



AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Connecticut

P 15

TESTIMONY BEFORE THE GENERAL LAW COMMITTEE
REGARDING SB923

March 5, 2013

I am Paul Brady, Executive Director of the American Council of Engineering Companies of Connecticut (ACEC/CT). We represent the interests of about 90 consulting engineering firms in the state.

We ask the General Law Committee JF substitute language for Senate Bill 923, AN ACT CONCERNING STRUCTURAL ENGINEERS AND REQUIRING CONTINUING PROFESSIONAL EDUCATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

Last year this Committee passed a bill identical to SB923 which died in the closing days of the session. ACEC, CSCE and CSPE have worked with our members, other professional organizations and the licensing board to address the issues that came up last year.

- We have reduced the number of hours of continuing education required for Professional Engineer license renewal from 15 to 12 hours per year, matching the New York State requirement.
- We have simplified the reporting and auditing requirement so that the Department of Consumer Protection will not have to hire additional staff to audit the requirement.
- At the request of the members of the licensing board, we have included updates to the licensing statutes, particularly those relating to the qualifications for licensure. These updates will bring Connecticut in line with the national standards and will make it easier for our resident PEs to practice in neighboring states.
- We have clarified that the structural engineering endorsement to the Professional Engineer license would be required only for "threshold" buildings and not include other structures like bridges.

We realize that our suggested substitute language is extensive, but these changes should bring Connecticut's licensure of Professional Engineers and Land Surveyors up to date with other states and continue to protect the public safety and welfare.

I would be glad to answer any of your questions.

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Sec. 1. Section 20-299 of the general statutes is repealed and the following is substituted in lieu thereof:

Definitions. As used in this chapter, unless the context otherwise requires:

(1) "Professional engineer" means a person who is qualified to practice engineering by reason of [his] special knowledge of mathematics, the physical sciences and the principles of engineering, and the principles of engineering analysis and design, acquired by professional education and practical experience, [to engage in engineering practice, including rendering or offering to render to clients any professional service such as consultation, investigation, evaluation, planning, design or responsible supervision of construction, in connection with any public or privately-owned structures, buildings, machines, equipment, processes, works or projects in which the public welfare or the safeguarding of life, public health or property is concerned or involved] and who has been duly licensed as a professional engineer by the board:

(2) "Practice of Engineering" or "engineering practice" means any service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, expert technical testimony, evaluation, planning, design and design coordination of engineering works and systems, planning the use of land and water, performing engineering studies, and the review of construction for the purpose of monitoring compliance with drawings and specifications; any of which embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, and work systems, insofar as they involve safeguarding life, health, or property, and including such other professional services as may be necessary to the planning, progress, and completion of any engineering services. Design coordination includes the review and coordination of those technical submissions prepared by others, including as appropriate and without limitation, consulting engineers, architects, landscape architects, land surveyors, and other professionals working under the direction of the engineer. Engineering studies include all activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude land surveying as defined in section 20-299(2).

~~[(2)]~~ (3) "Land surveyor" means a person who is qualified by knowledge of mathematics, physical and applied sciences and the principles of land surveying, and who is licensed under this chapter to practice or offer to practice the profession of land surveying, including, but not limited to: (A) Measuring, evaluating or mapping elevations, topography, planimetric features or land areas of any portion of the earth's surface; (B) determining positions of points with respect to appropriate horizontal or vertical datums in order to establish control networks for topographic, planimetric or cadastral mapping; (C) measuring, evaluating, mapping, monumenting or otherwise marking on the ground, property boundary lines, interior lot lines of subdivisions, easements, rights-of-way or street lines; (D) measuring, evaluating, mapping or marking on the ground, the horizontal location of existing or proposed buildings, structures or other improvements with respect to property boundary lines, building, setback, zoning or restriction lines, existing or proposed interior lot lines, easements, rights-of-way or street lines; (E) measuring, evaluating, mapping or reporting the vertical location of existing or proposed

buildings, structures or other improvements with respect to vertical reference surfaces, including base flood elevations; (F) measuring, evaluating, mapping or reporting the location of existing or proposed buildings, structures or other improvements or their surrounding topography with respect to flood insurance rate mapping or federal emergency management agency mapping; (G) measuring or mapping inland wetland boundaries delineated by a soil scientist; (H) creating or mapping surveys required for condominiums or planned communities meeting the requirements of section 47-228; (I) monumenting or otherwise marking on the ground, property subject to development rights, vertical unit boundaries, horizontal unit boundaries, leasehold real property or limited common elements described in section 47-228; (J) evaluating or designing the horizontal or vertical alignment of roads in conjunction with the layout and mapping of a subdivision; (K) measuring, evaluating or mapping areas under the earth's surface and the beds of bodies of water;

