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EDITORIAL NOTE ON [PART 1926](#)

Editorial Notes:

1. At [44 FR 8577](#), Feb. 9, 1979, and corrected at [44 FR 20940](#), Apr. 6, 1979, OSHA reprinted without change the entire text of [29 CFR part 1926](#) together with certain General Industry Occupational Safety and Health Standards contained in [29 CFR part 1910](#), which have been identified as also applicable to construction work. This republication developed a single set of OSHA regulations for both labor and management forces within the construction industry.

2. Nomenclature changes to part 1926 appear at [84 FR 21597](#), May 14, 2019.

§ 1926.1427 Operator training, certification, and evaluation.

- (a) *General requirements for operators.* The employer must ensure that each operator is trained, certified/licensed, and evaluated in accordance with this section before operating any equipment covered under subpart CC, except for the equipment listed in [paragraph \(a\)\(2\)](#) of this section.
- (1) *Operation during training.* An employee who has not been certified/licensed and evaluated to operate assigned equipment in accordance with this section may only operate the equipment as an operator-in-training under supervision in accordance with the requirements of [paragraph \(b\)](#) of this section.
- (2) *Exceptions.* Operators of derricks (see [§ 1926.1436](#)), sideboom cranes (see [§ 1926.1440](#)), or equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less (see [§ 1926.1441](#)) are not required to comply with [§ 1926.1427](#). Note: The training requirements in those other sections continue to apply (for the training requirement for operators of sideboom cranes, follow [section 1926.1430\(c\)](#)).
- (3) *Qualification by the U.S. military.*
 - (i) For purposes of this section, an operator who is an employee of the U.S. military meets the requirements of this section if he/she has a current operator qualification issued by the U.S. military for operation of the

equipment. An employee of the U.S. military is a Federal employee of the Department of Defense or Armed Forces and does not include employees of private contractors.

- (ii) A qualification under this paragraph is:
 - (A) Not portable: Such a qualification meets the requirements of [paragraph \(a\)](#) of this section only where the operator is employed by (and operating the equipment for) the employer that issued the qualification.
 - (B) Valid for the period of time stipulated by the issuing entity.
 - (b) *Operator training.* The employer must provide each operator-in-training with sufficient training, through a combination of formal and practical instruction, to ensure that the operator-in-training develops the skills, knowledge, and ability to recognize and avert risk necessary to operate the equipment safely for assigned work.
 - (1) The employer must provide instruction on the knowledge and skills listed in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section to the operator-in-training.
 - (2) The operator-in-training must be continuously monitored on site by a trainer while operating equipment.
 - (3) The employer may only assign tasks within the operator-in-training's ability. However, except as provided in [paragraph \(b\)\(3\)\(v\)](#) of this section, the operator-in-training shall not operate the equipment in any of the following circumstances unless certified in accordance with [paragraph \(c\)](#) of this section:
 - (i) If any part of the equipment, load line, or load (including rigging and lifting accessories), if operated up to the equipment's maximum working radius in the work zone (see [§ 1926.1408\(a\)\(1\)](#)), could get within 20 feet of a power line that is up to 350 kV, or within 50 feet of a power line that is over 350 kV.
 - (ii) If the equipment is used to hoist personnel.
 - (iii) In multiple-equipment lifts.
 - (iv) If the equipment is used over a shaft, cofferdam, or in a tank farm.
 - (v) In multiple-lift rigging operations, except where the operator's trainer determines that the operator-in-training's skills are sufficient for this high-skill work.
- (4) The employer must ensure that an operator-in-training is monitored as follows when operating equipment covered by this subpart:
 - (i) While operating the equipment, the operator-in-training must be continuously monitored by an individual (“operator's trainer”) who meets all of the following requirements:

