Report of
Committee on Fire Service Professional Standards
Development for Fire Fighter Qualifications

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This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.


This report has been submitted to letter ballot of the committee which consists of 13 voting members, of whom 13 have voted affirmatively.
Chapter 1 Administration

1-1 Scope. This standard deals with the professional levels of competence required of fire department members. It specifically covers the requirements for entrance into the fire department, and the first three levels of progression thereafter.

1-2 Purpose. The purpose of this standard is to specify minimum requirements of professional competence required for service as a fire fighter.

This standard shall cover the entrance requirements, and the requirements for the subsequent three levels of progression, i.e., Fire Fighter I, Fire Fighter II, and Fire Fighter III.

1-3 General.

1-3.1 All of the performance standards for any level of fire fighter shall meet the following criteria: It shall be performed swiftly, safely, and with competence. Each objective shall be met in its entirety (100 percent).

1-3.2 It is not the intent of the committee for the standards to be mastered in the order they appear. The local or state training program should identify the implementing priority.

1-3.3 Manipulative skill performance for qualifications covered by this standard shall be evaluated by three approved individuals from the Fire Service, one of whom may be from the state or regional fire service training agency.

1-3.4 When hired, the individual becomes a fire fighter. The fire fighter shall meet all of the qualifications for Fire Fighter I before being certified at that level, and before applying for qualification at the next higher level.

1-3.5 The Fire Fighter I shall meet all of the qualifications for Fire Fighter II before being certified at that level, and before applying for qualification at the next higher level.
1-3.6 The Fire Fighter II shall meet all of the qualifications for Fire Fighter III before being certified at that level, and before applying for qualification at the next higher level.

1-4 Definitions.

1-4.1 Candidate: The person who has made application to become a fire fighter.

1-4.2 Fire Fighter: The member of a fire department who engages in fire suppression and fire prevention activities.

1-4.3 Fire Fighter I: The fire fighter, at the first level of progression in the fire department, who has demonstrated the knowledge of, and the ability to perform the objectives specified in this standard for that level, and who works under direct supervision.

1-4.4 Fire Fighter II: The fire fighter, at the second level of progression in the fire department, who has demonstrated the knowledge of, and the ability to perform the objectives specified in this standard for that level, and who works under minimum direct supervision.

1-4.5 Fire Fighter III: The fire fighter, at the third level of progression in the fire department, who has demonstrated the knowledge of, and the ability to perform the objectives specified in this standard, and who works under minimum supervision, but under orders.

1-4.6 Fire Department: The agency that provides both fire suppression and fire prevention services to a state, county, municipality, or organized fire district.

1-4.7 Fire Service: The collective description of fire departments and their personnel.

1-4.8 Safely: To perform the objective without injury to self or to others.

1-4.9 With Competence: Possessing knowledge, skills, and judgment needed to perform indicated objective satisfactorily.

1-4.10 Swiftly: The time, as determined by the authority having jurisdiction, that it takes an approved fire fighter to perform the objective satisfactorily.

1-4.11 Demonstrate: To show by actual use, illustration, simulation, or explanation.

1-4.12 Identify: To physically select, indicate, or explain verbally or in writing, using standard terms recognized by the Fire Service.
Chapter 2 Entrance Requirements

*2-1 General.*

*2-1.1 The candidate shall have a high school diploma or a state recognized equivalent.

*2-1.2 The candidate shall be at least 18 years of age.

*2-1.3 The candidate shall pass the medical standard, and physical fitness standard enclosed.

*2-1.4 There shall be a thorough investigation and evaluation of the candidate’s character before employment is offered.

2-2 Medical Standards for Fire Department Candidates. The candidate shall be rejected when the medical examination reveals any of the following causes.

2-2.1 Abdominal Organs and Gastrointestinal System. The causes for rejection for appointment shall be:

(a) Cholecystectomy, sequelae of, such as postoperative stricture of common bile duct, reforming of stones in hepatic or common bile ducts, or incisional hernia, or post-cholecystectomy syndrome when symptoms are so severe as to interfere with normal performance of duty.

(b) Cholecystitis, acute or chronic, with or without cholelithiasis, if diagnosis is confirmed by usual laboratory procedures or authentic medical records.

(c) Cirrhosis, regardless of the absence of manifestations such as jaundice, ascites or known esophageal varices, abnormal liver function tests with or without history of chronic alcoholism.

(d) Fistula, in ano.

