# SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUEST FOR THE VEHICLE-MOUNTED ELEVATING AND ROTATING WORK PLATFORMS (AERIAL LIFTS) STANDARD (29 CFR 1910.67). OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0230 (September 2024)

This ICR seeks to extend authorization for this collection without change.

#### A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The main objective of the Occupational Safety and Health Act of 1970 (i.e., "the Act") is to "assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" (29 U.S.C. 651). To achieve this objective, the Act authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651).

With regard to recordkeeping, the Act specifies that "[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . ." (29 U.S.C. 657). The Act states further that "[t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer's establishment" (29 U.S.C. 657).

Under the authority granted by the Act, the Occupational Safety and Health Administration (i.e., "OSHA" or "the agency") published at 29 CFR 1910.67 a safety standard for general industry regulating the use of aerial lifts (i.e., "the Standard"). The paperwork provision of the Standard specifies requirements for certification records.

<sup>&</sup>lt;sup>1</sup>The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with the provision of the Standard that contains a paperwork requirement; this Supporting Statement does not provide information or guidance on how to comply with, or how to enforce, the provision.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The Standard specifies one paperwork requirement. The following section describes who uses the information collected under the requirement, as well as how they use it. The purpose of the requirement is to reduce workers' risk of death or serious injury by ensuring that aerial lifts are in safe operating condition.

Manufacturer's Certification of Modifications (1910.67(b)(2)). The Standard requires that when aerial lifts are "field modified" for uses other than those intended by the manufacturer, the manufacturer or other equivalent entity, such as a nationally recognized testing laboratory, must certify in writing that the modification is in conformity with all applicable provisions of ANSI A92.2-1969 and the OSHA standard and that the modified aerial lift is at least as safe as the equipment was before modification. Employers are to maintain the certification record and make it available to OSHA compliance officers. This record provides assurance to employers and workers that the modified aerial lift is safe for use; thereby, preventing failure while workers are being elevated.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

Employers may use automated, electronic, mechanical, or other technological information collection techniques or other forms of information technology (e.g., electronic submission of responses) when establishing and maintaining the required records. The agency wrote the paperwork requirements of the Standard in performance-oriented language (i.e., in terms of what data to collect, not how to record the data).

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in A.2 above.

The requirements to collect and maintain information are specific to each employer and worker involved, and no other source or agency duplicates these requirements or can make the required information available to OSHA (i.e., the required information is available only from employers).

5. If the collection of information impacts small businesses or other small entities, describe the methods used to reduce the burden.

The information collection requirement specified by the Standard does not have a significant impact on a substantial number of small entities.

6. Describe the consequence to Federal program or policy activities if the collection is or is not conducted less frequently, and any technical or legal obstacles to reducing the burden.

The Agency believes that the information collection frequencies required by the Standard are the minimum frequencies necessary to regulate aerial lifts effectively, and; thereby, fulfill its mandate "to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources" as specified in the Act at 29 U.S.C. 651. Accordingly, if employers do not perform the required information collections or delay in providing this information, workers may use aerial lifts that are in unsafe operating condition.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:
  - · Requiring respondents to report information to the agency more often than quarterly;
  - Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
  - · Requiring respondents to submit more than an original and two copies of any document;
  - Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;
  - · In connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;
  - Requiring the use of statistical data classification that has not been reviewed and approved by OMB;
  - That includes a pledge of confidentially that is not supported by authority established in statue or regulation that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or

• Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can prove that it has instituted procedures to protect the information's confidentially to the extent permitted by law.

No special circumstances exist that require employers to collect information using the procedures specified by this item. The requirements are within the guidelines set forth in 5 CFR 1320.5.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection before submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to those comments specifically address comments received on cost and hour burdens.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, revealed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every three years — even if the collection of information activity is the same as in prior periods. There may be circumstances that mitigate against consultation in a specific situation. These circumstances should be explained.

As required by the Paperwork Reduction Act of 1995 )(44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the Federal Register on (August 15, 2024) (89 FR 66456) requesting public comment on its proposed extension of the information collection requirement contained in the Standard on Vehicle-Mounted Elevating and Rotating Work Platforms (Aerial Lifts) (29 CFR 1910.67) under docket number OSHA-2011-0185. This notice is part of a preclearance consultation program intended to provide those interested parties the opportunity to comment. The agency will respond to any public comments received in response to this notice.

9. Explain any decision to provide any payments or gift to respondents, other than reenumeration of contractors or grantees.