- (A) The operator's trainer is an employee or agent of the operator-in-training's employer.
- (B) The operator's trainer has the knowledge, training, and experience necessary to direct the operator-in-training on the equipment in use.
- (ii) While monitoring the operator-in-training, the operator's trainer performs no tasks that detract from the trainer's ability to monitor the operator-in-training.
- (iii) For equipment other than tower cranes: The operator's trainer and the operator-in-training must be in direct line of sight of each other. In addition, they must communicate verbally or by hand signals. For tower cranes: The operator's trainer and the operator-in-training must be in direct communication with each other.
- (iv) The operator-in-training must be monitored by the operator's trainer at all times, except for short breaks where all of the following are met:
 - (A) The break lasts no longer than 15 minutes and there is no more than one break per hour.
 - (B) Immediately prior to the break the operator's trainer informs the operator-in-training of the specific tasks that the operator-in-training is to perform and limitations to which he/she must adhere during the operator trainer's break.
 - (C) The specific tasks that the operator-in-training will perform during the operator trainer's break are within the operator-in-training's abilities.
- (5) *Retraining.* The employer must provide retraining in relevant topics for each operator when, based on the performance of the operator or an evaluation of the operator's knowledge, there is an indication that retraining is necessary.
- (c) *Operator certification and licensing.* The employer must ensure that each operator is certified or licensed to operate the equipment as follows:
 - (1) *Licensing.* When a state or local government issues operator licenses for equipment covered under subpart CC, the equipment operator must be licensed by that government entity for operation of equipment within that entity's jurisdiction if that government licensing program meets the following requirements:
 - (i) The requirements for obtaining the license include an assessment, by written and practical tests, of the operator applicant regarding, at a minimum, the knowledge and skills listed in [paragraphs \(j\)\(1\) and \(2\)](#) of this section.
 - (ii) The testing meets industry-recognized criteria for written testing materials, practical examinations, test administration, grading, facilities/equipment, and personnel.

- (iii) The government authority that oversees the licensing department/office has determined that the requirements in [paragraphs \(c\)\(1\)\(i\)](#) and [\(ii\)](#) of this section have been met.
- (iv) The licensing department/office has testing procedures for re-licensing designed to ensure that the operator continues to meet the technical knowledge and skills requirements in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section.
- (v) For the purposes of compliance with this section, a license is valid for the period of time stipulated by the licensing department/office, but no longer than 5 years.
- (2) *Certification.* When an operator is not required to be licensed under [paragraph \(c\)\(1\)](#) of this section, the operator must be certified in accordance with [paragraph \(d\)](#) or [\(e\)](#) of this section.
- (3) *No cost to employees.* Whenever operator certification/licensure is required under this section, the employer must provide the certification/licensure at no cost to employees.
- (4) *Provision of testing and training.* A testing entity is permitted to provide training as well as testing services as long as the criteria of the applicable governmental or accrediting agency (in the option selected) for an organization providing both services are met.
- (d) *Certification by an accredited crane operator testing organization.*
- (1) For a certification to satisfy the requirements of this section, the crane operator testing organization providing the certification must:
 - (i) Be accredited by a nationally recognized accrediting agency based on that agency's determination that industry-recognized criteria for written testing materials, practical examinations, test administration, grading, facilities/equipment, and personnel have been met.
 - (ii) Administer written and practical tests that:
 - (A) Assess the operator applicant regarding, at a minimum, the knowledge and skills listed in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section.
 - (B) Provide certification based on equipment type, or type and capacity.
 - (iii) Have procedures for operators to re-apply and be re-tested in the event an operator applicant fails a test or is decertified.
 - (iv) Have testing procedures for re-certification designed to ensure that the operator continues to meet the technical knowledge and skills requirements in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section.

- (v) Have its accreditation reviewed by the nationally recognized accrediting agency at least every 3 years.
- (2) If no accredited testing agency offers certification examinations for a particular type of equipment, an operator will be deemed to have complied with the certification requirements of this section for that equipment if the operator has been certified for the type that is most similar to that equipment and for which a certification examination is available. The operator's certificate must state the type of equipment for which the operator is certified.
- (3) A certification issued under this option is portable among employers who are required to have operators certified under this option.
- (4) A certification issued under this paragraph is valid for 5 years.
- (e) *Audited employer program.* The employer's certification of its employee must meet the following requirements:
 - (1) *Testing.* The written and practical tests must be either:
 - (i) Developed by an accredited crane operator testing organization (see [paragraph \(d\)](#) of this section); or
 - (ii) Approved by an auditor in accordance with the following requirements:
 - (A) The auditor is certified to evaluate such tests by an accredited crane operator testing organization (see [paragraph \(d\)](#) of this section).
 - (B) The auditor is not an employee of the employer.
 - (C) The approval must be based on the auditor's determination that the written and practical tests meet nationally recognized test development criteria and are valid and reliable in assessing the operator applicants regarding, at a minimum, the knowledge and skills listed in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section.
 - (D) The audit must be conducted in accordance with nationally recognized auditing standards.
 - (2) *Administration of tests.*
 - (i) The written and practical tests must be administered under circumstances approved by the auditor as meeting nationally recognized test administration standards.
 - (ii) The auditor must be certified to evaluate the administration of the written and practical tests by an accredited crane operator testing organization (see [paragraph \(d\)](#) of this section).
 - (iii) The auditor must not be an employee of the employer.