(e) Gastritis, Chronic hypertrophic, severe.

(f) Hemorrhoids:

(1) External hemorrhoids producing marked symptoms.

(2) Internal hemorrhoids, if large or accompanied with hemorrhage or protruding intermittently or constantly.

(g) Hepatitis, within the preceding six months, or persistence of symptoms after a reasonable period of time with objective evidence of impairment of liver function.

(h) Hernia:

(1) Hernia, other than small asymptomatic umbilical or hiatal.
(2) History of operation for hernia within the preceding 60 days.

   (i) **Intestinal Obstruction**, or authenticated history of more than one episode, if either occurred during the preceding 5 years, or if resulting condition remains which produces significant symptoms or requires treatment.

   (j) **Megacolon**, of more than minimal degree, **diverticulitis**, **regional enteritis**, and **ulcerative colitis**. **Irritable colon** of more than moderate degree.

   (k) **Pancreas**, acute or chronic disease of, if proven by laboratory tests, or authenticated medical records.

   (l) **Rectum**, stricture or prolapse of.

   (m) **Resection**, **gastrectomy** or of **bowel**, or **gastroenterostomy**, however minimal intestinal resection in infancy or childhood (for example: for intussusception or pyloric stenosis) is acceptable if the individual has been asymptomatic since the resection and if surgical consultation (to include upper and lower gastrointestinal series) gives complete clearance.

   (n) **Scars**:

      (1) Scars, abdominal, regardless of cause, which show hernial bulging or which interfere with movements.

      (2) Scar pain associated with disturbance of function of abdominal wall or contained viscera.

   (o) **Sinuses** of the abdominal wall.

   (p) **Splenectomy**, except when accomplished for the following:

      (1) Trauma.

      (2) Causes unrelated to diseases of the spleen.

      (3) Hereditary spherocytosis.

      (4) Disease involving the spleen when followed by correction of the condition for a period of at least two years.

   (q) **Tumors** *(see 2-2.17)*.

   (r) **Ulcer**:

      (1) Ulcer of the stomach or duodenum, if diagnosis is confirmed by X-ray examination, or authenticated history thereof.

      (2) Authentic history of surgical operation(s) for gastric or duodenal ulcer.

   (s) **Other** congenital or acquired abnormalities and defects which preclude satisfactory performance of fire duties or which require frequent and prolonged treatment.
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2-2.2 Blood and Blood-Forming Tissue Diseases. The causes for rejection for appointment shall be:

(a) Anemia:
   (1) Blood loss anemia — until both condition and basic cause are corrected.
   (2) Deficiency anemia, not controlled by medication.
   (3) Abnormal destruction of RBC's: Hemolytic anemia.
   (4) Fault RBC construction: Hereditary hemolytic anemia, thalassemia and sickle-cell anemia.
   (6) Primary refractory anemia: Aplastic anemia, Di-Guglielmo's syndrome.

(b) Hemorrhagic states:
   (1) Due to changes in coagulation system (hemophilia, etc.).
   (2) Due to platelet deficiency.
   (3) Due to vascular instability.

(c) Leukopenia, chronic or recurrent, associated with increased susceptibility to infection.

(d) Myeloproliferative Disease (Other Than Leukemia):
   (1) Myelofibrosis.
   (2) Megakaryocytic myelosis.
   (3) Polycythemia vera.

(e) Splenomegaly, until the cause is remedied.

(f) Thromboembolic disease except for acute, nonrecurrent conditions.

2-2.3 Dental. The causes for rejection for appointment shall be:

(a) Diseases of the jaws or associated tissues, which are not easily remediable and which will incapacitate the individual or prevent the satisfactory performance of duty.

(b) Malocclusion, severe, which interferes with the mastication of a normal diet.

(c) Orthodontic Appliances, individuals with orthodontic appliances attached to the teeth are administratively unacceptable so long as active treatment is required. Individuals with retainer orthodontic appliances, who are not considered to require active treatment, are administratively acceptable.
(d) **ORAL TISSUES,** extensive loss in an amount that would prevent replacement of missing teeth with a satisfactory prosthetic appliance.

(e) Relationship between the mandible and maxilla of such a nature as to preclude future satisfactory prosthodontic replacement.

2-2.4 **Ears and Hearing.**

2-2.4.1 **Ears.** The causes for rejection for appointment shall be:

(a) **AUDITORY CANAL:**
   (1) Atresia or severe stenosis of the external auditory canal.
   (2) Tumors of the external auditory canal except mild exostoses.
   (3) Severe external otitis, acute or chronic.

