



DEPARTMENT OF ADMINISTRATIVE SERVICES

STATE OF CONNECTICUT

165 Capitol Avenue
Hartford, CT 06106-1658

Senate Bill 291
An Act Concerning Crane Operations

Public Safety & Security Committee
March 4, 2014

The Department of Administrative Services (DAS), on behalf of the Crane Examining Board as established by C.G.S. 29-222, thanks the Public Safety & Security Committee for raising Senate Bill 292. Attached for the Committee's consideration is the agency's proposed substitute language, which accurately reflects the agency and the Administration's request to delay by three years the implementation of the provisions of Public Act 12-99, related to the OSHA Final Rule.

During the 2012 legislative session, the Public Safety & Security Committee and the affected industries were instrumental in the Legislature's passage of Public Act 12-99, An Act Concerning Crane Operations. That Act was Connecticut's implementation of the revised OSHA standards governing cranes and derrick operations (29 CFR Part 1926, Subpart CC). The revised OSHA standards were the product of twelve years of work by OSHA and included extensive input from industry experts, stakeholders and members of the public. In order to be consistent with OSHA's implementation of its Final Rule, certain provisions of the Public Act were to go into effect in **October 2014**, while other provisions went into effect on **October of 2012**.

In 2013, OSHA made the decision to seek a delay of adoption of its Final Rule. Specifically, OSHA proposes to delay adoption of these standards until **November 2017**: https://www.osha.gov/cranes-derricks/extcertdate_FAQ.html.

Since P.A. 12-99 incorporated the revised OSHA standards, many of the provisions of that Act were made effective October 2014 in keeping with the OSHA timetable for implementation. However, since OSHA is seeking to delay implementation of its standards, and may make some modifications to the Final Rule, Connecticut should follow suit and delay implementation of its conforming statutes and processes.

As a result, this technical proposal seeks to delay, rather than repeal, the implementation of certain provisions of P.A. 12-99 to remain consistent with the implementation date of OSHA's Final Rule. By so doing, the industry would have a clear understanding of the commitment this State has to implementing the Final Rule as part of the Connecticut licensing of crane operators, which would encourage crane

operators to continue their efforts to meet the new requirement of re-testing every four years.

Thank you for the opportunity to provide comments today. Please don't hesitate to contact Terrence Tulloch-Reid, Terrence.reid@ct.gov if the Committee needs additional information or has any questions or concerns.

DAS PROPOSED SUBSTITUTUTE LANGUAGE TO SB 291

An Act Concerning Crane Operations

Section 1. Section 29-223 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective upon passage*):

(a) The board shall keep a record of its proceedings and a roster of persons licensed or registered by it. The commissioner shall, with the advice and assistance of the board, adopt regulations, in accordance with chapter 54, for crane operators and hoisting equipment operators, specifying qualifications for applicants for licensure, requirements for examinations, procedures for issuance and renewal of licenses and certificates of registration and examination and application fees sufficient to meet the costs of administration of this chapter. The board shall administer and establish passing grades for licensure examinations. The board shall hold examinations at times and locations determined by the board and shall give written notice to applicants for examination of the time and place of examinations. Examinations may be written or practical or both.

(b) Prior to October 1, [2014] 2017, the board may develop and administer written and practical examinations for, and issue licenses to, operators of cranes as defined in section 29-221, as amended by section 2 of public act 12-99, including cranes which have a manufacturer's rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds. The provisions of this subsection shall not be construed to eliminate the licensure requirements in effect prior to October 1, [2014] 2017, for operators of cranes or hoisting equipment, as those terms are defined in section 29-221, as amended by this act.

(c) The board shall adopt regulations, in accordance with the provisions of chapter 54, establishing a safety code for the operation and maintenance of cranes and hoisting equipment.