- (iv) The audit must be conducted in accordance with nationally recognized auditing standards.
- (3) *Timing of audit.* The employer program must be audited within 3 months of the beginning of the program and at least every 3 years thereafter.
- (4) *Requalification.* The employer program must have testing procedures for re-qualification designed to ensure that the operator continues to meet the technical knowledge and skills requirements in [paragraphs \(j\)\(1\)](#) and [\(2\)](#) of this section. The re-qualification procedures must be audited in accordance with [paragraphs \(e\)\(1\)](#) and [\(2\)](#) of this section.
- (5) *Deficiencies.* If the auditor determines that there is a significant deficiency (“deficiency”) in the program, the employer must ensure that:
 - (i) No operator is qualified until the auditor confirms that the deficiency has been corrected.
 - (ii) The program is audited again within 180 days of the confirmation that the deficiency was corrected.
 - (iii) The auditor files a documented report of the deficiency to the appropriate Regional Office of the Occupational Safety and Health Administration within 15 days of the auditor's determination that there is a deficiency.
 - (iv) Records of the audits of the employer's program are maintained by the auditor for 3 years and are made available by the auditor to the Secretary of Labor or the Secretary's designated representative upon request.
- (6) *Audited-program certificates.* A certification under this paragraph is:
 - (i) Not portable: Such a certification meets the requirements of [paragraph \(c\)](#) of this section only where the operator is employed by (and operating the equipment for) the employer that issued the certification.
 - (ii) Valid for 5 years.
- (f) *Evaluation.*
 - (1) Through an evaluation, the employer must ensure that each operator is qualified by a demonstration of:
 - (i) The skills and knowledge, as well as the ability to recognize and avert risk, necessary to operate the equipment safely, including those specific to the safety devices, operational aids, software, and the size and configuration of the equipment. Size and configuration includes, but is not limited to, lifting capacity, boom length, attachments, luffing jib, and counterweight set-up.
 - (ii) The ability to perform the hoisting activities required for assigned work, including, if applicable, blind lifts, personnel hoisting, and multi-crane lifts.

- (2) For operators employed prior to December 10, 2018, the employer may rely on its previous assessments of the operator in lieu of conducting a new evaluation of that operator's existing knowledge and skills.
- (3) The definition of “qualified” in [§ 1926.32](#) does not apply to [paragraph \(f\)\(1\)](#) of this section: Possession of a certificate or degree cannot, by itself, cause a person to be qualified for purposes of paragraph (f)(1).
- (4) The evaluation required under [paragraph \(f\)\(1\)](#) of this section must be conducted by an individual who has the knowledge, training, and experience necessary to assess equipment operators.
- (5) The evaluator must be an employee or agent of the employer. Employers that assign evaluations to an agent retain the duty to ensure that the requirements in paragraph (f) are satisfied. Once the evaluation is completed successfully, the employer may allow the operator to operate other equipment that the employer can demonstrate does not require substantially different skills, knowledge, or ability to recognize and avert risk to operate.
- (6) The employer must document the completion of the evaluation. This document must provide: The operator's name; the evaluator's name and signature; the date; and the make, model, and configuration of equipment used in the evaluation. The employer must make the document available at the worksite while the operator is employed by the employer. For operators assessed per [paragraph \(f\)\(2\)](#) of this section, the documentation must reflect the date of the employer's determination of the operator's abilities and the make, model and configuration of equipment on which the operator has previously demonstrated competency.
- (7) When an employer is required to provide an operator with retraining under [paragraph \(b\)\(5\)](#) of this section, the employer must re-evaluate the operator with respect to the subject of the retraining.
- (g) [Reserved]
- (h) *Language and literacy requirements.*
 - (1) Tests under this section may be administered verbally, with answers given verbally, where the operator candidate:
 - (i) Passes a written demonstration of literacy relevant to the work.
 - (ii) Demonstrates the ability to use the type of written manufacturer procedures applicable to the class/type of equipment for which the candidate is seeking certification.
 - (2) Tests under this section may be administered in any language the operator candidate understands, and the operator's certification documentation must note the language in which the test was given. The operator is only permitted to operate equipment that is furnished with materials required by

this subpart, such as operations manuals and load charts, that are written in the language of the certification.

