immediately notify their frontline supervisor."
- 3. Scope of FAA at External Industry Workplaces. The FPP addresses FS employees working in external industry workplaces (e.g., manufacturers, airlines, and airports) where the FAA does not have the authority to abate hazardous conditions. The external industry workplace has the responsibility to identify elevated working surfaces (at or greater than 4 feet above the next level) and apply the appropriate control measures. However, the FAA is ultimately responsible for the safety and health of its employees. FS employees must be trained to recognize elevated working surfaces and be able to determine whether adequate safeguards have been installed or if a Personal Fall Arrest System (PFAS) is required. If AVS employees recognize a condition that presents a dangerous fall hazard in the absence of fall protection equipment, they may refuse to access the height until the external industry workplace provides a safer and more suitable means for working at that elevation or an alternative solution is achieved (e.g., photographs or video).

4. Identification of Potential Fall Hazards.

a. FS employees in the course of surveillance activities may be required to observe work being performed on or from elevated work areas. Many of these work areas present the potential for falls. In some cases, engineered fall protection, such as a standard guardrail system, is not

possible or the employer under surveillance has inadvertently created a potential fall hazard. Examples include:

- (1) Wing and tail surfaces;
- (2) The surface of the fuselage crown;
- (3) Use of aerial lift devices during servicing and maintenance of aircraft;
- (4) Open aircraft service doors and bays; unsecured temporary flooring during aircraft renovation;
 - (5) Floor holes and openings in temporary flooring and scaffolding;
- (6) Improperly erected scaffolding including ladder stands, platforms, and unguarded scissor lift devices; and
 - (7) Bridge or dock plates for access to the interior of aircraft.
- **b.** FS employees should review the findings from Safety Hazard Analyses (SHA) performed at workplaces where they work. The SHAs have been performed at MRO facilities and other multiemployer worksites. The SHAs will include fall-protection-related guidance for work activities.

5. Hazard Control Measures.

- a. Hierarchy of Controls for Fall Hazards. The hierarchy or the preferred order of control measures for fall hazards is first and foremost to eliminate the exposure to the hazardous condition. However, due to the nature of an FS employee's role, this is not always possible. If it is not possible, the employee must employ other methods to mediate the fall hazard. Employees and their supervisors must carefully exercise professional judgment when determining the need to survey a work activity that presents a significant risk of a fall.
- **b.** Addressing Fall Hazards. The preferred hazard control methods for addressing fall hazards are:
- (1) Elimination. Removing the hazard from a workplace or allowing the work to be done from the ground (e.g., telescoping tools). This is the most effective control measure.
- (2) Engineering Controls. If the hazard cannot be eliminated, using an engineering control is the next preferred measure to control the risk. An example is the installation of a standard guardrail system on the elevated work platform.
- (3) Personal Protective Equipment (PPE). These shall be used after other control measures are determined not to be practical. Other methods of performing work that requires PPE may include observing work activities from an aerial lift device or utilizing a PFAS.

Note: The employee always has the right to disengage if he or she feels the task cannot be accomplished safely.

6. Fall Prevention and Protection.

a. Fall Prevention. Fall prevention measures involve, for example, the installation of guardrail systems on ladder stands and platforms, guarding of wall openings using standard guardrail systems, and properly covering floor holes and openings when not in use. These measures consist of permanent, passive systems that do not require training to use effectively but do require planning on the part of the external industry workplace.

b. Fall Protection.

- (1) When fall prevention measures are not feasible due to location or are not practical for the work situation under observation, personal fall protection must be considered. Whenever training and/or PPE is required, it is fall protection, not fall prevention.
- (2) The overall objective of fall protection is to minimize the potential for injury because of a fall. Items required for personal fall protection include, but are not limited to, a fall arrest body harness (Class 3), shock-absorbing lanyards, rope grabs, vertical and horizontal lifelines, retractable lifelines, and appropriate anchorage.
- (3) Use of a "body belt" or "lineman's belt" as part of a fall protection system is strictly prohibited and shall never be used by any FS personnel.
- (4) Personnel lifting devices, such as scissor lifts, boom trucks, or other aerial lift devices, may be available at many work locations. These devices offer a means of access to elevated work locations. When aerial devices (except scissor lifts) are used, personal fall protection (i.e., body harness and lanyard) must be used. Personal fall protection (i.e., body harness and lanyard) is required in a scissor lift only if the platform will be extended. However, fall protection must be worn if required by the operator.
- (5) FS employees shall not operate aerial lifts, scissor lifts, or other personnel lifting devices, unless an emergency arises in which the operator is unable to lower/operate the lift.