(b) **AURICLE:** Agenesis, severe; or severe traumatic deformity, unilateral or bilateral.

(c) **MASTOIDS:**
   (1) Mastoiditis, acute or chronic.
   (2) Residual or mastoid operation with marked external deformity which precludes or interferes with the wearing of a gas mask or helmet.
   (3) Mastoid fistula.

(d) **MENIERE'S SYNDROME.**

(e) **MIDDLE EAR:**
   (1) Acute or chronic suppurative otitis media. Individuals with a recent history of acute suppurative otitis media will not be accepted unless the condition is healed and a sufficient interval of time subsequent to treatment has elapsed to insure that the disease is in fact not chronic.
   (2) Adhesive otitis media associated with hearing level by audiometric test of 20 db or more average for the speech frequencies (500, 1000, or 2000 cycles per second) in either ear regardless of the hearing level in the other ear.
   (3) Acute or chronic serous otitis media.
   (4) Presence of attic perforation in which presence of cholesteatoma is suspected.
   (5) Repeated attacks of catarrhal otitis media; intact grayish, thickened drum(s).

(f) **TYMPANIC MEMBRANE:**
   (1) Any perforation of the tympanic membrane.
(2) Severe scarring of the tympanic membrane associated with hearing level by audiometric test of 20 db or more average for the speech frequencies (500, 1000, and 2000 cycles per second) in either ear regardless of the hearing level in the other ear.

(g) Other diseases and defects of the ear which obviously preclude satisfactory performance of duty or which require frequent and prolonged treatment.

2-2.4.2 Hearing. The cause for rejection for appointment shall be:

Hearing Acuity Level by audiometric testing (regardless of conversational or whispered voice hearing acuity) greater than that described in Table 2-2.4.2. There is no objection to conducting the whispered voice test or the spoken voice test as a preliminary to conducting the audiometric hearing test.

Table 2-2.4.2
Table of Acceptable Audiometric Hearing Level

<table>
<thead>
<tr>
<th>Acceptable Audiometric Hearing Level</th>
<th>(Present American Standard) for Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 500 1000 2000 3000 4000 6000 8000</td>
<td></td>
</tr>
<tr>
<td>256 512 1024 2048 2896 4096 6144 8192</td>
<td></td>
</tr>
</tbody>
</table>

a. Both ears — (1) Average of the three (3) frequencies not greater than twenty (20) decibels with no level greater than twenty-five (25) decibels.

or

b. Better ear — (1) 15 15 15 (2) 30 (2) (1)
Worse ear — (1) (1) (1) (1) (1) (1) (1) (1)

(1) No requirement
(2) Not yet standardized

2-2.5 Endocrine and Metabolic Disorders. The causes for rejection for appointment shall be:

(a) Adrenal gland, malfunction of, of any degree
(b) Cretinism.
(c) Diabetes insipidus.
(d) DIABETES MELLITUS.
(e) GIGANTISM OR ACROMEGALY.
(f) GLYCOSURIA, persistent, regardless of cause.
(g) GOITER:
   (1) Simple goiter with definite pressure symptoms or so large in size as to interfere with the wearing of a uniform or fire fighting equipment.
   (2) Thyrotoxicosis.
(h) GOUT.
(i) HYPERINSULINISM, confirmed, symptomatic.
(j) HYPERPARATHYROIDISM and HYPOPARATHYROIDISM.
(k) HYPOPITUITARISM, severe.
(l) MYXEDEMA, spontaneous or postoperative (with clinical manifestations and not based solely on low basal metabolic rate).

(m) NUTRITIONAL DEFICIENCY DISEASES (including sprue, beriberi, pellagra, and scurvy) which are more than mild and not readily remediable or in which permanent pathological changes have been established.

(n) OTHER ENDOCRINE OR METABOLIC DISORDERS which obviously preclude satisfactory performance of duty or which require frequent and prolonged treatment.

2-2.6 Extremities.

2-2.6.1 Upper Extremities.