The agency will not provide payments or gifts to the respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

The paperwork requirement specified by the Standard does not involve confidential information.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The provision in the Standard does not require sensitive information.

- 12. Provide estimates of the hour burden of the collection of information. The statement should:
- Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.
- If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.
- Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories.

#### BURDEN HOUR AND COST DETERMINATIONS

The agency determined the wage rate from mean hourly wage earnings to represent the cost of employee time. For the relevant standard occupational classification category, OSHA used the wage rates reported in the Bureau of Labor Statistics (BLS), U.S. Department of Labor, Occupational Employment and Wage Statistics (OEWS), May 2023 [date accessed: April 3, 2024] (OEWS) data is available at <a href="https://www.bls.gov/oes/tables.htm">https://www.bls.gov/oes/tables.htm</a>. To access a wage rate, select the year, "Occupation profiles," and the Standard Occupational Classification (SOC)

code.)

The agency used the Bureau of Labor Statistics' Occupational Employment and Wage Statistics (2024) to account for fringe benefits. Fringe markup is from the following BLS release: *Employer Costs for Employee Compensation* news release text; For release 10:00 AM (EDT), June 18, 2024 (<a href="https://www.bls.gov/news.release/pdf/ecec.pdf">https://www.bls.gov/news.release/pdf/ecec.pdf</a>). BLS reported that for civilian workers, fringe benefits accounted for 31.2 percent of total compensation, and wages accounted for the remaining 68.8 percent. The agency divided the mean hourly wage by 68.8 percent to calculate the loaded hourly wage for each occupation.

Table 1 - WAGE HOUR ESTIMATES										
Occupational Title	SOC Code	Mean Hourly Wage Rate (A)	Fringe Benefits (B)	Loaded Hourly Wage Rate (C)=[(A)/(1-(B)]						
Crane Operator Tower Operator/Manufacturing Worker	53-7021	\$32.71	0.312	\$47.54						

Based on previous information provided by a manufacturer of aerial lifts, it was estimated that there are approximately 100,000 aerial lifts in use today in general industry (most of which are sold to rental companies). The agency has been unable to identify updated data regarding the number of aerial lifts covered by the Standard yet does not suspect that these figures have changed significantly since the prior ICR update. Additionally, given the minimal paperwork and cost burden imposed by the Standard, it seems reasonable to retain estimates contained in previous updates. Under the provision of the OSHA standard that requires the collection of information, 29 CFR 1910.67, the certification of modification by the manufacturer is required only when the aerial lift is "field modified" and the modification is to allow the lift to be used for other than its intended purpose. The manufacturer indicated that very few, if any, aerial lifts are modified, however; for purposes of this ICR, OSHA estimates that no more than 1% of the aerial lifts (1,000) are modified in any one year. To determine the cost of the paperwork requirements specified by the Standard, the agency used wage rates of \$32.71 for a manufacturing worker Crane and Tower Operators. These wages have been adjusted to reflect the fact that fringe benefits comprise roughly 31.2 percent of total worker compensation in the civilian sector.<sup>2</sup> The costs of labor used in this analysis are estimates of total hourly compensation.

<sup>&</sup>lt;sup>2</sup>Occupational Outlook Handbook: U.S. Bureau of Labor Statistics

OSHA does not believe that there is any burden associated with the manufacturer's certificate of the field modification of the aerial lift because the manufacturer, as a normal and customary practice, would certify the equipment to be at least as safe as the equipment was before modification. However, there is a burden for the employer to maintain the manufacturer-supplied certificate. OSHA estimates that it takes one minute (0.02 hour) to maintain the certification record.

**Burden hours:** 1,000 modified aerial lifts  $\times$  0.02 hours to maintain

certification record = 20 hours

**Cost:** 20 burden hours  $\times$  \$47.54 = \$951

**TABLE 2 - Estimated Annualized Respondent Burden Hours And Costs.** 

Information Collection Requirements	Type of Respondent	Number of Respondents	Number of Responses per Respondent	Total Number of Responses	Burden per Response	Total Burden Hours	Loaded Hourly Wage	Total Burden Cost
	Crane Operator Tower Operator/Manufacturing Worker	1,000	1 year	1,000	0.02	20	\$47.54	\$951
Total				1,000		20		\$951

13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14.)

The cost estimate should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life); and (b) a total operation and maintenance and purchase of service component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondent (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

Item 12 above provides the total cost of the information collection requirement specified by the Standard.

14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 into a single table.

Usually, OSHA requests access to records during an inspection. Information collected by the

agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Items 12 and 14 of this Supporting Statement.

