

STUDY MATERIAL FOR THE
CERTIFICATE OF FITNESS EXAM
FOR

E-20

**USE AND
DISCHARGE OF
FIREWORKS**

INSIDE THIS BOOKLET YOU WILL
FIND THE FOLLOWING:

NOTICE OF EXAMINATION (NOE)

NOTICE OF EXAMINATION FOR

Title: Examination for the Certificate of Fitness for Use and Discharge of Fireworks - Pyrotechnist (E-20)

Date of Test: Applicants must make an appointment with the Explosive Unit at 718-999-1595 prior to arriving at Metrotech. All applicants with appointments must arrive before 8:30 AM for processing. Computer tests are conducted Monday to Friday (except legal holidays) 9:00 A.M. to 2:30 P.M.

QUALIFICATION REQUIREMENTS

1. Applicants must be at least 18 years of age.
2. Applicants must have a reasonable understanding of the English language.
3. Applicants must present a letter of recommendation from his/her employer. The letter must be on official letterhead and must state the applicant's full name, character, physical condition, and experience.
4. Applicants must present two (2) forms of satisfactory identification i.e., driver's license and passport photo ID.
5. Applicants must have completed a training course on pyrotechnic displays given by a recognized fireworks company. Proof must be provided before taking the test.
6. Applicants must submit two (2) passport-size photos.

APPLICATION INFORMATION

Application Fees: \$25.00 for originals; \$5.00 for renewals. The application fee may be paid in cash, money order, or personal check payable to New York City Fire Department. The \$25.00 fee must be payable by all applicants prior to taking the Certificate of Fitness test. Application forms are available at the Public Certification Unit, 1st floor, 9 MetroTech Center, Brooklyn, NY 11201.

Fingerprint Fees: \$75.00 money order only, made out to **NYS Criminal Justice Services**. This fee is collected upon passing the test.

TEST INFORMATION

Test: The test will be of the multiple-choice type given on a touch-screen computer terminal. A passing score of at least 70% is required in order to secure a Certificate of Fitness. Call (718) 999-1986 for additional information and forms.

This study material will help you prepare for the examination for the Certificate of Fitness for Use and Discharge of Fireworks (Pyrotechnist) E-20. The study material includes information taken from the Rules and Regulations of the City of New York (3RCNY). The study material does not contain all of the information you need to know in order to use and discharge fireworks. It is your responsibility to learn whatever else you need to know to do your job. You must also become familiar with all applicable rules and regulations of the City of New York, even if they are not covered in this material.

All questions on the Certificate of Fitness examination are multiple choice, with four alternative answers to each question. Only one answer is correct for each question. If you do not answer a question or mark more than one alternative your answer will be scored as incorrect. A score of 70% correct is required on the examination in order to qualify for the Certificate of Fitness. Read each question carefully before marking your answer. There is no penalty for guessing.

Sample Questions

- 1. All vehicles transporting any quantity of 1.3 display Fireworks or more than 1000 lbs. of 1.4 consumer Fireworks must have an orange color, diamond-shaped placard on:**
- (A) the rear panel only.
 - (B) both sides, and front and rear.
 - (C) the left side front only.
 - (D) the front seat.

The correct answer is "B". You would press "B" on your computer's touch screen.

- 2. Under which circumstances would you let anyone other than yourself use your Certificate of Fitness?**
- (A) If you could not be present.
 - (B) If he/she plans to test in the near future.
 - (C) Never.
 - (D) If he/she has his/her own Certificate, but misplaced it.

The correct answer is "C". You would press "C" on your computer's touch screen.

Chapter 18

Fireworks Display

§18-01 Fireworks Displays Fired from Shore Front.

(a)(1) Each application for a permit to display fireworks shall be submitted to the Bureau of Fire Prevention for evaluation by a committee consisting of the Chief in Charge, the Chief Inspector and Executive Officer of the Bureau of Fire Prevention, and the Chief in Charge of the Bureau of Fire, or his designated representative. Such committee shall grant tentative approval for fireworks display permits, subject to the final approval of the Fire Commissioner.

A sketch of the area showing the storage facilities, protection, location of all mortars, flights, barricades and fire extinguishers shall be submitted as part of the application for a permit.