7. External Industry Workplace Orientation and Training.

- **a. FS Personnel Training.** Prior to working on elevated working surfaces that are at or greater than 4 feet above the next level, applicable FS personnel shall receive fall protection training provided by FS. The training will include the requirements contained in this document, the proper utilization and inspection of a full-body harness, use and inspection of fall arrest systems, and inspection techniques to ensure that an effective engineered fall prevention system, such as a standard guardrail system, is in place.
- **b.** Assessing the Need for Equipment. It is the responsibility of each manager or their designee to assess the need for FS-issued fall protection equipment versus using the external industry workplace's equipment. If FS-issued fall protection equipment is needed, notify the FPPM.

c. Management Notification. Because of the design specifications of many fall protection systems, the external industry workplace will likely require the FS employee to use their fall protection equipment (i.e., body harness and lanyard). This is the most common scenario. However, the employee must notify their Front Line Manager (FLM) regarding the external industry workplace's fall protection requirements before proceeding further. The manager/supervisor should contact the Office CDOSH POC and the office FPP trainer for assistance with obtaining training for the employee, if they are not already trained.

- **d. Prior Fall Protection Training.** Each office manager or their designee must ensure that before personal fall protection equipment is utilized, the FS employee has received FS-provided fall protection training that includes these program requirements. Additionally, the FS employee must receive the external industry workplace's training, if they require it. For this program, initial FS employee general safety and health training, fall protection training provided by former employers, or external industry workplace-provided fall protection training are not sufficient to qualify an FS employee to utilize fall protection equipment.
- **e. Safe Work Requirements.** The FS employee is required to follow the safe work requirements established by the external industry workplace, unless a requirement is deemed to create a potential hazard.
- **f. Retraining and Refresher Training.** If actions or conditions show inadequacies in the employee's knowledge or the systems they use change or become obsolete, the employee must be retrained. All FS-provided fall protection training must be refreshed every 2 years if the employee is actively using fall protection systems. The office FPP trainer provides the refresher training.

8. Inspection of Personal Fall Arrest Equipment, Devices, and Systems.

- **a. Fall Arrest System Inspection.** If it is necessary for an FS employee to utilize personal fall protection for the observation of work activity, the employee must perform an inspection of the fall arrest system. In most cases, the fall arrest system was designed, installed, and under the control of the external industry workplace. Therefore, basic questions must be asked of the external industry workplace and a visual inspection of the components of the fall arrest system must be made. Never assume that simply because employees of the external industry workplace are using the system that the system is safe for use.
- **b.** Additional Guidance. Appendix A, Fall Protection Definitions, and Appendix B, Fall Protection Information, provide additional requirements and guidance on inspection.
- **c. Before Using Any PFAS.** The following criteria should be followed before using any PFAS:
- (1) Ascertain if the fall arrest system and the anchorage was designed by a registered professional engineer or a fall protection qualified person. If documentation is not available, do not use the system. Determine if the system is under the supervision of a qualified person.

(2) Inspect the connectors, snaphooks, and D-Rings for corrosion or deformities. If any apparent visible damage is observed, do not use it.

- (a) Snaphooks must be the locking type with a self-closing, self-locking keeper, which remains closed and locked until unlocked and pressed open for connection or disconnection. It will require two actions to open. This is the only type allowed for use by OSHA. Snaphooks that comply with the newer consensus standards will have a gate that can withstand 3,600 pounds.
- (b) Snaphooks may not be engaged directly to webbing, rope, or wire rope, to each other, or to a D-Ring to which another snaphook or other connector is attached, unless it was specifically designed to do so.
- (c) Snaphooks must not be attached to any object which is incompatibly shaped or dimensioned in relation to the snaphook, such that unintentional disengagement (also called rollout) could occur by the connected object being able to depress the snaphook keeper and release itself.
- (3) Ensure that horizontal lifelines have been designed and maintained with a minimum safety factor of 2. Note whether it is designed for multiple users, which should be shown on the engineering documentation.
- (4) Physically examine the body harness and the safety lanyard for cuts, snags, or other defects in the webbing in accordance with the FS training; check for chemical contamination from oils or grease; note any de-stitching or evidence that the equipment was subjected to impact loading (used to arrest a previous fall). If any of these conditions are observed, do not use them.
- (5) Ensure that all ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses are labeled with the manufacturer's name and certification(s).
- (6) All U.S. fall protection equipment must be tested to American National Standards Institute (ANSI)/American Society of Safety Professionals (ASSP) Z359, Fall Protection and Arrest Standards (listed on labels). Before using an international facility's fall protection equipment, the FS employee should consult the FS FPPM for foreign equipment equivalencies.
- (7) Never use fall protection devices such as harnesses and lanyards for material handling or hoisting. If the equipment has been seen in this arrangement, do not use the external industry workplace's equipment until its systems can be evaluated.
- (8) If an FAA-owned harness or lanyard fails the prior-to-use or annual inspection, the employee or his or her manager will send it to the FS OSH Office.

9. Fall Prevention Systems.

a. Standard Guardrails. The majority of elevated surveillance activities conducted by FS employees are performed on systems that provide protected walking and working surfaces, such as scaffolding, work platforms, and aerial lifts. These systems need to be equipped with standard

guardrails on all open sides and with a closure apparatus for ladder and stairway openings or other points of access.