Sec. 2. Section 29-221 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

As used in this chapter: (1) "Board" means the Examining Board for Crane Operators established under section 29-222; (2) "commissioner" means the Commissioner of [Construction] Administrative Services; (3) "crane" means [(A) a tower crane used in construction, demolition or excavation work, (B) a hydraulic crane, (C) a power-operated derrick, or (D) a mobile crane which is a mobile, carrier-mounted, power-operated hoisting machine utilizing a power-operated boom which moves laterally by

rotation of the machine on the carrier and which has a manufacturers' maximum rated capacity exceeding five tons] power-operated equipment that can hoist, lower and horizontally move a suspended load and which has a manufacturer's maximum rated hoisting or lifting capacity exceeding two thousand pounds, including, but not limited to: (A) Articulating cranes such as knuckle-boom cranes, (B) crawler cranes, (C) floating cranes, (D) cranes on barges, (E) locomotive cranes, (F) mobile cranes such as wheel-mounted, rough terrain, all-terrain, commercial truck-mounted and boom truck cranes, (G) multi-purpose machines when configured to hoist and lower, by means of a winch or hook, and horizontally move a suspended load, (H) industrial cranes such as carry-deck cranes, (I) dedicated pile drivers when used in construction, demolition or excavation work, (I) service or mechanic trucks with a hoisting device, (K) cranes on monorails, (L) tower cranes such as fixed jib hammerhead boom, luffing boom and self-erecting, (M) pedestal cranes, (N) portal cranes, (O) overhead and gantry cranes, (P) straddle cranes, (Q) side boom cranes, (R) derricks, and (S) variations of such equipment; (4) "hoisting equipment", other than cranes, means motorized equipment (A) used in construction, demolition or excavation work, (B) at a construction site for a project, other than a project involving residential structures of less than four stories, the estimated cost of which is more than one million two hundred fifty thousand dollars, and (C) which has a manufacturer's rated hoisting or lifting capacity exceeding five tons and a manufacturer's rated maximum reach in excess of thirty-two feet; (5) "department" means the Department of Construction Services; and (6) "apprentice" means a person who is not licensed under this chapter, who has filed an application for a license with the board and whose employer has registered him or her with the board to learn crane operations or hoisting equipment operations under the direct supervision of a licensed operator in accordance with section 29-224c.

Sec. 3. (NEW) (*Effective October 1, 2017*) (a) Notwithstanding subdivisions (3) and (4) of section 29-221 of the general statutes, as amended by section 2 of this act, the following items are excluded from the scope of chapter 539 of the general statutes: (1) Machinery included in subdivisions (3) and (4) of section 29-221 of the general statutes, as amended by section 2 of this act, while it has been converted or adapted for a nonhoisting or nonlifting use, including power shovels, excavators and concrete pumps, (2) power shovels, excavators, wheel loaders, backhoes, loader backhoes and track loaders, including when this machinery is used with chains, slings or other rigging to lift suspended loads, (3) automotive wreckers and tow trucks including rotators registered as wreckers and operated by a person, firm or corporation licensed as a motor vehicle dealer or repairer in accordance with the provisions of subpart (D) of part III of chapter 246 of the general statutes when used in such licensed business, whose functions may include consensual or nonconsensual vehicle recovery and load transfer and consensual or nonconsensual towing and transportation of wrecked or disabled vehicles from the point at which the accident occurred or the vehicle became disabled, (4) digger derricks when used for augering holes for poles carrying electric and telecommunication lines, placing and removing the poles and handling associated materials to be installed on or

removed from the poles, (5) machinery originally designed as vehicle-mounted aerial devices for lifting personnel and self-propelled elevating work platforms, (6) telescopic or hydraulic gantry systems, (7) stacker cranes, (8) powered industrial forklifts, except when configured to hoist and lower, by means of a winch or hook, and horizontally move a suspended load, (9) mechanic trucks with a hoisting device when used in activities related to equipment maintenance and repair, (10) machinery that hoists by using a come-a-long or chain fall, (11) gin poles when used for the erection of communication towers, (12) anchor handling or dredge-related operations with a vessel or barge using an affixed A-frame, (13) roustabouts, (14) helicopter cranes, (15) propane service vehicles that are equipped with a crane to load or offload Department of Transportation (DOT) approved propane tanks or American Society of Mechanical Engineers (ASME) approved propane tanks having a capacity of two thousand gallons or less, (16) overhead and gantry cranes when used for non-construction-related work, and (17) dedicated drill rigs.

(b) Articulating or knuckle-boom truck cranes that deliver material to a construction site are excluded from the scope of chapter 539 of the general statutes when used to (1) transfer materials from the truck crane to the ground without arranging the materials in a particular sequence for hoisting, or (2) transfer building supply sheet goods or building supply packaged materials including, but not limited to, sheets of sheetrock, sheets of plywood, bags of cement, sheets or packages of roofing shingles and rolls of roofing felt from the truck crane onto a structure, using a fork or cradle at the end of the boom, but only when the truck crane is equipped with a properly functioning automatic overload prevention device.