2-2.6.1.1 Limitation of Motion. The causes for rejection for appointment shall be joint ranges of motion less than the measurements listed below:
(a) SHOULDER:
   (1) Forward elevation to 90 degrees
   (2) Abduction to 90 degrees
(b) ELBOW:
   (1) Flexion to 100 degrees
   (2) Extension to 15 degrees
(c) WRIST: A total range of 15 degrees (extension plus flexion)
(d) HAND: Pronation to the first quarter of the normal arc.
(e) FINGERS: Inability to clench fist, pick up a pin or needle, and grasp an object.
2-2.6.1.2 Hand and Fingers. The causes for rejection for appointment shall be:

(a) Absence (or loss) of more than $\frac{1}{3}$ of the distal phalanx of either thumb.

(b) Absence (or loss) of distal and middle phalanx of an index, middle or ring finger of either hand irrespective of the absence (or loss) of little finger.

(c) Absence of more than the distal phalanx of any two of the following fingers, index, middle finger or ring finger, of either hand.

(d) Absence of hand or any portion thereof, except for fingers as noted above.

(e) Hyperdactylyia.

(f) Scars and deformities of the fingers, hands, or both which impair circulation, are symptomatic, or which impair normal function to such a degree as to interfere with the satisfactory performance of fire duty.

2-2.6.1.3 Wrist, Forearm, Elbow, Arm, and Shoulder. The causes for rejection for appointment shall be:

Healed disease or injury of wrist, elbow, or shoulder with residual weakness or symptoms of such a degree as to preclude satisfactory performance of duty.

2-2.6.2 Lower Extremities (see also 2-2.6.3).

2-2.6.2.1 Limitation of motion. The causes for rejection for appointment shall be joint ranges of motion less than the measurement listed below:

(a) Hip:
   (1) Flexion to 90 degrees
   (2) Extension to 10 degrees (beyond 0)

(b) Knee:
   (1) Full extension
   (2) Flexion to 90 degrees

(c) Ankle:
   (1) Dorsiflexion to 10 degrees
   (2) Plantar flexion to 10 degrees

(d) Toes. Stiffness which interferes with walking, running, or jumping.

2-2.6.2.2 Foot and Ankle. The causes for rejection for appointment shall be:
(a) Absence of one or more small toes of one or both feet, if function of the foot is poor or running or jumping is precluded, or absence of foot or any portion thereof except for toes as noted herein.

(b) Absence (or loss) of great toe(s) or loss of dorsal flexion thereof if function of the foot is impaired.

(c) Claw toes precluding the wearing of service boots.

(d) Clubfoot.

(e) Flatfoot, pronounced cases, with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of the astragalus, regardless of the presence or absence of symptoms.

(f) Flatfoot, spastic.

(g) Hallux valgus, if severe and associated with marked exostosis or bunion.

(h) Hammer toe which interferes with the wearing of boots.

(i) Healed disease, injury, or deformity including hyperdactylia which precludes running, is accompanied by disabling pain, or which prohibits wearing of service boots.

(j) Ingrowing toe nails, if severe, and not remediable.

(k) Obliteration of the transverse arch associated with permanent flexion of the small toes.

(l) Pes cavus, with contracted plantar fascia, dorsiflexed toes, tenderness under the metatarsal heads, and callosity under the weight bearing areas.

2-2.6.2.3 Leg, Knee, Thigh, and Hip. The causes for rejection for appointment shall be:

(a) Dislocated semilunar cartilage, loose or foreign bodies within the knee joint, or history of surgical correction of same if —

(1) Within the preceding six months.

(2) Six months or more have elapsed since operation without recurrence, and there is instability of the knee ligaments in lateral or anteroposterior directions in comparison with the normal knee or abnormalities noted on X-ray, there is significant atrophy or weakness of the thigh musculature in comparison with the normal side, there is not acceptable active motion in flexion and extension or there are other symptoms of internal derangement.

(b) Authentic history or physical findings of an unstable or internally deranged joint causing disabling pain or seri-
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ently limiting functions. Individuals with verified episodes of buckling or locking of the knee who have not undergone satisfactory surgical correction or, if subsequent to surgery, there is evidence of more than mild instability of the knee ligaments in lateral and anteroposterior directions in comparison with a normal knee, weakness or atrophy of the thigh musculature in comparison with the normal side, or if the individual requires medical treatment of sufficient frequency to interfere with the performance of duty.

2-2.6.2.4 General. The causes for rejection for appointment shall be:

(a) Deformities of one or both lower extremities which have interfered with function to such a degree as to prevent the individual from following a physically active vocation in life or which would interfere with the satisfactory completion of prescribed training and performance of fire duty.

(b) Diseases or deformities of the hip, knee, or ankle joint which interfere with walking, running, or weight bearing.