#### 15. Explain the reasons for any program changes or adjustments.

There are no adjustment or program changes associated with this package. OSHA is requesting that the burden hours remain the same.

16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection information, completion of report, publication dates, and other actions.

OSHA will not publish the information collected under the Standard.

# 17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be appropriate.

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5 and publishes the expiration date in the Federal Register notice announcing OMB approval of the information collection requirement (see 5 CFR 1320.3(f)(3)). OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

#### 18. Explain each exception to the certification statement.

OSHA is not requesting an exception to the certification statement.

#### B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

This Supporting Statement does not contain any collection of information requirements that employ statistical methods.

#### SEC. 2. Congressional Findings and Purpose

- (a) The Congress finds that personal injuries and illnesses arising out of work situations impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments.
- (b) The Congress declares it to be its purpose and policy, through the exercise of its powers to regulate commerce among the several States and with foreign nations and to provide for the general welfare, to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources --

#### 29 USC 651

- (1) by encouraging employers and employees in their efforts to reduce the number of occupational safety and health hazards at their places of employment, and to stimulate employers and employees to institute new and to perfect existing programs for providing safe and healthful working conditions;
- (2) by providing that employers and employees have separate but dependent responsibilities and rights with respect to achieving safe and healthful working conditions;
- (3) by authorizing the Secretary of Labor to set mandatory occupational safety and health standards applicable to businesses affecting interstate commerce, and by creating an Occupational Safety and Health Review Commission for carrying out adjudicatory functions under the Act;
- (4) by building upon advances already made through employer and employee initiative for providing safe and healthful working conditions;
- (5) by providing for research in the field of occupational safety and health, including the psychological factors involved, and by developing innovative methods, techniques, and approaches for dealing with occupational safety and health problems;
- (6) by exploring ways to discover latent diseases, establishing causal connections between diseases and work in environmental conditions, and conducting other research relating to health problems, in recognition of the fact that occupational health standards present problems often different from those involved in occupational safety;
- (7) by providing medical criteria which will assure insofar as practicable that no employee will suffer diminished health, functional capacity, or life expectancy as a result of his work experience;
- (8) by providing for training programs to increase the number and competence of personnel engaged in the field of occupational safety and health; affecting the OSH Act since its passage in 1970 through January 1, 2004.
- (9) by providing for the development and promulgation of occupational safety and health standards;

- (12) by providing an effective enforcement program which shall include a prohibition against giving advance notice of any inspection and sanctions for any individual violating this prohibition;
- (11) by encouraging the States to assume the fullest responsibility for the administration and enforcement of their occupational safety and health laws by providing grants to the States to assist in identifying their needs and responsibilities in the area of occupational safety and health, to develop plans in accordance with the provisions of this Act, to improve the administration and enforcement of State occupational safety and health laws, and to conduct experimental and demonstration projects in connection therewith;
- (12) by providing for appropriate reporting procedures with respect to occupational safety and health which procedures will help achieve the objectives of this Act and accurately describe the nature of the occupational safety and health problem;
- (13) by encouraging joint labor-management efforts to reduce injuries and disease arising out of employment

# SEC. 8. Inspections, Investigations, and Recordkeeping

- (a) In order to carry out the purposes of this Act, the Secretary, upon presenting appropriate credentials to the owner, operator, or agent in charge, is authorized --29 USC 657
- (1) to enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; and
- (2) to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials therein, and to question privately any such employer, owner, operator, agent or employee.
- (b) In making his inspections and investigations under this Act the Secretary may require the attendance and testimony of witnesses and the production of evidence under oath. Witnesses shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of a contumacy, failure, or refusal of any person to obey such an order, any district court of the United States or the United States courts of any territory or possession, within the jurisdiction of which such person is found, or resides or transacts business, upon the application by the Secretary, shall have jurisdiction to issue to such person an order requiring such person to

appear to produce evidence if, as, and when so ordered, and to give testimony relating to the matter under investigation or in question, and any failure to obey such order of the court may be punished by said court as a contempt thereof.

(c) (1) Each employer shall make, keep and preserve, and make available to the Secretary or the Secretary of Health and Human Services, such records regarding his activities relating to this Act as the Secretary, in cooperation with the Secretary of Health and Human Services, may prescribe by regulation as necessary or appropriate for the enforcement of this Act or for developing information regarding the causes and prevention of occupational accidents and illnesses. In order to carry out the provisions of this paragraph such regulations may include provisions requiring employers to conduct periodic inspections. The Secretary shall also issue regulations requiring that employers,

through posting of notices or other appropriate means, keep their employees informed of their protections and obligations under this Act, including the provisions of applicable standards.