(c) The exclusion set forth in subsection (b) of this section does not apply when (1) the articulating or knuckle-boom crane is used to hold, support or stabilize the material to facilitate a construction activity, such as holding material in place while it is attached to the structure, (2) the material being handled by the articulating or knuckle-boom crane is a prefabricated component including, but not limited to, precast concrete members or panels, roof trusses, prefabricated building sections such as floor panels, wall panels, roof panels, roof structures or similar items, (3) the material being handled by the crane is a structural steel member such as joists, beams, columns and steel decking or a component of a systems-engineered metal building, or (4) the activity is not otherwise excluded under subsection (b) of this section.

Sec. 4. Section 29-223 of the general statutes, as amended by section 1 of this act, is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) The board shall keep a record of its proceedings and a roster of persons licensed or registered by it. The commissioner shall, with the advice and assistance of the board, adopt regulations, in accordance with chapter 54, for crane operators and hoisting equipment operators; specifying qualifications for applicants for licensure, requirements for examinations, procedures for issuance and renewal of licenses and

certificates of registration and examination and application fees sufficient to meet the costs of administration of this chapter. The board shall administer and establish passing grades for licensure examinations. The board shall hold examinations at times and locations determined by the board and shall give written notice to applicants for examination of the time and place of examinations. [Examinations may be written or practical or both.] An applicant for a license shall be required to take both a written and practical examination.

(b) The written examination shall determine whether the applicant (1) knows the information necessary for the safe operation of the specific type of crane or hoisting equipment that the applicant will operate including (A) the controls and operational or performance characteristics, (B) use of, and the ability to calculate, manually or with a calculator, load or capacity information on a variety of configurations of the equipment, (C) procedures for preventing and responding to power line contact, (D) technical knowledge applicable to the specific type of equipment the individual will operate concerning (i) site information, (ii) operations, and (iii) load information, and (E) technical knowledge applicable to site suitability, site hazards and site access, and (2) is able to read and locate relevant information in the equipment manual and other materials containing information referred to in subdivision (1) of this subsection.

(c) The practical examination shall determine whether the applicant has the skills necessary for safe operation of the crane or hoisting equipment including (1) the ability to recognize, from visual and auditory observation, all items required in a shift inspection, (2) operational and maneuvering skills, (3) application of load chart information, and (4) application of safe shutdown and securing procedures.

(d) Any license, or renewal thereof, issued pursuant to this section shall be valid for a period of two years from the date of issuance. Every four years the licensee shall take and pass, prior to the issuance of a license renewal, an examination developed by the board that is designed to ensure that the licensee continues to meet the technical knowledge and skills requirements set forth in subsections (b) and (c) of this section.

[(b)] (e) Prior to October 1, 2017, the board may develop and administer written and practical examinations for, and issue licenses to, operators of cranes as defined in section 29-221, as amended by section 2 of this act, including cranes which have a manufacturer's rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds. The provisions of this subsection shall not be construed to eliminate the licensure requirements in effect prior to October 1, 2017, for operators of cranes or hoisting equipment, as those terms are defined in section 29-221.

[(c)] (f) The board shall adopt regulations, in accordance with the provisions of chapter 54, establishing a safety code for the operation and maintenance of cranes and hoisting equipment.

Sec. 5. Section 29-223a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) No person shall engage in, practice or offer to perform the work of a hoisting equipment operator, except as provided in subsection (b) of this section, who is not the holder of a valid crane operator's license or hoisting equipment operator's license issued by the board. Each licensed hoisting equipment operator shall carry his or her license on his or her person when operating hoisting equipment. No person may engage in, practice or perform the work of a hoisting equipment operator apprentice unless he or she has obtained a certificate of registration from the board. An apprentice's certificate may be issued for the performance of work of a hoisting equipment operator for the purpose of training, provided such work may be performed only under the direct supervision of a licensed hoisting equipment operator and is in compliance with the provisions of section 29-224c.