- **b.** Scaffolding Decks. Scaffolding decks must be fully planked with no gaps or openings. Temporary flooring must be secured from movement when live weight is applied. If temporary floor coverings are not secured, exit the area and ask the external industry workplace to secure them from movement.
- c. Manually Propelled Ladder Stands, Stairways, and Scaffolding. OSHA requires a minimum of two brakes to be engaged for portable stands and platforms. If a ladder stand, rolling stairway, or scaffolding rolls when you step onto it or flexes laterally, verify at least two brakes (caster locks) are engaged. Some stands have more than four brakes/casters. If this is the case, it is recommended that at least half of the casters be locked. Additionally, all ladder stands and scaffolds shall be capable of supporting at least four times the design working load.
- **d. Floor Openings and Holes.** OSHA requires floor openings or holes on platforms, walkways, or floors to be guarded with a standard guardrail or covered with a cover capable of supporting the maximum potential load to which they may be subjected. Covers must be secured against displacement. In many repair situations, such hazards may not be mitigated in accordance with OSHA. The employee must assess the area and determine whether or not they can enter and perform their work safely. Where necessary, the employee should have the external industry workplace secure covers, install guards, or otherwise mitigate hazards prior to commencing activities that would put them at risk.
- e. Lifts. If the need to utilize a personnel lifting or hoisting device arises, the FS employee riding in or working from boom lifts must secure their fall protection lanyard to the device's engineered anchorage point at all times. Never secure the lanyard to a guardrail unless the guardrail system was designed for that purpose. Ensure that the lifting device is placed on a solid, level surface so that the probability of overturning is reduced. If it is equipped with outriggers, they must be extended properly. Ensure that the capacity of the lifting device will not be exceeded (capacity rating must be posted on the lift) and that it has a minimum design carriage rating for two individuals and equipment. In no case shall an FS employee independently operate the lifting device, unless an emergency arises in which the operator is unable to lower/operate the lift.
- **f. Fall Clearance for Horizontal Lifelines.** Care should be exercised when using horizontal lifelines located at or near the walking-working surface. This type of installation may result in a free fall distance greater than 6 feet. Therefore, extreme caution must be exercised when tying-off and using this type of installation.
- **10. Training.** The use of personal fall protection systems necessitates proper training, which includes an understanding of how to use the equipment, its capabilities, and its limitations.
- **a.** Training Requirements. Training in the use and evaluation of fall protection systems and devices shall be provided to all FS employees who may be potentially exposed to fall hazards related to elevated working surfaces that are at or greater than 4 feet above the next level. At a minimum, the training shall include:

- (1) The contents of the FS FPP and the fall protection standards and regulations.
- (2) The nature of potential fall hazards they are likely to encounter during work activities.
- (3) The correct procedure for donning full-body safety harnesses and using fall protection lanyards and lifelines, including retractable lifelines.
 - (4) Proper handling, storing, maintaining, and inspecting of fall protection equipment.
 - (5) The proper use and the limitations of the systems they may encounter.
 - (6) The FS employee's role regarding the use of fall protection.
- **b.** Refresher Training. Refresher training is required every 2 years for FS employees who have been using or are likely to use fall protection systems that require donning a harness.
- **c. Documentation.** All training shall be properly documented in the FAA's official training information system. Documentation of training shall include a written certification record that contains the name or other identifier of the employee, the date of training, and the name of the qualified trainer who performed the training.
- **d.** Additional Information. Appendix B, and Appendix C, Additional Guidelines for Personal Fall Arrest Systems (PFAS), provide additional information for fall protection training.

11. Acquisition of Fall Protection Equipment.

- **a. Purchasing Fall Equipment.** Normally an FS employee will be using external industry workplace-provided fall protection equipment, but there will be rare situations where the office may need FS-issued fall protection equipment. This will require FS FPPM approval.
- **b.** Fall Protection Equipment Assessment. It is the responsibility of office management, with consultation from the FS OSH Office, to determine the need for and FS acquisition of fall protection equipment for their employees.
- c. Full-Body Harness and Other Protection Devices. Full-body harnesses that were tested in accordance with ANSI/ASSP Z359 must be the only harnesses used in the United States. For international testing requirements, consult the FS FPPM for equivalencies. The use of a body belt, also known as a lineman's belt, is prohibited for fall protection. Fall protection lanyards used by FS personnel must have shock absorbers integrally integrated into the lanyard. The lanyards shall not exceed 6 feet in length.
- **d. Full-Body Harness and Lanyard Limitations.** Full-body harnesses and lanyards have limitations regarding overall weight/working capacity. This includes the weight of the worker, tools, and clothes.
- (1) The ANSI standard outlines requirements for harnesses and lanyards, and states that their general off-the-shelf capacity must be 130–310 pounds.

(2) However, if the person and equipment weigh less than 130 or more than 310 pounds, specially designed harnesses and lanyards are available. Since ANSI has released testing requirements for harnesses/lanyards that can have higher capacity ratings, most major manufacturers have manufactured harnesses/lanyards with ratings of 420 pounds. The labels and manufacturer's instructions will indicate the capacity ratings.

- (3) If the person's overall weight is outside the general working range of 130 to 310 pounds, they must:
- (a) Not use the external industry workplace's harnesses/lanyards unless its capacity has been verified.
- (b) Verify with the external industry workplace that the system to which the harness and lanyard will be connected (e.g., horizontal lifeline, or self-retracting lifeline (SRL)) has been engineered to safely arrest the fall for those weighing less than 130 or more than 310 pounds.