[(3)] (4) "Automatic fire sprinkler system layout technician" means a person, licensed by the Department of Consumer Protection pursuant to this chapter, to [design] prepare layouts of automatic fire sprinkler [system layouts] designs;

[(4)] (5) "Automatic fire sprinkler system layout" means preparing [and designing] shop drawings to be used for the installation, alteration or modification of an automatic fire sprinkler system;

[(5)] (6) "National Institute for Certification in Engineering Technologies" means a nationally recognized organization which determines the qualifications of automatic fire sprinkler system layout technicians through a series of standardized examinations; and

[(6)] (7) "Board" means the State Board of Examiners for Professional Engineers and Land Surveyors appointed under the provisions of section 20-300.

(8) "Experience" or "practice" as applied to professional engineering means experience in the practice of engineering gained following the issuance of a degree.

(9) "Threshold building" means any building that meets or exceeds threshold requirements stated in section 29-276b. The design and review of threshold buildings in accordance with section 29-276b shall be performed by a licensed professional engineer with a structural endorsement. Non-building structures, temporary and miscellaneous building structural subsystems and components which are not primary structural support systems, including but not limited to roads, bridges, geotechnical piles and sheet piling, may be designed by a licensed professional engineer with a structural endorsement or a professional engineer.

(10) " Licensed professional engineer with a structural endorsement " means a person who is qualified to practice structural engineering by reason of special knowledge of mathematics, the physical sciences and the principles of engineering, design, analysis and supervision of the primary structural support system of threshold buildings, acquired by professional education and practical experience, and who has been duly licensed as a professional engineer by the board with a structural engineer endorsement.

Sec. 2. Section 20-300 of the general statutes is repealed and the following is substituted in lieu thereof:

There shall be in the Department of Consumer Protection a State Board of Examiners for Professional Engineers and Land Surveyors, which shall consist of twelve persons appointed by the Governor, three of whom shall hold licenses as professional engineers, two of whom shall hold combined licenses as professional engineers and land surveyors, four of whom shall be public members and three of whom shall hold licenses as land surveyors. The members holding licenses as professional engineers, the members holding the combined licenses and the public members shall administer the provisions of this chapter as to licensure and issuance, reissuance, suspension or revocation of licenses concerning the practice of professional engineering. The members holding licenses as land surveyors, the members holding the combined licenses and the public members shall administer the provisions of this chapter as to licensure and issuance, reissuance, suspension or revocation of licenses concerning the practice of land surveying. The Governor may remove any member of the board for misconduct, incompetence or neglect of duty. The members of the board shall receive no compensation for their services but shall be reimbursed for necessary expenses incurred in the performance of their duties. The board shall keep a true and complete record of all its proceedings. The Commissioner of Consumer Protection, with advice and assistance from the board, shall adopt regulations in accordance with chapter 54 (1) concerning professional ethics and conduct appropriate to establish and maintain a high standard of integrity and dignity in the practice of the profession[, and]; (2) for the conduct of the board's affairs and for the examination of applicants for a license; (3) establish a structural engineer endorsement to the professional engineer license issued pursuant to chapter 391 of the general statutes; and, (4) establish an application process for an endorsement as a licensed professional engineer with a structural endorsement.

Sec. 3. Section 20-302 of the general statutes is repealed and the following is substituted in lieu thereof:

No person shall practice or offer to practice the [profession] professions of engineering [in any of its branches, including] or land surveying, [or use any title or description tending to convey the impression that such person is a professional engineer or a land surveyor.] unless such person has been licensed, registered or is exempt under the provisions of this chapter. Notwithstanding the provisions of section 20-309, no person shall use any title or description tending to convey the impression that such person is a professional engineer, licensed professional engineer with a structural endorsement, or land surveyor unless such person is currently licensed or registered under the provisions of this chapter.