(2) Each applicant shall include a bond of indemnity in the sum of \$25,000 in favor of the City of New York.

(b) All permits issued must be subject to compliance with Articles 270 and 405 of the Penal Code of the State of New York.

(c) All fireworks shall be stored in metal drums or storage chests constructed of heavy tongue and groove lumber. All storage containers shall be fitted with non-sparking self-closing covers.

(d) A filled water cask of at least fifty (50) gallon capacity with at least six (6) buckets and two (2) 2½ gallon soda and acid fire extinguishers shall be provided for each area.

(e) All persons discharging fireworks shall have Certificates of Fitness as Pyrotechnists issued by the Fire Commissioner.

(f) The manufacturers shall obtain Certificates of Registration from the Fire Commissioner for all the fireworks to be used, and shall furnish all information as to the size and types of the fireworks. Only the types of fireworks which have been approved by the Bureau of Explosives and described in the Certificate of Registration shall be used.

(g) All single fire bombs shall be discharged from mortars placed in 32 or 55 gallon sand-filled metal drums. The mortars shall be barricaded on the side from which the operator ignites the fuses. Mortars may be buried in beach sand in lieu of drums.

(h) Wood racks or troughs filled with sand shall be permitted for firing of either a “flight” or a “grand finale”. Mortars for this purpose may be buried in beach sand in lieu of trough.

(i) “Flights”, “Grand Finales”, and single shots shall be fired so that no embers or sparks will land upon the area of discharge or viewing area.

(j) All single fire mortars shall be constructed of non-cast metal.

(k) Only approved oriental shells to which the lifting charge has been attached by the firm conducting the display shall be permitted.

(l) All drums, chests or other storage facilities intended for the storage of fireworks shall be located away from the mortars.

(m) The firing rate for single shells shall not exceed one (1) shell every fifteen (15) seconds, or not more than four (4) single shells per minute.

(n) Shelter for the protection of the fireworks shall be provided. Such shelters shall be of unpierced corrugated metal roofs of sufficient dimensions to adequately cover the containers. Truck used for transportation may be used as shelter.

(o) No display shall take place when the wind velocity exceeds 30 m.p.h.

(p) No display bomb or shell shall be fired to a height exceeding 1,200 feet.

(q) No bomb or shell which exceeds twelve (12) inches in diameter shall be used.

(r) §27-4044(f) of the Administrative Code shall be complied with. It provides:
§27-4044(f) — Local transportation. It shall be unlawful to carry or transport through the streets, fireworks exceeding in wholesale market value the sum of ten (\$10) dollars, unless they are securely packed in spark-proof wooden or metal packages having plainly marked on the outside thereof in large legible letters the words: “FIREWORKS—EXPLOSIVE”, but under no circumstances shall any person carry or transport fireworks in a tunnel or subway under the streets, lands, or waters of the city, to which the public has access.

(s) Fireworks discharge shall be from shore at waters edge, and location of discharge shall be at least 200 feet from any permanent building or public highway, and at least 150 feet from line of audience restraint. (Only persons in active charge of display to be permitted within these lines).

(t) Fireworks projectiles shall be discharged in such manner and direction that any falling residue will fall into the water.

(u) A list of number and kind of fireworks to be discharged shall be filed with the Fire Department.

(v) Submit evidence that Department of Parks and Recreation has no objection to fireworks display.

§18-02 Fireworks Displays Fired from Offshore.

(a)(1) Each application for a permit to display fireworks shall be submitted to the bureau of Fire Prevention for evaluation by a committee consisting of the Chief in Charge, the Chief Inspector and Executive Officer of the Bureau of Fire Prevention, and the Chief in Charge of the Bureau of Fire, or his designated representative. Such committee shall grant tentative approval for fireworks display permits, subject to the final approval of the Fire Commissioner.

A sketch of the barge showing the storage facilities, protection, location of all mortars, flights, barricades and fire extinguishers shall be submitted as part of the application for a permit.

(2) Each application shall include a bond of indemnity in the sum of \$25,000.00 in favor of the City of New York.

(b) All permits issued must be subject to compliance with Articles 270 and 405 of the Penal Code of the State of New York.