12. Program Evaluations.

- **a.** Level and Frequency of Evaluation. The effectiveness of the FPP must be evaluated at the individual and the program level.
- (1) Individual Level. The evaluation at the individual level must take place annually to evaluate the effectiveness of the FPP and to determine if there are any changes to equipment needs.
- (2) Program Level. The program level evaluation must occur annually by responsible Flight Standards office management with assistance provided by the FS FPPM. The fall protection program elements must be reviewed annually for quality and effectiveness.
- **b.** Evaluation Tools. Program evaluation-related questions will be distributed annually as a job aid for completing the individual level evaluations.
- **c. Documentation.** The findings of the program evaluation must be documented and must include recommendations for program corrections, modifications, and additions. This documentation must be kept for 5 years.

Appendix A. Fall Protection Definitions

- 1. Aerial Lift. Any vehicle-mounted device, telescoping or articulating, or both, which is used to position personnel. This does not include scissor lifts.
- 2. Anchorage. A secure point of attachment for lifelines, lanyards, or deceleration devices.
- **3. Body Harness.** Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over the thighs, pelvis, waist, chest, and shoulders, and which can be attached to other components of a Personal Fall Arrest System (PFAS).
- **4. Competent Person.** An individual knowledgeable of fall protection equipment who is capable of identifying existing and potential fall hazards, and who is knowledgeable of applicable rules, standards, and regulations regarding the erection, use, inspection, and maintenance of fall protection equipment and systems.
- **5.** Connector. A device used to couple (connect) parts of the PFAS and positioning device systems together.
- **6. Deceleration Device.** Any mechanism, such as a rope grab, shock-absorbing lanyard, or automatic self-retracting lifeline (SRL)/lanyard, which dissipates a substantial amount of energy during a fall arrest or otherwise limits the energy imposed on an employee during fall arrest.
- 7. **Deceleration Distance.** The additional vertical distance a falling employee 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.
- **8.** Floor Hole. A gap 2 inches (5.1 cm) or more in its least dimension, in a floor, roof, or other walking-working surfaces.
- **9. Floor Opening.** An opening measuring of 12 inches or more in its least dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit, or large manhole.
- 10. Free Fall. The act of falling before a PFAS begins to arrest the fall.
- 11. 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.
- 12. Guardrail System. See Standard Guardrail definition.
- **13.** Ladder Stand. A mobile, fixed-size, self-supporting ladder consisting of a wide, flat tread ladder in the form of stairs. The assembly should include handrails.

14. Lanyard. A line of rope, wire rope, or synthetic webbing, generally with a connector at each end, for connecting the body harness to a deceleration device, lifeline, or anchorage.

- **15. 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 PFAS to the anchorage.
- **16. Lower Levels.** Those areas or surfaces onto which an employee can fall. Such areas or surfaces include but are not limited to ground levels, floors, platforms, ramps, runways, cargo holds, or portions thereof.
- 17. Personal Fall Arrest System (PFAS). A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, and body harness, and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.
- **18. Rope Grab.** A deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks it, arresting the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.
- 19. Self-Retracting Lifeline (SRL)/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 the onset of a fall, automatically locks the drum and arrests the fall. Most have a deceleration device built into the inner mechanisms. Some SRLs have a descent device integrated into the unit that will lower the fallen worker at a moderate rate of speed after the fall has been arrested.
- **20. Scissor Lift.** A type of lift that travels only straight up and down and does not articulate outward or have an extensible boom. Scissor lifts are classified as mobile scaffolding.
- **21. Snaphook.** A connector is comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object. The locking type with a self-closing, self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection is the only type allowed for use by OSHA regulations. The latest ANSI standard requires the gate of snaphooks to withstand 3,600-pound forces.
- **22. Standard Guardrail.** A standard railing consisting of a top rail, intermediate rail, and posts, and which has a vertical height of 42 inches (± 3 inches) from the upper surface of the top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail and the floor, platform, runway, or ramp.
- **23.** Unprotected Sides and Edges. Any side or edge (except at entrances to points of access) of a walking-working surface (e.g., open doorway, floor, roof, ramp, or runway) where there is no wall or compliant guardrail system.

24. Unsatisfactory Condition Report (UCR). Provides all agency employees with direct means for advising management of an existing unsatisfactory condition, per FAA Order 1800.6, Unsatisfactory Condition Report. Although the condition may be an isolated occurrence, the collection and tracking of reports via the Safety Management Information System (SMIS) may assist in the identification of trends or patterns that require a broader corrective action than may be apparent from a single occurrence.

- **25.** Walking-Working Surface. Any surface, whether horizontal or vertical, on which an employee walks or works, including but not limited to wing and tail surfaces, fuselage crown, floors, roofs, ramps, bridges, runways, and work platforms.
- **26.** Wall Opening. A gap or void 30 inches high or more and 18 inches wide or more, in a wall or partition, through which employees can fall to a lower level.
- 27. Work Area. The portion of a walking-working surface where job duties are performed.