(b) The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure as a professional engineer, engineer-in-training, land surveyor or surveyor-in-training, respectively:

(1) Professional engineer: Graduation from an approved [course] curriculum of four years or more in engineering in a school or college approved by the board as of satisfactory standing, a specific record of an additional four years [of active practice] or more of progressive experience in engineering work, which shall be of a character satisfactory to the board, and the successful

passing of a written [or written and oral] examination prescribed by the board, with the consent of the commissioner, the first part of which shall test the applicant's knowledge of fundamental engineering subjects, including mathematics and the physical sciences, and the second part of which shall test the applicant's ability to apply the principles of engineering to the actual practice of engineering. [In lieu of graduation as specified in this subdivision, the board may accept, as an alternative, six years or more of experience in engineering work which shall be of a character satisfactory to the board and which shall indicate knowledge, skill and education approximating that attained through graduation from an approved course in engineering. The board may waive the written examination requirement in the case of an applicant who submits a specific record of twenty years or more of lawful practice in engineering work which shall be of a character satisfactory to the board and which shall indicate that the applicant is competent to be in responsible charge of such work, and may waive the first part of the written examination for an applicant who has completed an approved course in engineering and has at least eight years of engineering experience.]

(2) Engineer-in-training: The board may license as an engineer-in-training a person who is a graduate of an approved [course] curriculum of four years or more in engineering [or who has had the alternative experience prescribed in subdivision (1) of this section] and who has successfully passed the first part of the examination specified in [said] subdivision (1) of this section. Licensure as an engineer-in-training shall remain valid [for a period of ten years from date of issuance of an applicant's first license] indefinitely toward meeting in part the requirements of subdivision (1) of this section.

(3) Professional engineer with a structural endorsement: Graduation from an approved curriculum in engineering in a school or college approved by the board as of satisfactory standing, a specific record of an additional four years of progressive experience in structural engineering work, which shall be of a character satisfactory to the board, and the successful passing of the 16 hour NCEES Structural Engineering examination promulgated by the National Council of Examiners for Engineering and Surveying. Prior to January 31, 2015, any licensed professional engineer who has experience designing building structures may apply for a licensed professional engineer with a structural endorsement licensure in one of the following ways: (1) Applicant must complete an application form prescribed and furnished by the state licensing board which will describe the engineer's professional structural engineering experience, provide three professional references that attest to the engineer's structural engineering capability and submit a signed affidavit which states that the engineer is currently engaged in the practice of structural engineering. (2) Applicant successfully completed the 16 hour NCEES PE Structural Engineering exam. (3) Has a current certification from the Structural Engineering Certification Board.

[(3)] (4) Land surveyor: Graduation from [a school or college approved by the board as of satisfactory standing, including the completion of] an approved [course in surveying] curriculum of four years or more in land surveying at a school or college approved by the board as of satisfactory standing, a specific record of an additional three years or more of [active practice] progressive experience in land surveying work, which shall be of a character satisfactory to the board, and the successful passing of a written [or written and oral] examination, prescribed by the board with the consent of the commissioner, [for the purpose of testing] the first part of

which shall test the applicant's knowledge of [the fundamentals of] fundamental land surveying subjects (Part I), [and the procedures pertaining to land surveying] the second part of which shall test the applicant's knowledge of the principles and practices of land surveying (Part II) and the third part of which shall test the applicant's knowledge of land surveying principles and practices that are specific to the state of Connecticut (Part III). In lieu of graduation from an approved curriculum of four years or more in land surveying, as specified in this subdivision, the board may accept, as an alternative[,] 1) graduation from an approved curriculum of two years or more in land surveying, combined with six years or more of progressive experience in land surveying, which shall be of a character satisfactory to the board, or 2) [six] nine years or more of progressive experience in surveying work which shall be of a character satisfactory to the board and which shall indicate knowledge, skill and education approximating that attained through completion of an approved [course] curriculum in surveying. [The board may waive the written examination requirement in the case of an applicant who submits a specific record of sixteen years or more of lawful practice in surveying work, at least ten of which shall have been in land surveying, of a character satisfactory to the board and which shall indicate that the applicant is competent to be in responsible charge of such work.]