(c) Pain in lower back or leg which is intractable and disabling to the degree of interfering with walking, running, and weight bearing.

(d) Shortening of a lower extremity resulting in any limp of noticeable degree.

2-2.6.3 Miscellaneous (see also 2-2.6.1 and 2-2.6.2). The causes for rejection for appointment shall be:

(a) Arthritis.

(1) Active or subacute arthritis, including Marie-Strumpell type.

(2) Chronic osteoarthritis or traumatic arthritis of isolated joints of more than minimal degree, which has interfered with the following of a physically active vocation in civilian life or which precludes the satisfactory performance of duty.

(3) Documented clinical history of rheumatoid arthritis.

(4) Traumatic arthritis of a major joint of more than minimal degree.

(b) Disease of any bone or joint, healed, with such resulting deformity or rigidity that function is impaired to such a degree that it will interfere with fire service.

(c) Dislocation, old unreduced; substantiated history of recurrent dislocations of major joints; instability of a major joint, symptomatic and more than mild; or if, subsequent to surgery, there is evidence of more than mild instability in comparison with the normal joint, weakness or atrophy in comparison with the normal
side, or if the individual requires medical treatment of sufficient frequency to interfere with the performance of duty.

(d) Fractures.
   (1) Malunited fractures that interfere significantly with function.
   (2) Ununited fractures.
   (3) Any old or recent fracture in which a plate, pin, or screws were used for fixation and left in place and which may be subject to easy trauma, i.e., as a plate tibia, etc.

(e) Injury of a bone or joint within the preceding six weeks, without fracture or dislocation, of more than a minor nature.

(f) Muscular paralysis, contracture, or atrophy, if progressive or of sufficient degree to interfere with fire service.

(g) Myotonia congenita. Confirmed.

(h) Osteomyelitis, active or recurrent, of any bone or substantiated history of osteomyelitis of any of the long bones unless successfully treated 2 or more years previously without subsequent recurrence or disqualifying sequelae as demonstrated by both clinical and X-ray evidence.

(i) Osteoporosis.

(j) Scars, extensive, deep, or adherent, of the skin and soft tissues or neuromas of an extremity which are painful, which interfere with muscular movements, which preclude the wearing of fire equipment, or that show a tendency to break down.

(k) Chondromalacia, manifested by verified history of joint effusion, interference with function, or residuals from surgery.

2-2.7 Eyes and Vision.

2-2.7.1 Eyes.

2-2.7.1.1 Lids. The causes for rejection for appointment shall be:
   (a) Blepharitis, chronic more than mild. Cases of acute blepharitis will be rejected until cured.
   (b) Blepharospasm.
   (c) Dacryocystitis, acute or chronic.
   (d) Destruction of the lids, complete or extensive, sufficient to impair protection of the eye from exposure.
   (e) Disfiguring cicatrices and adhesions of the eyelids to each other or to the eyeball.
(f) Growth or tumor of the eyelid other than small early basal cell tumors of the eyelid, which can be cured by treatment, and small nonprogressive asymptomatic benign lesions.

(g) LAGOPHTHALMOS.

(h) Ptosis interfering with vision.

(i) TRICHIASIS, severe

2-2.7.1.2 Conjunctiva. The causes for rejection for appointment shall be:

(a) CONJUNCTIVITIS, chronic, including vernal catarrh and trachoma. Individuals with acute conjunctivitis are unacceptable until the condition is cured.

(b) Pterygium.

(1) Pterygium recurring after three operative procedures.

(2) Pterygium encroaching on the cornea in excess of three millimeters of interfering with vision.

2-2.7.1.3 Cornea. The causes for rejection for appointment shall be:

(a) Dystrophy, corneal, of any type including keratoconus of any degree.

(b) Keratitis, acute or chronic.

(c) Ulcer, corneal; history of recurrent ulcers or corneal abrasions (including herpetic ulcers).

(d) Vascularization or Opacification of the cornea from any cause which interferes with visual function or is progressive.

2-2.7.1.4 Uveal tract. The causes for rejection for appointment shall be:

Inflammation of the uveal tract except healed traumatic choroiditis.

2-7.1.5 Retina. The causes for rejection for appointment shall be:

(a) Angiomaticoses, phakomaticoses, retinal cysts, and other congenito-hereditary conditions that impair visual function.

(b) Degenerations of the retina to include macular cysts, holes, and other degenerations (hereditary or acquired degenerative changes) and other conditions affecting the macula. All types of pigmentary degenerations (primary and secondary).