Appendix B. Fall Protection Information

- 1. Fall Protection Categories. All fall protection products fit into four functional categories:
- **a. Fall Arrest.** A fall arrest system is required if any risk exists that a worker may fall from an elevated position; as a general rule, the fall arrest system should be used anytime a working height of 4 feet or more is reached. A fall arrest system will only come into service should a fall occur. A full-body harness distributes the forces throughout the body, and the shock-absorbing lanyard decreases the fall-arresting forces.
- **b. Positioning.** This system holds the worker in place while keeping his or her hands free to work. Whenever the worker leans back, the system is activated. The personal positioning system is not allowed to be used as the arrest system. This is commonly used by tower climbers.
- **c.** Suspension. Suspension equipment can be a system that lowers and supports the worker while allowing a hands-free work environment (e.g., window washing). Additionally, suspension equipment can be a fall arrest system that arrests the fall and suspends the worker until rescue arrives.
- **d. Retrieval/Rescue.** Preplanning for retrieval or rescue in the event of a fall should be taken into consideration when developing a proactive fall protection program. The external industry workplace must have a rescue program, and any FS employees using their systems must review this program prior to first use and periodically thereafter.
- **2.** Fall Protection Systems. Listed below are different types of fall protection equipment and their recommended usage.

Full-Body Harness	Full-body harnesses that meet ANSI/ASSP Z359 are designed for industrial applications and possible suspension; they are tested to the highest industry standard. This is the only device approved for use by FS personnel.
Rope Lanyard	Usually used for restraint purposes.
Web Lanyard	Ideal for arrest and restraint purposes when a shock absorber is incorporated into the system.
Positioning Lanyards	Web or cable versions. The cable is designed for corrosive or excess heat environments and must be used in conjunction with shock-absorbing devices.
Shock Absorbers	When used, the fall arresting force on the user's body will be greatly reduced if a fall occurs. Shock absorbers can elongate 3.5 or more feet when activated.
Rope Grabs	A deceleration device, which travels on a lifeline used to safely ascend or descend ladders or sloped surfaces and automatically, by friction, engages the lifeline and locks to arrest the fall of an employee.
Self-Retracting Lifeline (SRL)	Gives fall protection and mobility to the user when working at height or in areas where there is a danger of falling.
Rail Systems	When climbing a ladder, rail systems can be used on any fixed ladder as well as curved surfaces as a reliable method of fall prevention.

3. Inspection and Maintenance. Harnesses should be inspected frequently to maintain their service life and high performance. Visual inspection before each use and an annual inspection by a competent person are required. If any of the conditions listed below are found, the equipment should be replaced before being used.

a. Harness Inspection.

- (1) Webbing and Rings. Inspect webbing for wear points, abrasions, damaged threads, or torn, severed, or damaged stitching or sewing. Also, check webbing for excessive sun damage (fading) or other deformities. Bend the webbing in an inverted "U." Watch for frayed edges, broken fibers, pulled stitches, or chemical damage. Webbing should be flexible and not brittle when you run it between your fingers. Webbing must not have paint on it. Check rings or snaphooks for pits and rust pits. Check for labels and tags that are not intact or able to be read.
- (2) Buckles and D-Rings. Attachments of buckles and D-Rings should be given special attention. Note any unusual wear, frayed or cut fibers, or distortion of the buckles. Rivets should be tight and nonremovable with fingers. The body-side rivet base and outside rivets should be flat against the material. Bent rivets will fail under stress. Inspect frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burnt stitches will be readily seen.
- (3) Buckles. Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Rollers should turn freely on the frame. Check for distortion or sharp edges. The outer bar or center bars must be straight. Pay special attention to the corners and attachment points of the center bar.
- (4) Grommets. For tongue and buckle leg straps, the round grommets where the tongue fits should be round and not oblong. If they are elongated, this is evidence that the harness may have been impacted by a fall. Compare with other grommets for shape.
- **b.** Lanyard Inspection. When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked.

(1) Hardware.

- (a) Snaps. Inspect closely for hook and eye distortion, cracks, corrosion, or pitted surfaces. The keeper or latch should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. The keeper or latch must be kept from opening once the keeper closes.
- (b) Thimbles. The thimble (protective plastic sleeve) must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands. The edges of the thimble should be free of sharp edges, distortion, or cracks.

(2) Lanyards.

(a) Steel Lanyards. While rotating a steel lanyard, watch for cuts, frayed areas, or unusual wear patterns. Steel lanyards for fall protection must have an integrated shock absorber.

(b) Web Lanyard. While bending webbing, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Due to the limited elasticity of the web lanyard, fall protection without the use of a shock absorber is not recommended.

- (c) Rope Lanyard. Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in period.
- **c. Shock-Absorbing Packs.** The outer portion of the shock-absorbing pack should be examined for burn holes and tears. Stitching on areas where the pack is sewn to the D-Ring, belt, or lanyard should be examined for loose strands and deterioration. The label, with manufacture date and information, must be legible.

d. Visual Indication of Damage to Webbing and Rope Lanyards.