(b) The provisions of this section shall not apply to: (1) [Any person engaged in the occupation of hoisting equipment operator in the state on October 1, 2003, provided such person shall be required to obtain a license not later than one year of October 1, 2004, (2) engineers] Engineers under the jurisdiction of the United States, [(3)] (2) engineers or operators employed by public utilities or industrial manufacturing plants, [(4)] (3) any person operating either a bucket truck or a digger derrick designed and used for an electrical generation, electrical transmission, electrical distribution, electrical catenary or electrical signalization project, if such person: (A) Holds a valid limited electrical line contractor or journeyman's license issued pursuant to chapter 393 or any regulation adopted pursuant to said chapter, or (B) has engaged in the installation of electrical line work for more than one thousand hours, or (C) has enrolled in or has graduated from a federally recognized electrical apprenticeship program, or [or (5)] (4) persons engaged in [boating, fishing,] the recreational boating or fishing industry, except when engaged in construction-related work, or in agriculture or arboriculture, or (5) persons engaged in activities, or using equipment, excluded under section 3 of this act.

Sec. 6. Section 29-224 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) No person shall engage in, practice or offer to perform the work of a crane operator, except as provided in subsection (b) of this section, who is not the holder of a valid license issued by the board. Each licensed crane operator shall carry his or her license on his or her person when operating a crane. No person may engage in, practice or perform the work of a crane operator apprentice unless he or she has obtained a certificate of registration from the board. An apprentice's certificate may be issued for the performance of work of a crane operator for the purpose of training, provided such

work may be performed only under the direct supervision of a licensed crane operator and is in compliance with the provisions of section 29-224c. No crane owner may operate or permit the operation of any of his or her cranes in this state unless he or she has obtained a certificate of registration from the board. Nothing in this subsection shall be construed to require a hoisting equipment owner to obtain a certificate of registration from the board.

(b) The provisions of subsection (a) of this section shall not apply to: (1) [Any person engaged in the occupation of crane operator in the state on October 1, 1981, provided such person shall be required to obtain a license within one year of October 1, 1981, (2) engineers] Engineers under the jurisdiction of the United States, [(3)] (2) engineers or operators employed by public utilities or industrial manufacturing plants, [(4)] (3) any person operating either a bucket truck or a digger derrick designed and used for an electrical generation, electrical transmission, electrical distribution, electrical catenary or electrical signalization project, if such person: (A) Holds a valid limited electrical line contractor or journeyman's license issued pursuant to chapter 393 or any regulation adopted pursuant to said chapter, or (B) has engaged in the installation of electrical line work for more than one thousand hours, or (C) has enrolled in or has graduated from a federally recognized electrical apprenticeship program, or [or (5)] (4) persons engaged in [boating, fishing,] the recreational boating or fishing industry, except when engaged in construction-related work, or in agriculture or arboriculture, (5) persons engaged in activities, or using equipment, excluded under section 3 of this act, or (6) persons operating equipment, except a tower crane, that can hoist, lower and horizontally move a suspended load and has a manufacturer's maximum rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds who, pursuant to federal Occupational Safety and Health Administration Standard 1926.1427, are (A) certified by an accredited crane operator testing organization, (B) qualified by an audited employer program, (C) qualified by the United States Military, or (D) licensed pursuant to this chapter.

Sec. 7. Sections 2, 3, 6, 8 and 10 of public act 12-99 are repealed (*Effective upon passage*)

DAS Requested S Language – 3 year Delay

An Act Delaying Implementation of Changes to Crane Operations Statutes to Ensure Conformity with OSHA's Final Rule

Section 1. Section 29-223 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective upon passage*):

(a) The board shall keep a record of its proceedings and a roster of persons licensed or registered by it. The commissioner shall, with the advice and assistance of the board, adopt regulations, in accordance with chapter 54, for crane operators and hoisting equipment operators, specifying qualifications for applicants for licensure, requirements for examinations, procedures for issuance and renewal of licenses and certificates of registration and examination and application fees sufficient to meet the costs of administration of this chapter. The board shall administer and establish passing grades for licensure examinations. The board shall hold examinations at times and locations determined by the board and shall give written notice to applicants for examination of the time and place of examinations. Examinations may be written or practical or both.