[(4)] (5) Surveyor-in-training: The board may license as a surveyor-in-training a person who is 1) a graduate of [a school or college approved by the board or who is scheduled to graduate from such an institution within three months after applying for licensure, or who has had six years or more of experience in surveying work of a character satisfactory to the board and which indicates knowledge, skill and education approximating that attained through completion of an approved course in surveying, provided any such person has successfully passed part 1 of the national examination relating to fundamentals of land surveying] an approved curriculum of four years or more in land surveying, 2) is a graduate of an approved curriculum of two years or more in land surveying and has three years or more of progressive experience in surveying work of a character satisfactory to the board, or 3) has six years or more of progressive experience in surveying work of a character satisfactory to the board and who has successfully passed the first part of the examination specified in subdivision (4) of this section. Licensure as a surveyor-in-training shall remain valid [for a period of ten years from the date of issuance of an applicant's first license] indefinitely toward meeting in part the requirements of subdivision [(3)](4) of this section. The board may also license as a surveyor-in-training a person who has gained the alternative education or experience prescribed in subdivision (4) of this section and who has successfully passed Part I of the written examination.

Sec. 4. Section 20-304 of the general statutes is repealed and the following is substituted in lieu thereof:

(a) The board shall authorize the Department of Consumer Protection to issue a license, upon payment of a fee as provided in section 20-305, to any applicant who, in the opinion of the

board, has satisfactorily met all the requirements of this chapter. The issuance of a license by the department shall be evidence that the person named in such license is entitled to all the rights and privileges of a licensed professional engineer, a licensed professional engineer with a structural endorsement, or of a licensed land surveyor, while such license remains valid. Nothing in this chapter shall be construed as permitting a [person] licensed [only as a] land surveyor to practice [any other branch of] the profession of engineering or structural engineering nor as permitting a licensed professional engineer or licensed professional engineer with a structural endorsement to practice the profession of land surveying unless such person is a holder of a valid combined license as professional engineer and land surveyor provided that a professional engineer or corporation licensed to practice professional engineering may subcontract the professional services of a licensed land surveyor in support of a project in which the engineer is engaged or proposes to be engaged, and a land surveyor or corporation licensed to practice land surveying may subcontract the professional services of a licensed professional engineer or licensed professional engineer with a structural endorsement in support of a project in which the land surveyor is engaged or proposes to be engaged. A licensed professional engineer with a structural endorsement shall also be qualified to perform those tasks performed by a licensed professional engineer.

(b) The Commissioner of Consumer Protection, with the advice and assistance of the board, may adopt regulations, in accordance with chapter 54, pertaining to the design and use of seals by licensees under this chapter. The application of a seal shall indicate that the person applying the seal is authorized to practice under this chapter and the work sealed was performed under the direct supervision of the licensee.

(c) Each agency, department, board or commission of the state or political subdivision of the state shall accept, subject to review for conformance with all approved policies and standards, any final drawings, specifications, plots, reports, papers or documents relative to the practice of a licensed professional engineer, licensed professional engineer with a structural endorsement or land surveyor when sealed and submitted on behalf of an employer by a licensed professional engineer or licensed land surveyor.

Sec. 5. Section 20-306 of the general statutes is repealed and the following is substituted in lieu thereof:

(a)(1) The Department of Consumer Protection shall notify by mail each person licensed under this chapter of the date of the expiration of such license and the amount of the fee required for its renewal for one year. Such license renewals shall be accompanied by the payment of the professional services fee for class G, as defined in section 33-182I, in the case of a professional engineer license, a professional engineer and land surveyor combined license, or a land surveyor license. The license shall be considered lapsed if not renewed within thirty days following the normal expiration date.

(2) Annual renewal of an engineer-in-training license or a surveyor-in-training license shall not be required. Any such license shall remain valid [for a period of ten years from the date of its original issuance and, during this time, it shall meet in part the requirements for licensure as a

professional engineer or land surveyor] indefinitely. [It shall not be the duty of the department to notify the holder of an engineer-in-training license or a surveyor-in-training license of the date of expiration of such license other than to publish it annually in the roster.]

(3) Renewal of any license under this chapter or payment of renewal fees shall not be required of [any licensee] licensees serving in the armed forces of the United States until the next renewal period immediately following the termination of such service or the renewal period following the fifth year after such licensee's entry into such service, whichever occurs first. The status of such licensees shall be indicated in the annual roster of professional engineers and land surveyors.

(b) Notwithstanding the provisions of subsection (a) of this section concerning fees, any person who is licensed under the provisions of this chapter, who is age sixty-five or over and who is no longer actively engaged in the practice of engineering or any of its branches, or land surveying, may renew such license annually upon payment of the professional services fee for class A, as defined in section 33-182I.