- (1) Heat. Heat causes nylon to become brittle and have a shriveled brownish appearance.
- (2) Chemicals. Chemicals cause a change in color, usually a brownish smear or smudge.
- (3) Transverse Cracks. Transverse cracks appear when the webbing is bent over tightly, which causes a loss of elasticity.
- (4) Ultraviolet Rays. Do not store webbing and rope lanyards in direct sunlight, because ultraviolet rays can reduce the strength of some material.
- (5) Molten Metal or Flame. Webbing and rope strands may be fused by molten metal or flame. Watch for hard, shiny spots or a hard and brittle feel. The webbing will not support combustion; nylon will.
- (6) Paint and Solvents. Paint will penetrate and dry, restricting movements of fibers. Drying agents and solvents in some paints will appear as chemical damage.
- **4.** Cleaning of Equipment. Basic care for fall protection equipment will prolong the life of the equipment and contribute toward the performance of its vital safety function. Proper storage and maintenance after use are as important as cleaning the equipment of dirt, corrosives, or contaminants. The storage area should be clean, dry, and free of corrosive elements.
- **a.** Nylon and Polyester. Wipe off all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion. Then wipe the webbing dry with a clean cloth. Hang freely to dry but away from excessive heat.
 - **b. Drying.** Harness, lanyards, and other equipment should be air-dried without sunlight.

Appendix C. Additional Guidelines for Personal Fall Arrest Systems (PFAS)

- 1. Selection and Use. The kind of PFAS selected should match the particular work situation, and any possible free fall distance should be kept to a minimum. Consideration should be given to the particular work environment. For example, the presence of acids, dirt, moisture, oil, grease, paint solvents, or other corrosives or solvents, and their effect on the system, should be evaluated. Hot or cold environments may also harm the system. The external industry workplace should have means available to promptly rescue an individual should a fall occur. Where lanyards, connectors, and lifelines are subject to damage by work operations, such as welding, chemical cleaning, painting, or abrasive blasting, the component should be protected, or other securing systems should be used. The external industry workplace should monitor the effectiveness of its fall protection system and have documentation of these monitoring activities available for review if requested.
- **2. Testing.** The fall protection equipment used by FS personnel must meet American National Standards Institute (ANSI)/American Society of Safety Professionals (ASSP) Z359 testing standards; this will be listed on the equipment's labels.
- **3.** Component Compatibility. Ideally, a PFAS is designed, tested, and supplied as a complete system. However, it is common practice for lanyards, connectors, lifelines, deceleration devices, and body harnesses to be interchanged since some components wear out before others. The FS employee should realize that not all components are interchangeable. For instance, a lanyard should not be connected between a harness and a deceleration device of the self-retracting lifeline, since this can result in additional free fall for which the system was not designed. Any substitution or change to a PFAS should be fully evaluated by a competent person.
- **4. Employee Training.** FS employees who perform work activities from elevated work surfaces require training in the evaluation, use, and limitations of PFASs. This should include the following:
 - a. Application limits; proper anchoring and tie-off techniques.
- **b.** Estimation of free fall distance, including determination of deceleration distance, and total fall distance to prevent striking a lower level.
 - **c.** Methods of use; and inspection and storage of the system.
 - **d.** Careless or improper use of the equipment can result in serious injury or death.
- **e.** FS employees should become familiar with the material in this appendix, as well as manufacturer's recommendations before a system is used.
- **f.** Reduction in strength caused by certain tie-offs (such as using knots or tying around sharp edges) and maximum permitted free fall distance.
- **g.** The importance of inspection prior to use, the limitations of the equipment, and unique conditions at the worksite, which may be important in determining the type of system to use.

5. Instruction. The external industry workplace should have obtained comprehensive instructions from the supplier/vendor and manufacturer as to the system's proper use and application. The external industry workplace may require the FS employee to receive training in the use of their fall protection equipment/system. This training may include:

- **a.** Caution statements on critical use limitations and application limits;
- **b.** Proper hook-up, anchoring, and tie-off techniques, including the proper D-Ring or other attachment points to use on the harness for fall arrest;
 - **c.** Proper climbing techniques;
 - d. Methods of inspection, use, cleaning, and storage; and
 - e. Site-specific procedures.
- **6. Rescue.** The external industry workplace must ensure that an FS employee can be promptly rescued or can rescue themselves should a fall occur. The availability of rescue personnel, ladders, or other rescue equipment should be evaluated. In some situations, equipment that allows employees to rescue themselves after the fall has been arrested may be desirable, such as devices that have descent capability. According to the Occupational Safety and Health Administration (OSHA), suspension trauma, which can cause physical injury, can occur in less than 30 minutes. This time is based on a person in better health. The FS employee needs to assess the hazard and the availability of rescue prior to working at height.