(b) Prior to October 1, [2014] 2017, the board may develop and administer written and practical examinations for, and issue licenses to, operators of cranes as defined in section 29-221, as amended by section 2 of public act 12-99, including cranes which have a manufacturer's rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds. The provisions of this subsection shall not be construed to eliminate the licensure requirements in effect prior to October 1, [2014] 2017, for operators of cranes or hoisting equipment, as those terms are defined in section 29-221, as amended by this act.

(c) The board shall adopt regulations, in accordance with the provisions of chapter 54, establishing a safety code for the operation and maintenance of cranes and hoisting equipment.

Sec. 2. Section 29-221 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

As used in this chapter: (1) "Board" means the Examining Board for Crane Operators established under section 29-222; (2) "commissioner" means the Commissioner of [Construction] Administrative Services; (3) "crane" means [(A) a tower crane used in construction, demolition or excavation work, (B) a hydraulic crane, (C) a power-operated derrick, or (D) a mobile crane which is a

mobile, carrier-mounted, power-operated hoisting machine utilizing a power-operated boom which moves laterally by rotation of the machine on the carrier and which has a manufacturers' maximum rated capacity exceeding five tons] power-operated equipment that can hoist, lower and horizontally move a suspended load and which has a manufacturer's maximum rated hoisting or lifting capacity exceeding two thousand pounds, including, but not limited to: (A) Articulating cranes such as knuckle-boom cranes, (B) crawler cranes, (C) floating cranes, (D) cranes on barges, (E) locomotive cranes, (F) mobile cranes such as wheel-mounted, rough terrain, all-terrain, commercial truck-mounted and boom truck cranes, (G) multi-purpose machines when configured to hoist and lower, by means of a winch or hook, and horizontally move a suspended load, (H) industrial cranes such as carry-deck cranes, (I) dedicated pile drivers when used in construction, demolition or excavation work, (J) service or mechanic trucks with a hoisting device, (K) cranes on monorails, (L) tower cranes such as fixed jib hammerhead boom, luffing boom and self-erecting, (M) pedestal cranes, (N) portal cranes, (O) overhead and gantry cranes, (P) straddle cranes, (Q) side boom cranes, (R) derricks, and (S) variations of such equipment; (4) "hoisting equipment", other than cranes, means motorized equipment (A) used in construction, demolition or excavation work, (B) at a construction site for a project, other than a project involving residential structures of less than four stories, the estimated cost of which is more than one million two hundred fifty thousand dollars, and (C) which has a manufacturer's rated hoisting or lifting capacity exceeding five tons and a manufacturer's rated maximum reach in excess of thirty-two feet; (5) "department" means the Department of Construction Services; and (6) "apprentice" means a person who is not licensed under this chapter, who has filed an application for a license with the board and whose employer has registered him or her with the board to learn crane operations or hoisting equipment operations under the direct supervision of a licensed operator in accordance with section 29-224c.

Sec. 3. (NEW) (*Effective October 1, 2017*) (a) Notwithstanding subdivisions (3) and (4) of section 29-221 of the general statutes, as amended by section 2 of this act, the following items are excluded from the scope of chapter 539 of the general statutes: (1) Machinery included in subdivisions (3) and (4) of section 29-221 of the general statutes, as amended by section 2 of this act, while it has been converted or adapted for a nonhoisting or nonlifting use, including power shovels, excavators and concrete pumps, (2) power shovels, excavators, wheel loaders, backhoes, loader backhoes and track loaders, including when this machinery is used with chains, slings or other rigging to lift suspended loads, (3) automotive wreckers and tow trucks including rotators registered as wreckers and operated by a person, firm or corporation licensed as a motor vehicle dealer or repairer in accordance with the provisions of subpart (D) of part III of chapter 246 of the general statutes when used in such licensed business, whose functions

may include consensual or nonconsensual vehicle recovery and load transfer and consensual or nonconsensual towing and transportation of wrecked or disabled vehicles from the point at which the accident occurred or the vehicle became disabled, (4) digger derricks when used for augering holes for poles carrying electric and telecommunication lines, placing and removing the poles and handling associated materials to be installed on or removed from the poles, (5) machinery originally designed as vehicle-mounted aerial devices for lifting personnel and self-propelled elevating work platforms, (6) telescopic or hydraulic gantry systems, (7) stacker cranes, (8) powered industrial forklifts, except when configured to hoist and lower, by means of a winch or hook, and horizontally move a suspended load, (9) mechanic trucks with a hoisting device when used in activities related to equipment maintenance and repair, (10) machinery that hoists by using a come-a-long or chain fall, (11) gin poles when used for the erection of communication towers, (12) anchor handling or dredge-related operations with a vessel or barge using an affixed A-frame, (13) roustabouts, (14) helicopter cranes, (15) propane service vehicles that are equipped with a crane to load or offload Department of Transportation (DOT) approved propane tanks or American Society of Mechanical Engineers (ASME) approved propane tanks having a capacity of two thousand gallons or less, (16) overhead and gantry cranes when used for non-construction-related work, and (17) dedicated drill rigs.