(c) The Commissioner of Consumer Protection shall adopt regulations, in accordance with the provisions of chapter 54 of the general statutes, to require professional engineers and licensed professional engineer with a structural endorsement to declare on their annual renewal a statement that they have completed not less than twelve hours per renewal period of continuing professional education. If a licensee exceeds the annual requirement in any renewal period, the excess, up to a maximum of twelve hours may be carried forward into the next renewal period. The Commissioner of Consumer Protection and board may audit no more than one percent of such renewals each year to verify completion of such education.

Sec. 6. Section 20-306a of the general statutes is repealed and the following is substituted in lieu thereof:

(a) The practice of or the offer to practice professional engineering in this state by individual licensed professional engineers or the practice of or the offer to practice land surveying in this state by individual licensed land surveyors under the corporate form or by a corporation or limited liability company, a material part of the business of which includes engineering or land surveying, is permitted, provided (1) such personnel of such corporation or limited liability company as act in its behalf as engineers or land surveyors are licensed or exempt from licensure under the provisions of this chapter, and (2) such corporation or limited liability company has been issued a certificate of registration by the board as provided in this section. No such corporation or limited liability company shall be relieved of responsibility for the conduct or acts of its agents, employees or officers by reason of its compliance with the provisions of this section, nor shall any individual practicing engineering or land surveying be relieved of responsibility for engineering or land surveying services performed by reason of his employment or relationship with such corporation or limited liability company. All final drawings, specifications, plots, reports or other engineering or land surveying papers or documents involving the practice of engineering or land surveying which are prepared or approved by any such corporation or limited liability company or engineer or land surveyor for use of or for delivery to any person or for public record within this state shall be dated and bear the signature

March 1, 2013

and seal of the engineer or land surveyor who prepared them or under whose supervision they were prepared.

(b) A qualifying corporation or limited liability company desiring a certificate of registration shall file with the board an application upon a form prescribed by the Department of Consumer Protection accompanied by [an] a nonrefundable application fee of five hundred sixty-five dollars. Each such certificate shall expire annually and shall be renewable upon payment of a fee of three hundred seventy-five dollars. If all requirements of this chapter are met, the board shall authorize the department to issue to such corporation or limited liability company a certificate of registration within thirty days of such application, provided the board may refuse to authorize the issuance of a certificate if any facts exist which would entitle the board to suspend or revoke an existing certificate.

(c) Each such corporation or limited liability company shall file with the board a designation of an individual or individuals licensed to practice engineering or land surveying in this state who shall be in charge of engineering or land surveying by such corporation or limited liability company in this state. Such corporation or limited liability company shall notify the board of any change in such designation within thirty days after such change becomes effective.

Sec. 7. Section 20-307 of the general statutes is repealed and the following is substituted in lieu thereof:

(a) The board may refuse to issue or renew, or may suspend or revoke a license or certificate of registration, or may take any other action permitted in subdivision (7) of section 21a-7, and may assess a civil penalty of up to one thousand dollars per violation, if the holder of the license or certificate of registration: (1) has violated a statute or regulation related to the practice of engineering or land surveying of this state, any state of the United States, the United States, the District of Columbia, the Commonwealth of Puerto Rico, any territory or insular possession subject to the jurisdiction of the United States or a foreign jurisdiction; (2) has been disciplined by, or is the subject of pending disciplinary action or an unresolved complaint before, the duly authorized disciplinary agency of any state of the United States, the United States, the District of Columbia, the Commonwealth of Puerto Rico, any territory or insular possession subject to the jurisdiction of the United States or a foreign jurisdiction; (3) has been refused a license or registration or renewal of a license or registration by any state of the United States, the United States, the District of Columbia, the Commonwealth of Puerto Rico, any territory or insular possession subject to the jurisdiction of the United States or a foreign jurisdiction based on grounds that are similar to grounds on which Connecticut could refuse to issue or renew such a license or registration; (4) has made false, misleading or deceptive representations to the public or board; (5) has performed or been a party to a fraudulent or deceitful practice or transaction; (6) has illegally or fraudulently obtained a license or registration; or (7) has performed incompetent or negligent work.

(b) Appeals from the decisions of the board concerning [the issuance or the suspension or revocation of] any license or certificate of registration under the provisions of this chapter may be taken as provided in section 4-183, except such appeal shall be made returnable to the judicial

district of New Britain. The board, for reasons it deems sufficient, may authorize the Department of Consumer Protection to reissue a license or certificate of registration to any person whose license or certificate has been revoked or suspended. A new license or certificate of registration to replace any license or certificate revoked, suspended, lost, destroyed or mutilated may be issued, subject to the regulations adopted under this chapter, and a charge of twenty-five dollars shall be made for such issuance.