7. Inspection.

- **a. Significant Defects.** PFASs must be regularly inspected and the annual inspection by a competent person must be documented. FS employees can request to see this documentation. Additionally, horizontal lifeline systems must have documentation on the engineering required. If there is any component with any significant defect, such as cuts, tears, abrasions, mold, or undue stretching; alterations or additions which might affect its efficiency; damage due to deterioration; contact with fire, acids, or other corrosives or solvents; distorted hooks or faulty hook springs; tongues unfitted to the shoulder of buckles; loose or damaged mountings; non-functioning parts; or wearing or internal deterioration in the ropes, it must not be used by FS employees.
- **b.** Expected Life of Equipment. Most fall protection equipment manufacturers will not state the expected life of the equipment. Most will say as long as it passes the competent person inspection it can continue to be used.
- (1) If it is an operator's harness, use only harnesses that are under 5 years old since the history of the equipment is unknown. It must still pass the prior-to-use inspection by the user.
- (2) For FS-purchased harnesses/lanyards, the service life may be extended beyond 5 years, since it will be used less frequently and FS will know how it has been maintained.

(3) FS-owned harnesses/lanyards will be tested where necessary to verify exceeding the 5 years.

8. Tie-Off.

- **a.** Anchorage Installation. Properly planned anchorages should be used if they are available. In some cases, anchorages must be installed immediately prior to use. In such cases, a registered professional engineer with experience in designing fall protection systems, or another qualified person with appropriate education and experience, should design an anchor point for installation.
- **b.** Arresting Force. Anchorages have to meet a 5,000-pound arresting force for fall arrest or be designed by an engineer to have a safety factor of at least 2.
- c. Anchor Point from Existing Structures. In other cases, it is recognized that there will be a need to devise an anchor point from existing structures. Examples of what might be appropriate anchor points are steel members or I-beams, if an acceptable strap is available for the connection (do not use a lanyard with a snaphook clipped onto itself), or guardrails or railings if they have been designed for use as an anchor point. Improvised anchors like these should be used only after reviewing any system documentation and if they are found to meet the requirements outlined in the FS training.
- **d. Knots.** Tie-off using a knot in a rope lanyard or lifeline (at any location), to reduce its length, is prohibited since it can reduce the lifeline or lanyard strength by 50 percent. A tie-off location can be raised or lanyard length can be shortened to minimize free fall distance.
- e. Beams. Tie-off of a rope or webbing lanyard or lifeline around an H- or I-beam or similar support is prohibited since it can reduce its strength by as much as 70 percent due to the cutting action of the beam edges. Anchorage connectors such as beam clamps or tie-off adapters with abrasion pads must be used to help connect the system to the anchorage. Exception: some lanyards are designed to be wrapped around structural members, but this must be stated on the label.
- **f. Sharp Surfaces.** A tie-off where the line passes over or around rough or sharp surfaces reduces strength drastically. Anchorage connectors should have abrasion pads to resist damage to the material and reduce this risk.
- g. Horizontal Lifelines. Horizontal lifelines may, depending on their geometry and angle of sag, be subjected to greater loads than the impact load imposed by an attached component. Therefore, the design of systems using horizontal lifelines must only be done by qualified persons. The procedure, capacity, and limitations should be documented for the employee's review. The required testing of the system should also be documented and available for the employee's review.
- **h.** Eyebolts. The strength of an eyebolt is rated along the axis of the bolt and its strength is greatly reduced if the force is applied at an angle to this axis (in the direction of shear). Also, care should be exercised in selecting the proper diameter of the eye to avoid accidental disengagement of snaphooks not designed to be compatible with the connection.

9. Vertical Lifeline. Each employee must have a separate lifeline when the lifeline is vertical, since a second person can fall if the first person incurs a fall due to movement of the lifeline.

10. Snaphook.

- **a.** Locking Snaphooks. Locking snaphooks designed for connection to suitable objects (of sufficient strength) are required. OSHA prohibits non-locking snaphooks. Locking snaphooks incorporate a positive locking mechanism in addition to the spring-loaded keeper, which will not allow the keeper to open under moderate pressure without someone first releasing the mechanism.
 - **b.** Avoidances. Avoid the following connections because they may result in rollout:
 - (1) Direct connection of a snaphook to a horizontal lifeline.
 - (2) Two (or more) snaphooks connected to one D-Ring.
 - (3) Two snaphooks connected to each other.
 - (4) A snaphook connected back on its integral lanyard.
 - (5) A snaphook connected to webbing or webbing lanyard, unless designed to do so.
- (6) Improper dimensions of the D-Ring, rebar, or other connection points in relation to the snaphook dimensions would allow the snaphook keeper to be depressed by a turning motion of the snaphook.
- 11. Free Fall. The FS employee should at all times be aware that a system's maximum arresting force is evaluated under normal use conditions established by the manufacturer, and in no case using a free fall distance in excess of 6 feet (1.8 m). A few extra feet of free fall can significantly increase the arresting force on the employee, possibly to the point of causing injury. To avoid injury, the tie-off attachment point to the lifeline or anchor should be located at or above the connection point of the fall arrest equipment to harness. Attaching to the elevated working surface will often result in a free fall greater than 6 feet. For instance, if a 6-foot lanyard is used, the total free fall distance will be the distance from the working level to the body harness attachment point plus the 6 feet of lanyard length. Another important consideration is that the arresting force on the body and the system also goes up with greater distances of free fall, possibly exceeding the strength of the system.
- 12. Elongation and Deceleration Distance. Other factors involved in a proper tie-off are elongation and deceleration distance. During the arresting of a fall, a lanyard will experience a length of stretching or elongation, whereas activation of a deceleration device will result in a certain stopping distance. These distances should be available with the lanyard or device's instructions and must be added to the free fall distance to arrive at the total fall distance before an employee is fully stopped. As required by the standard, sufficient distance to allow for all of these factors must also be maintained between the employee and obstructions below, to prevent an injury due to impact before the system fully arrests the fall.