(c) Off-shore displays shall be permitted on barges only if situated at least 1000 feet from shore, and a range-finder shall be provided aboard the barge so that the minimum distance of 1000 feet to shore can be measured and maintained; fireworks displays from such barges shall be made only if tugboat towing barge is operating under full power so that all necessary maneuvering can be effectuated.

(d) The decks of such barges shall be completely and thoroughly watered down or covered with ½ inch layer of sand prior to the loading of fireworks.

(e) All fireworks shall be stored in metal drums or storage chests constructed of heavy tongue and groove lumber. All storage containers shall be fitted with non-sparking self-closing covers.

(f) A filled water cask of at least fifty (50) gallon capacity with at least six (6) buckets and two (2) 2½ gallon soda and acid fire extinguishers shall be provided for each barge.

(g) All persons aboard the barges shall have Certificates of Fitness as Pyrotechnists issued by the Fire Commissioner.

(h) The manufacturers shall obtain Certificates of Registration from the Fire Commissioner for all the fireworks to be used, and shall furnish all information as to the size and types of the fireworks. Only the types of fireworks which have been approved by the Bureau of Explosives and described in the Certificate of Registration shall be used.

(i) Barges shall bear legible signs on sides reading:

“FIREWORKS—STAY CLEAR.”

(j) Radio communication is to be maintained between the operator of the towboat and the barge at all times; pyrotechnist shall be provided on the fireworks barge whose sole duties at the time of display shall be to watch the positioning of the barge and the location where shells are discharged and falling, and to maintain radio communication with the tugboat and with the shore so that repositioning of the barge can be ordered and effected if a change in wind or a hazardous situation develops.

(k) All single fire bombs shall be discharged from mortars placed in thirty-two (32) or fifty-five (55) gallon sand filled metal drums. The mortars shall be barricaded on the side from which the operator ignites the fuses.

(l) Wood racks or troughs filled with sand shall be permitted for firing of either a "flight" or a "grand finale."

(m) "Flights," "Grand Finales," and single shots shall be fired so that no embers or sparks will land upon the barge.

(n) All single fire mortars shall be constructed of non-cast metal.

(o) Only approved oriental shells to which the lifting charge has been attached by the firm conducting the display shall be permitted. (p) Suitable railings shall be provided around the outer edge of the barges to prevent personnel falling overboard.

(q) All personnel shall wear approved life preservers while aboard the barges.

(r) All drums, chests or other storage facilities intended for the storage of fireworks shall be located away from the mortars.

(s) The firing rate for single shells shall not exceed one (1) shell every fifteen (15) seconds, or not more than four (4) single shells per minute.

(t) Shelter for the protection of the fireworks must be provided. Such shelters shall be of unpierced corrugated metal roofs of sufficient dimensions to adequately cover the containers.

(u) Copies of inspection and approval of the barges from the U.S. Coast Guard shall be submitted.

(v) Copies of clearance from the Civil Aeronautics Authority be submitted.

(w) No display shall take place when the wind velocity exceeds 30 m.p.h.

(x) No display bomb or shell shall be fired to a height exceeding 1200 feet.

(y) No bomb or shell which exceeds six (6) inches in diameter shall be used.

(z) §27-4044(f) of the Administrative Code shall be complied with. It provides:

§27-4044(f) — Local Transportation.

It shall be unlawful to carry or transport through the streets, fireworks exceeding in wholesale market value the sum of ten (\$10.00) dollars, unless they are securely packed in spark-proof wooden or metal packages having plainly marked on the outside thereof in large legible letters the words: "FIREWORKS-EXPLOSIVE," but under no circumstances shall any person carry or transport fireworks in a tunnel or subway under the streets, lands or waters of the city, to which the public has access.

§18-03 Exemption from Classification as Fireworks. Those items exempted by the New York State Penal Law, Section 270.00. sub. 1, are also exempted from classification as fireworks under §27-4002(17) of the Administrative Code.

The Fire Commissioner reserves the right under §27-4265(a) of the Administrative Code to order any protection deemed necessary in the interest of public safety where large quantities of exempted items are stored.

Note:

Flares and warning lights referred to in the New York Penal Law, Section 270.00 subd. 1 are those used for emergency purposes only.