- (2) The Secretary, in cooperation with the Secretary of Health and Human Services, shall prescribe regulations requiring employers to maintain accurate records of, and to make periodic reports on, work-related deaths, injuries and illnesses other than minor injuries Requiring only first aid treatment and which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.
- (3) The Secretary, in cooperation with the Secretary of Health and Human Services, shall issue regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or harmful physical agents which are required to be monitored or measured under section 6. Such regulations shall provide employees or their representatives with an opportunity to observe such monitoring or measuring, and to have access to the records thereof. Such regulations shall also make appropriate provision for each employee or former employee to have access to such records as will indicate his own exposure to toxic materials or harmful physical agents. Each employer shall promptly harmful physical agents in concentrations or at levels which exceed those prescribed by an applicable occupational safety and health standard promulgated under section 6 and shall inform any employee who is being thus exposed of the corrective action being taken.
- (d) Any information obtained by the Secretary, the Secretary of Health and Human Services, or a State agency under this Act shall be obtained with a minimum burden upon businesses. Unnecessary duplication of efforts in obtaining information shall be reduced to the maximum extent feasible.
- (e) Subject to regulations issued by the Secretary, a representative of the employer and a representative authorized by his employees shall be given an opportunity to accompany the

Secretary or his authorized representative during the physical inspection of any workplace under subsection (a) for the purpose of aiding such inspection. Where there is no authorized employee representative, the Secretary or his authorized representative shall consult with a reasonable number of employees concerning matters of health and safety in the workplace.

- (f) (1) Any employees or representative of employees who believe that a violation of a safety or health standard exists that threatens physical harm, or that an imminent danger exists, may request an inspection by giving notice to the Secretary or his authorized representative of such violation or danger. Any such notice shall be reduced to writing, shall set forth with reasonable particularity the grounds for the notice, and shall be signed by the employees or representative of employees, and a copy shall be provided the employer or his agent no later than at the time of inspection, except that, upon the request of the person giving such notice, his name and the names of individual employees referred to therein shall not appear in such copy or on any record published, released, or made available pursuant to subsection (g) of this section. If upon receipt of such notification the Secretary determines there are reasonable grounds to believe that such violation or danger exists, he shall make a special inspection in accordance with the provisions of this section as soon as practicable, to determine if such violation or danger exists. If the Secretary determines there are no reasonable grounds to believe that a violation or danger exists, he shall notify the employees or representative of the employees in writing of such determination.
- (2) Prior to or during any inspection of a workplace, any employee or representative of employees employed in such workplace may notify the Secretary or any representative of the Secretary responsible for conducting the inspection, in writing, of any violation of this Act which they have reason to believe exists in such workplace. The Secretary shall, by regulation, establish procedures for informal review of any refusal by a representative of the Secretary to issue a citation with respect to any such alleged violation and shall furnish the employees or representative of employees requesting such review a written statement of the reasons for the Secretary's final disposition of the case.
- (g) (1) The Secretary and Secretary of Health and Human Services are authorized to compile, analyze, and publish, either in summary or detailed form, all reports or information obtained under this section.
- (2) The Secretary and the Secretary of Health and Human Services shall each prescribe such rules and regulations as he may deem necessary to carry out their responsibilities under this Act, including rules and regulations dealing with the inspection of an employer's establishment.
- (h) The Secretary shall not use the results of enforcement activities, such as the number of citations issued or penalties assessed, to evaluate employees directly involved in enforcement

activities under this Act or to impose quotas or goals with regard to the results of such activities. Pub. L. 105-198 added subsection (h)