13. Obstruction. The location of the tie-off should also consider the hazard of obstructions in the potential fall path of the employee.

- **14. Swing Fall.** If the self-retracting lifeline or anchor is not close to being directly over the worker's body, there is a potential for the person to swing if they fall and possibly impact another object. The general rule is to stay within a 30-degree angle from your anchor overhead.
- **15. Other Considerations.** Because of the design of some PFASs, additional considerations may be required for proper tie-off. For example, heavy deceleration devices of the self-retracting type should be secured overhead to avoid the weight of the device having to be supported by the employee. Also, if self-retracting equipment is connected to a horizontal lifeline, the sag in the lifeline should be minimized to prevent the device from sliding down the lifeline to a position which creates a swing hazard during fall arrest. In all cases, the manufacturer's instructions should be followed.

Appendix D. Applicable Standards and Regulations

The current editions of the following standards, regulations, and requirements apply to the Flight Standards Service (FS) Fall Protection Program (FPP):

- 1. FAA Order 3900.19, Federal Aviation Administration (FAA) Occupational Safety and Health Policy, Chapter 4, Fall Protection.
- 2. Title 29 of the Code of Federal Regulations (29 CFR) Part 1910, Occupational Safety and Health Standards.
 - **a.** Subpart D, Walking-Working Surfaces:
 - Section 1910.21, Scope and Definitions.
 - Section 1910.22, General Requirements.
 - Section 1910.23, Ladders.
 - Section 1910.28, Duty to Have Fall Protection and Falling Object Protection.
 - Section 1910.29, Fall Protection Systems and Falling Object Protection—Criteria and Practices.
- **b.** Subpart F, Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms, § 1910.67, Vehicle-Mounted Elevating and Rotating Work Platforms.
 - c. Subpart I, Personal Protective Equipment, § 1910.132, General Requirements.
- 3. Title 29 CFR Part 1926, Safety and Health Regulations for Construction.
- **a.** Subpart E, Personal Protective and Life Saving Equipment, § 1926.104, Safety Belts, Lifelines, and Lanyards.
 - **b.** Subpart L, Scaffolds:
 - Section 1926.451, General Requirements.
 - Section 1926.453, Aerial Lifts.
 - c. Subpart M, Fall Protection.
 - Section 1926.501, Duty To Have Fall Protection.
 - Section 1926.502, Fall Protection Systems Criteria and Practices.
 - Section 1926.503, Training Requirements.
- 4. American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.7-2011, American National Standard for Mobile Ladder Stands and Mobile Ladder Stand Platforms.

5. ANSI/American Society of Safety Professionals (ASSP) Z359, Fall Protection and Fall Restraint.

- **a.** ANSI/ASSP Z359.0-2012, Definitions and Nomenclature Used for Fall Protection and Fall Arrest.
 - **b.** ANSI/ASSP Z359.1-2016, The Fall Protection Code—Part of the Fall Protection Code.
- **c.** ANSI/ASSP Z359.2-2017, Minimum Requirements for a Comprehensive Managed Fall Protection Program.
 - **d.** ANSI/ASSP Z359.3-2017, Safety Requirements for Lanyards and Positioning Lanyards.
- **e.** ANSI/ASSP Z359.4-2013, Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components.
- **f.** ANSI/ASSP Z359.6-2016, Specifications and Design Requirements for Active Fall Protection Systems.
- **g.** ANSI/ASSP Z359.7-2019, Qualification and Verification Testing of Fall Protection Products.
 - h. ANSI/ASSP Z359.11-2014, Safety Requirements for Full Body Harnesses.
 - i. ANSI/ASSP Z359.12-2009, Connecting Components for Personal Fall Arrest Systems.
 - j. ANSI/ASSP Z359.13-2013, Personal Energy Absorbers and Energy Absorbing Lanyards.
- **k.** ANSI/ASSP Z359.14-2014, Safety Requirements for Self-Retracting Devices For Personal Fall Arrest and Rescue Systems.
- **l.** ANSI/ASSP Z359.15-2014, Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest and Rescue Systems.
- **m.** ANSI/ASSP Z359.16-2016, Safety Requirements for Climbing Ladder Fall Arrest Systems.
- **n.** ANSI/ASSP Z359.18-2017, Safety Requirements for Anchorage Connectors for Active Fall Protection Systems—Part of the Fall Protection Code.

Directive Feedback Information

Please submit any written comments or recommendation for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: FAA Order 3900.65A, Flight Standards Service Fall Protection Program (FPP)

To: Flight Standards Directive Management Officer, AFB-120 Directives Mailbox (9-AWA-AFB-120-Directives@faa.gov)

(Please check all appropriate line items)

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An error (procedural or typographical) h	as been noted in paragraph	on
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