(c) Detachment of the retina or history of surgery for same.
Inflammation of the retina (retinitis or other inflammatory conditions of the retina to include Coat’s disease, diabetic retinopathy, Eales’ disease, and retinitis proliferans).

2-2.7.1.6 Optic Nerve. The causes for rejection for appointment shall be:

(a) Congenito-hereditary conditions of the optic nerve or any other central-nervous-system pathology affecting the efficient function of the optic nerve.

(b) Optic neuritis, neuroretinitis, or secondary optic atrophy resulting therefrom or document history of attacks of retrobulbar neuritis.

(c) Optic atrophy (primary or secondary)

(d) Papilledema.

2-2.7.1.7 Lens. The causes for rejection for appointment shall be:

(a) Aphakia (unilateral or bilateral).

(b) Dislocation, partial or complete of a lens.

(c) Opacities of the lens which interfere with vision or which are considered to be progressive.

2-2.7.1.8 Ocular Mobility and Motility. The causes for rejection for appointment shall be:

(a) Diplopia, documented, constant or intermittent from any cause or of any degree interfering with visual function (i.e., may suppress).

(b) Diplopia, monocular, documented, interfering with visual function.

(c) Nystagmus, with both eyes fixing, congenital or acquired.

(d) Strabismus of 40 prism diopters or more, uncorrectable by lenses to less than 40 diopters.

(e) Strabismus of any degree accompanied by documented diplopia.

(f) Strabismus, surgery for the correction of, within the preceding six months.

2-2.7.1.9 Miscellaneous Defects and Diseases. The causes for rejection for appointment shall be:

(a) Abnormal conditions of the eye or visual fields due to diseases of the central nervous system.
(b) Absence of any eye.
(c) Asthenopia severe.
(d) Exophthalmos, unilateral or bilateral.
(e) Glaucoma, primary or secondary.
(f) Hemianopsia of any type.
(g) Loss of normal pupillary reflex reactions to light or accommodation to distance of Adies syndrome.
(h) Loss of visual fields due to organic disease.
(i) Night blindness associated with objective disease of the eye. Verified congenital night blindness.
(j) Residuals of old contusions, lacerations, penetrations, etc., which impair visual function required for satisfactory performance of fire duty.
(k) Retained intraocular foreign body.
(l) Tumors (see also 2-2.7.11f).
(m) Any organic disease of the eye or adnexa not specified above which threatens continuity of vision or impairment of visual function.

2-2.7.2 Vision. The causes for rejection for appointment shall be:

(a) Color vision. Failure to identify red and/or green as projected by the Ophthalmological Projector Tester.
(b) Distant visual acuity of any degree that does not correct to at least 20/20 in one eye and 20/100 in the other eye within 8 diopters of plus or minus refractive error.
(c) Near visual acuity. Near visual acuity of any degree which does not correct to at least J-6 in the better eye.
(d) Refractive error. Any degree of refractive error in spherical equivalent of over -8.00 or +8.00; or if ordinary spectacles cause discomfort by reason of ghost images, prismatic displacement, etc.; or if an ophthalmological consultation reveals a condition which is disqualifying.
(e) Contact lens. Complicated cases requiring contact lens for adequate correction of vision as keratoconus, corneal scars, and irregular astigmatism.

2-2.8 Genitourinary System.

2-2.8.1 Genitalia. The causes for rejection for appointment shall be:
(a) **Bartholinitis**, Bartholin’s cyst.

(b) **Cervicitis**, acute or chronic manifested by leukorrhea.

(c) **Dysmenorrhea**, incapacitating to a degree which necessitates recurrent absences of more than a few hours from routine activities.

(d) **Endometriosis**, or confirmed history thereof.

(e) **Hemaphroditism**.

(f) **Menopausal syndrome**, either physiologic or artificial, if manifested by more than mild constitutional or mental symptoms, or artificial menopause if less than 13 months have elapsed since cessation of menses. In all cases of artificial menopause, the clinical diagnosis will be reported; if accomplished by surgery, the pathologic report will be obtained and recorded.

(g) **Menstrual cycle**, irregularities of, including menorrhagia, if excessive; metrorrhagia; polymenorrhea; amenorrhea, except as noted in (f) above.

(h) **New growths of the internal or external genitalia** except single uterine fibroid, subserous, asymptomatic, less than 3 centimeters in diameter, with no general enlargement of the uterus (*see also* 2-2.17).