#### \$1910.67 Vehicle-mounted elevating and rotating work platforms.

- (a) *Definitions applicable to this section*—(1) *Aerial device*. Any vehicle—mounted device, telescoping or articulating, or both, which is used to position personnel.
- (2) *Aerial ladder*. An aerial device consisting of a single- or multiple-section extensible ladder.
  - (3) Articulating boom platform. An aerial device with two or more hinged boom sections.
- (4) Extensible boom platform. An aerial device (except ladders) with a telescopic or extensible boom. Telescopic derricks with personnel platform attachments shall be considered to be extensible boom platforms when used with a personnel platform.
- (5) *Insulated aerial device*. An aerial device designed for work on energized lines and apparatus.
  - (6) Mobile unit. A combination of an aerial device, its vehicle, and related equipment.
- (7) *Platform*. Any personnel-carrying device (basket or bucket) which is a component of an aerial device.
  - (8) Vehicle. Any carrier that is not manually propelled.
- (9) *Vertical tower*. An aerial device designed to elevate a platform in a substantially vertical axis.
- (b) General requirements. (1) Unless otherwise provided in this section, aerial devices (aerial lifts) acquired on or after July 1, 1975, shall be designed and constructed in conformance with the applicable requirements of the American National Standard for "Vehicle Mounted Elevating and Rotating Work Platforms," ANSI A92.2—1969, including appendix, which is incorporated by reference as specified in §1910.6. Aerial lifts acquired for use before July 1, 1975 which do not meet the requirements of ANSI A92.2—1969, may not be used after July 1, 1976, unless they shall have been modified so as to conform with the applicable design and construction requirements of ANSI A92.2—1969. Aerial devices include the following types of

vehicle-mounted aerial devices used to elevate personnel to jobsites above ground: (i) Extensible boom platforms, (ii) aerial ladders, (iii) articulating boom platforms, (iv) vertical towers, and (v) a combination of any of the above. Aerial equipment may be made of metal, wood, fiberglass reinforced plastic (FRP), or other material; may be powered or manually operated; and are deemed to be aerial lifts whether or not they are capable of rotating about a substantially vertical axis.

- (2) Aerial lifts may be "field modified" for uses other than those intended by the manufacturer, provided the modification has been certified in writing by the manufacturer or by any other equivalent entity, such as a nationally recognized testing laboratory, to be in conformity with all applicable provisions of ANSI A92.2—1969 and this section, and to be at least as safe as the equipment was before modification.
- (3) The requirements of this section do not apply to firefighting equipment or to the vehicles upon which aerial devices are mounted, except with respect to the requirement that a vehicle be a stable support for the aerial device.
  - (4) For operations near overhead electric lines, see §1910.333(c)(3).
- (c) Specific requirements—(1) Ladder trucks and tower trucks. Before the truck is moved for highway travel, aerial ladders shall be secured in the lower traveling position by the locking device above the truck cab, and the manually operated device at the base of the ladder, or by other equally effective means (e.g., cradles which prevent rotation of the ladder in combination with positive acting linear actuators).
- (2) Extensible and articulating boom platforms. (i) Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.
  - (ii) Only trained persons shall operate an aerial lift.
- (iii) Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.
- (iv) Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- (v) A personal fall arrest or travel restraint system that meets the requirements in subpart I of this part shall be worn and attached to the boom or basket when working from an aerial lift.
  - (vi) Boom and basket load limits specified by the manufacturer shall not be exceeded.

- (vii) The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline.
- (viii) An aerial lift truck may not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation in accordance with the provisions of paragraphs (b)(1) and (b)(2) of this section.
- (ix) Articulating boom and extensible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower-level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
  - (x) Climbers shall not be worn while performing work from an aerial lift.
- (xi) The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating value.
- (xii) Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position, except as provided in paragraph (c)(2)(viii) of this section.
- (3) Electrical tests. Electrical tests shall be made in conformance with the requirements of ANSI A92.2—1969, Section 5. However, equivalent DC voltage tests may be used in lieu of the AC voltage test specified in A92.2—1969. DC voltage tests which are approved by the equipment manufacturer or equivalent entity shall be considered an equivalent test for the purpose of this paragraph (c)(3).
- (4) Bursting safety factor. All critical hydraulic and pneumatic components shall comply with the provisions of the American National Standards Institute standard, ANSI A92.2—1969, Section 4.9 Bursting Safety Factor. Critical components are those in which a failure would result in a free fall or free rotation of the boom. All noncritical components shall have a bursting safety factor of at least two to one.
- (5) "Welding standards." All welding shall conform to the following American Welding Society (AWS) Standards which are incorporated by reference as specified in §1910.6, as applicable:
  - (i) Standard Qualification Procedure, AWS B3.0—41.

- (ii) Recommended Practices for Automotive Welding Design, AWS D8.4-61.
- (iii) Standard Qualification of Welding Procedures and Welders for Piping and Tubing, AWS D10.9-69.
  - (iv) Specifications for Welding Highway and Railway Bridges, AWS D2.0-69.

[39 FR 23502, June 27, 1974, as amended at 40 FR 13439, Mar. 26, 1975; 55 FR 32014, Aug. 6, 1990; 61 FR 9235, Mar. 7, 1996; 79 FR 37190, July 1, 2014; 81 FR 82999, Nov. 18, 2016]