Sec. 8. Section 20-307a of the general statutes is repealed and the following is substituted in lieu thereof:

The Department of Consumer Protection may, upon request of the board or on its own motion, inquire into the existence of violations of the provisions of this chapter. If, after notice and opportunity for hearing as provided in the regulations adopted by the Commissioner of Consumer Protection, the board determines that a violation of any provision of this chapter or any regulation adopted under this chapter exists, the board may issue an appropriate order to the person or persons found to be so violating such provision or regulation, providing for the immediate discontinuance of such violation and may levy a civil penalty of not more than one thousand dollars for each such violation.

Sec. 9. Section 20-308 of the general statutes is repealed and the following is substituted in lieu thereof:

(a) The board may, upon application and the payment of a fee of one hundred ninety dollars to the Department of Consumer Protection, authorize the department to issue a license as a professional engineer, or a combined license as a professional engineer and land surveyor or, upon application and the payment of a fee of one hundred ninety dollars, to issue a license as a land surveyor to any person who holds a [certificate of qualification, licensure] valid license or registration issued to such person by the proper authority of any state, territory or possession of the United States, or any country, or the National [Bureau of Engineering Registration] Council of Examiners for Engineers and Surveyors, provided the requirements for the licensure or registration of professional engineers or land surveyors under which such license[, certificate of qualification] or registration was issued shall not conflict with the provisions of this chapter and shall be of a standard not lower than that specified in section 20-302. Upon request of any such applicant the board may, if it determines that the application is in apparent good order, authorize the department to grant to such applicant permission in writing to practice engineering or land surveying or both for a specified period of time while such application is pending. The board may waive the first part of the examination specified in subdivision (1) of section 20-302 in the case of an applicant for licensure as a professional engineer who holds a certificate as an engineer-in-training issued [to him] by the proper authority of any state, territory or possession of the United States, or of any country, provided the requirements under which the certificate was issued do not conflict with the provisions of this chapter and are of a standard at least equal to that specified in said subdivision (1). The board may waive that part of the examination specified in subdivision (3) of section 20-302 relating to the fundamentals of land surveying, in the case of an applicant for licensure as a land surveyor who holds a certificate as a surveyor-in-training issued to him by the proper authority of any state, territory or possession of the United States, provided the requirements under which the certificate was issued do not conflict with the

provisions of this chapter and are of a standard at least equal to that specified in said subdivision (3). Applicants for reciprocity as a land surveyor shall be required to pass Part III, the Connecticut specific examination.

(b) The board may, upon application and the payment of a fee to be fixed by the board, authorize the Department of Consumer Protection to issue a license as an engineer-in-training or as a surveyor-in-training to any person who holds a certificate of qualification as an engineer-in-training or as a surveyor-in-training issued [to him] by the proper authority of any state or territory or possession of the United States, or any country, provided the requirements for certification under which such certificate of qualification was issued do not conflict with the provisions of this chapter and are of a standard at least equal to that specified in section 20-302.

Sec. 10. Section 20-309 of the general statutes is repealed and the following is substituted in lieu thereof:

The following persons shall be exempt from the provisions of this chapter: (1) An employee or a subordinate of a person holding a license under this chapter, provided the work of such employee or subordinate shall be under the responsible supervision of a person so licensed; (2) any corporation whose operations are under the jurisdiction of the Department of Public Utility Control and the officers and employees of any such corporation or any contracting corporation affiliated with any such corporation, except that any maps or surveys filed in the public land records by such corporations, officers or employees shall comply with the standards established by Regulations of Connecticut State Agencies, Section 11-8-21; (3) any manufacturing or scientific research and development corporation and the officers and employees of any such corporation while engaged in the performance of their employment by such corporation, provided the engineering work performed by such corporation, officers and employees shall be incidental to the research and development or manufacturing activities of such corporation; (4) officers and employees of the government of the United States while engaged within this state in the practice of the profession of engineering or land surveying for said government; and (5) architects licensed under chapter 390, in the performance of work incidental to their profession for which they are qualified by education and experience.

Sec. 11. Section 20-310 of the general statutes is repealed and the following is substituted in lieu thereof:

Any person who knowingly or wilfully violates any provision of this chapter shall be fined not more than five [hundred] thousand dollars or be imprisoned not more than [three months] one year or both.