(i) **Oophoritis**, acute or chronic.

(j) **Ovarian cysts**, persistent and considered to be of clinical significance.

(k) **Pregnancy**.

(l) **Salpingitis**, acute or chronic.

(m) **Testicle(s)**.

(1) Absence or nondescent of both testicles.

(2) Undiagnosed enlargement or mass of testicle or epididymis.

(3) Undescended testicle.

(n) **Urethritis**, acute or chronic, other than gonorrheal urethritis without complications.

(o) **Uterus**.

(1) Cervical polyps, cervical ulcer, or marked erosion.

(2) Endocervicitis, more than mild.

(3) Generalized enlargement of the uterus due to any cause.

(4) Malposition of the uterus if more than mildly symptomatic.
(p) **Vagina.**
(1) Congenital abnormalities or severe lacerations of the vagina.
(2) Vaginitis, acute or chronic, manifested by leukorrhea.

(q) **Varicocele or Hydrocele,** if large or painful.

(r) **Vulva.**
(1) Leukoplakia.
(2) Vulvitis, acute or chronic.

(s) Major abnormalities and defects of the genitalia such as a change of sex, a history thereof, or complications (adhesions, disfiguring scars, etc.) residual to surgical correction of these conditions.

2-2.8.2 **Urinary System** *(see also 2-2.5 and 2-2.17).* The causes for rejection for appointment shall be:

(a) **Albuminuria** if persistent or recurrent including so-called orthostatic or functional albuminuria.

(b) **Cystitis,** chronic. Individuals with acute cystitis are unacceptable until the condition is cured.

(c) **Enuresis** determined to be a symptom of an organic defect not amenable to treatment.

(d) **Epispadias or Hypospadias** when accompanied by evidence of infection of the urinary tract or if clothing is soiled with voiding.

(e) **Hematuria, Cylindruria,** or other findings indicative of renal tract disease.

(f) **Incontinence of urine.**

(g) **Kidney.**
(1) Absence of one kidney, regardless of cause.
(2) Acute or chronic infections of the kidney.
(3) Cystic or polycystic kidney, confirmed history of.
(4) Hydronephrosis or pyonephrosis.
(5) Nephritis, acute or chronic.
(6) Pyelitis, pyelonephritis.

(h) **Penis,** amputation of, if the resulting stump is insufficient to permit micturition in a normal manner.

(i) **Peyronie’s Disease.**

(j) **Prostate Gland,** hypertrophy of, with urinary retention.
(k) Renal calculus.
   (1) Substantiated history of bilateral renal calculus at any time.
   (2) Verified history of renal calculus at any time with evidence of stone formation within the preceding 12 months, current symptoms or positive X-ray for calculus.

(l) Skeneitis.

(m) Urethra.
   (1) Stricture of the urethra.
   (2) Urethritis, acute or chronic, other than gonorrheal urethritis without complications.

(n) Urinary fistula.

(o) Other diseases and defects of the urinary system which obviously preclude satisfactory performance of duty or which require frequent and prolonged treatment.

2-2.9 Head and Neck.

2-2.9.1 Head. The causes for rejection for appointment shall be:

(a) Abnormalities which are apparently temporary in character resulting from recent injuries until a period of 3 months has elapsed. These include severe contusions and other wounds of the scalp and cerebral concussion.

(b) Deformities of the skull in the nature of depressions, exostoses, etc., of a degree which would prevent the individual from wearing a gas mask or fire headgear.

(c) Deformities of the skull of any degree associated with evidence of disease of the brain, spinal cord, or peripheral nerves.

(d) Depressed fractures near central sulcus with or without convulsive seizures.

(e) Loss or congenital absence of the bony substance of the skull except that the examiner may find individuals acceptable when —

   (1) The area does not exceed 2.5 centimeters square, and does not overlie the motor cortex or a dural sinus.
   (2) There is no evidence of alteration of brain function in any of its several spheres (intelligence, judgment, perception, behavior, motor control, sensory function, etc.).
   (3) There is no evidence of bone degeneration, disease, or other complications of such a defect.
2-2.9.2 Neck. The causes for rejection for appointment shall be:

(a) **Cervical ribs** if symptomatic, or so obvious that they are found on routine physical examination. (Detection based primarily on X-ray is not considered to meet this criterion.)

(b) **Congenital cysts** of branchial cleft origin or those developing from the remnants of the thyroglossal duct, with or without fistulous tracts.