(i) [Reserved]

(j) *Certification criteria.* Certifications must be based on the following:

(1) A determination through a written test that:

(i) The individual knows the information necessary for safe operation of the specific type of equipment the individual will operate, including all of the following:

(A) The controls and operational/performance characteristics.

(B) Use of, and the ability to calculate (manually or with a calculator), load/capacity information on a variety of configurations of the equipment.

(C) Procedures for preventing and responding to power line contact.

(D) Technical knowledge of the subject matter criteria listed in appendix C of this subpart applicable to the specific type of equipment the individual will operate. Use of the appendix C criteria meets the requirements of this provision.

(E) Technical knowledge applicable to the suitability of the supporting ground and surface to handle expected loads, site hazards, and site access.

(F) This subpart, including applicable incorporated materials.

(ii) The individual is able to read and locate relevant information in the equipment manual and other materials containing information referred to in [paragraph \(j\)\(1\)\(i\)](#) of this section.

(2) A determination through a practical test that the individual has the skills necessary for safe operation of the equipment, including the following:

(i) Ability to recognize, from visual and auditory observation, the items listed in [§ 1926.1412\(d\)](#) (shift inspection).

(ii) Operational and maneuvering skills.

(iii) Application of load chart information.

(iv) Application of safe shut-down and securing procedures.

(k) *Effective dates.*

(1) Apart from the evaluation and documentation requirements in paragraphs (a) and (f), this section is effective on December 10, 2018.

(2) The evaluation and documentation requirements in paragraphs (a) and (f) are effective on February 7, 2019.

Editorial Notes:

1. At [44 FR 8577](#), Feb. 9, 1979, and corrected at [44 FR 20940](#), Apr. 6, 1979, OSHA reprinted without change the entire text of [29 CFR part 1926](#) together with certain General Industry Occupational Safety and Health Standards contained in [29 CFR part 1910](#), which have been identified as also applicable to construction work. This republication developed a single set of OSHA regulations for both labor and management forces within the construction industry.

2. Nomenclature changes to part 1926 appear at [84 FR 21597](#), May 14, 2019.

§ 1926.1428 Signal person qualifications.

- (a) The employer of the signal person must ensure that each signal person meets the Qualification Requirements ([paragraph \(c\)](#) of this section) prior to giving any signals. This requirement must be met by using either Option (1) or Option (2) of this section.
 - (1) *Option (1)—Third party qualified evaluator.* The signal person has documentation from a third party qualified evaluator (see Qualified Evaluator (third party), [§ 1926.1401](#) for definition) showing that the signal person meets the Qualification Requirements (see [paragraph \(c\)](#) of this section).
 - (2) *Option (2)—Employer's qualified evaluator.* The employer's qualified (see Qualified Evaluator (not a third party), [§ 1926.1401](#) for definition) evaluator assesses the individual and determines that the individual meets the Qualification Requirements (see [paragraph \(c\)](#) of this section) and provides documentation of that determination. An assessment by an employer's qualified evaluator under this option is not portable—other employers are not permitted to use it to meet the requirements of this section.
- (3) The employer must make the documentation for whichever option is used available at the site while the signal person is employed by the employer. The documentation must specify each type of signaling (*e.g.* hand signals, radio signals, *etc.*) for which the signal person meets the requirements of [paragraph \(c\)](#) of this section.
- (b) If subsequent actions by the signal person indicate that the individual does not meet the Qualification Requirements (see [paragraph \(c\)](#) of this section), the employer must not allow the individual to continue working as a signal person until re-training is provided and a re-assessment is made in accordance with [paragraph \(a\)](#) of this section that confirms that the individual meets the Qualification Requirements.
- (c) *Qualification Requirements.* Each signal person must:

- (1) Know and understand the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.
- (2) Be competent in the application of the type of signals used.
- (3) Have a basic understanding of equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads.
- (4) Know and understand the relevant requirements of [§§ 1926.1419](#) through [1926.1422](#) and [1926.1428](#).
- (5) Demonstrate that he/she meets the requirements in [paragraphs \(c\) \(1\)](#) through [\(4\)](#) of this section through an oral or written test, and through a practical test.