(b) Articulating or knuckle-boom truck cranes that deliver material to a construction site are excluded from the scope of chapter 539 of the general statutes when used to (1) transfer materials from the truck crane to the ground without arranging the materials in a particular sequence for hoisting, or (2) transfer building supply sheet goods or building supply packaged materials including, but not limited to, sheets of sheetrock, sheets of plywood, bags of cement, sheets or packages of roofing shingles and rolls of roofing felt from the truck crane onto a structure, using a fork or cradle at the end of the boom, but only when the truck crane is equipped with a properly functioning automatic overload prevention device.

(c) The exclusion set forth in subsection (b) of this section does not apply when (1) the articulating or knuckle-boom crane is used to hold, support or stabilize the material to facilitate a construction activity, such as holding material in place while it is attached to the structure, (2) the material being handled by the articulating or knuckle-boom crane is a prefabricated component including, but not limited to, precast concrete members or panels, roof trusses, prefabricated building sections such as floor panels, wall panels, roof panels, roof structures or similar items, (3) the material being handled by the crane is a structural steel member such as joists, beams, columns and steel decking or a component of a

systems-engineered metal building, or (4) the activity is not otherwise excluded under subsection (b) of this section.

Sec. 4. Section 29-223 of the general statutes, as amended by section 1 of this act, is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) The board shall keep a record of its proceedings and a roster of persons licensed or registered by it. The commissioner shall, with the advice and assistance of the board, adopt regulations, in accordance with chapter 54, for crane operators and hoisting equipment operators, specifying qualifications for applicants for licensure, requirements for examinations, procedures for issuance and renewal of licenses and certificates of registration and examination and application fees sufficient to meet the costs of administration of this chapter. The board shall administer and establish passing grades for licensure examinations. The board shall hold examinations at times and locations determined by the board and shall give written notice to applicants for examination of the time and place of examinations. [Examinations may be written or practical or both.] An applicant for a license shall be required to take both a written and practical examination.

(b) The written examination shall determine whether the applicant (1) knows the information necessary for the safe operation of the specific type of crane or hoisting equipment that the applicant will operate including (A) the controls and operational or performance characteristics, (B) use of, and the ability to calculate, manually or with a calculator, load or capacity information on a variety of configurations of the equipment, (C) procedures for preventing and responding to power line contact, (D) technical knowledge applicable to the specific type of equipment the individual will operate concerning (i) site information, (ii) operations, and (iii) load information, and (E) technical knowledge applicable to site suitability, site hazards and site access, and (2) is able to read and locate relevant information in the equipment manual and other materials containing information referred to in subdivision (1) of this subsection.

(c) The practical examination shall determine whether the applicant has the skills necessary for safe operation of the crane or hoisting equipment including (1) the ability to recognize, from visual and auditory observation, all items required in a shift inspection, (2) operational and maneuvering skills, (3) application of load chart information, and (4) application of safe shutdown and securing procedures.

(d) Any license, or renewal thereof, issued pursuant to this section shall be valid for a period of two years from the date of issuance. Every four years the licensee shall take and pass, prior to the issuance of a license renewal, an examination

developed by the board that is designed to ensure that the licensee continues to meet the technical knowledge and skills requirements set forth in subsections (b) and (c) of this section.

[(b)] (e) Prior to October 1, 2017, the board may develop and administer written and practical examinations for, and issue licenses to, operators of cranes as defined in section 29-221, as amended by section 2 of this act, including cranes which have a manufacturer's rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds. The provisions of this subsection shall not be construed to eliminate the licensure requirements in effect prior to October 1, 2017, for operators of cranes or hoisting equipment, as those terms are defined in section 29-221.

[(c)] (f) The board shall adopt regulations, in accordance with the provisions of chapter 54, establishing a safety code for the operation and maintenance of cranes and hoisting equipment.

Sec. 5. Section 29-223a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) No person shall engage in, practice or offer to perform the work of a hoisting equipment operator, except as provided in subsection (b) of this section, who is not the holder of a valid crane operator's license or hoisting equipment operator's license issued by the board. Each licensed hoisting equipment operator shall carry his or her license on his or her person when operating hoisting equipment. No person may engage in, practice or perform the work of a hoisting equipment operator apprentice unless he or she has obtained a certificate of registration from the board. An apprentice's certificate may be issued for the performance of work of a hoisting equipment operator for the purpose of training, provided such work may be performed only under the direct supervision of a licensed hoisting equipment operator and is in compliance with the provisions of section 29-224c.

(b) The provisions of this section shall not apply to: (1) [Any person engaged in the occupation of hoisting equipment operator in the state on October 1, 2003, provided such person shall be required to obtain a license not later than one year of October 1, 2004, (2) engineers] Engineers under the jurisdiction of the United States, [(3)] (2) engineers or operators employed by public utilities or industrial manufacturing plants, [(4)] (3) any person operating either a bucket truck or a digger derrick designed and used for an electrical generation, electrical transmission, electrical distribution, electrical catenary or electrical signalization project, if such person: (A) Holds a valid limited electrical line contractor or journeyman's license issued pursuant to chapter 393 or any regulation adopted

pursuant to said chapter, or (B) has engaged in the installation of electrical line work for more than one thousand hours, or (C) has enrolled in or has graduated from a federally recognized electrical apprenticeship program, or [or (5)] (4) persons engaged in [boating, fishing,] the recreational boating or fishing industry, except when engaged in construction-related work, or in agriculture or arboriculture, or (5) persons engaged in activities, or using equipment, excluded under section 3 of this act.

Sec. 6. Section 29-224 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2017*):

(a) No person shall engage in, practice or offer to perform the work of a crane operator, except as provided in subsection (b) of this section, who is not the holder of a valid license issued by the board. Each licensed crane operator shall carry his or her license on his or her person when operating a crane. No person may engage in, practice or perform the work of a crane operator apprentice unless he or she has obtained a certificate of registration from the board. An apprentice's certificate may be issued for the performance of work of a crane operator for the purpose of training, provided such work may be performed only under the direct supervision of a licensed crane operator and is in compliance with the provisions of section 29-224c. No crane owner may operate or permit the operation of any of his or her cranes in this state unless he or she has obtained a certificate of registration from the board. Nothing in this subsection shall be construed to require a hoisting equipment owner to obtain a certificate of registration from the board.

(b) The provisions of subsection (a) of this section shall not apply to: (1) [Any person engaged in the occupation of crane operator in the state on October 1, 1981, provided such person shall be required to obtain a license within one year of October 1, 1981, (2) engineers] Engineers under the jurisdiction of the United States, [(3)] (2) engineers or operators employed by public utilities or industrial manufacturing plants, [(4)] (3) any person operating either a bucket truck or a digger derrick designed and used for an electrical generation, electrical transmission, electrical distribution, electrical catenary or electrical signalization project, if such person: (A) Holds a valid limited electrical line contractor or journeyman's license issued pursuant to chapter 393 or any regulation adopted pursuant to said chapter, or (B) has engaged in the installation of electrical line work for more than one thousand hours, or (C) has enrolled in or has graduated from a federally recognized electrical apprenticeship program, or [or (5)] (4) persons engaged in [boating, fishing,] the recreational boating or fishing industry, except when engaged in construction-related work, or in agriculture or arboriculture, (5) persons engaged in activities, or using equipment, excluded under section 3 of this act, or (6) persons operating equipment, except a tower

crane, that can hoist, lower and horizontally move a suspended load and has a manufacturer's maximum rated hoisting or lifting capacity exceeding two thousand pounds but not exceeding ten thousand pounds who, pursuant to federal Occupational Safety and Health Administration Standard 1926.1427, are (A) certified by an accredited crane operator testing organization, (B) qualified by an audited employer program, (C) qualified by the United States Military, or (D) licensed pursuant to this chapter.

Sec. 7. Sections 2, 3, 6, 8 and 10 of public act 12-99 are repealed (*Effective upon passage*)