(c) **Fistula**, chronic draining, of any type.

(d) **Healed tuberculosis lymph nodes** when extensive in number or densely calcified.

(e) **Nonspastic contraction** of the muscles of the neck or cicatricial contracture of the neck to the extent that it interferes with the wearing of a uniform or fire equipment.

(f) **Spastic contraction** of the muscles of the neck, persistent, and chronic.

(g) **Tumor of thyroid or other structures of the neck** *(see also 2-2.17).*

2-2.10 Heart and Vascular System.

2-2.10.1 Heart. The causes for rejection for appointment shall be:

(a) **All organic valvular diseases of the heart**, including those improved by surgical procedures.

(b) **Coronary artery disease or myocardial infarction**, old or recent or true angina pectoris, at any time.

(c) **Electrocardiographic evidence** of major arrhythmias such as —

(1) Atrial tachycardia, flutter, or fibrillation, ventricular tachycardia or fibrillation.

(2) Conduction defects such as first degree atrioventricular block and right bundle branch block. (These conditions occurring as isolated findings are not unfitting when cardiac evaluation reveals no cardiac disease.)

(3) Left bundle branch block, 2d and 3d degree A-V block.

(4) Unequivocal electrocardiographic evidence of old or recent myocardial infarction; coronary insufficiency at rest or after stress; or evidence of heart muscle disease.

(d) **Hypertrophy or dilatation** of the heart as evidenced by clinical examination or roentgenographic examination...
and supported by electrocardiographic examination. Care should be taken to distinguish abnormal enlargement from increased diastolic filling as seen in the well conditioned subject with a sinus bradycardia.

(c) **Myocardial Insufficiency** (congestive circulatory failure, cardiac decompensation) obvious or covert, regardless of cause.

(f) **Paroxysmal Tachycardia** within the preceding five years, or at any time if recurrent or disabling or if associated with electrocardiographic evidence of accelerated A-V conduction (Wolff-Parkinson-White).

(g) **Pericarditis; Endocarditis; or Myocarditis**, history or finding of, except for a history of a single acute idiopathic or coxsackie pericarditis with no residuals.

(h) **Tachycardia** persistent with a resting pulse rate of 100 or more, regardless of cause.

**2-2.10.2 Vascular System.** The causes for rejection for appointment shall be:

(a) **Congenital or Acquired Lesions of the Aorta and Major Vessels,** such as syphilitic aortitis, demonstrable atherosclerosis which interferes with circulation, congenital or acquired dilatation of the aorta (especially if associated with other features of Marfan’s syndrome), and pronounced dilatation of the main pulmonary artery.

(b) **Hypertension** evidenced by preponderant blood pressure readings of 150-mm or more systolic in an individual over 35 years of age or preponderant readings of 140-mm or more systolic in an individual 35 years of age or less. Preponderant diastolic pressure over 90-mm diastolic is cause for rejection at any age.

(c) **Marked Circulatory Instability** as indicated by orthostatic hypotension, persistent tachycardia, severe peripheral vasomotor disturbances and sympathicotonia.

(d) Peripheral vascular disease including Raynaud’s phenomena, Buerger’s disease (thromboangiitis obliterans), erythromelalgia, arteriosclerotic and diabetic vascular disease. Special tests will be employed in doubtful cases.

(e) **Thrombophlebitis.**

1. History of thrombophlebitis with persistent thrombus or evidence of circulatory obstruction or deep venous incompetence in the involved veins.

2. Recurrent thrombophlebitis.
(f) Varicose veins, if more than mild, or if associated with edema, skin ulceration, or residual scars from ulceration.

2-2.10.3 Miscellaneous. The causes for rejection for appointment shall be:

(a) Aneurysm of the heart or major vessel, congenital or acquired.

(b) History and evidence of a congenital abnormality has been treated by surgery but with residual abnormalities or complications, for example: Patent ductus arteriosus with residual cardiac enlargement or pulmonary hypertension; resection of a coarctation of the aorta without a graft when there are other cardiac abnormalities or complications; closure of a secundum type atrial septal defect when there are residual abnormalities or complications.

(c) Major congenital abnormalities and defects of the heart and vessels unless satisfactorily corrected without residuals or complications. Uncomplicated dextrocardia and other minor asymptomatic anomalies are acceptable.

(d) Substantiated history of rheumatic fever or chorea within the previous two years, recurrent attacks of rheumatic fever or chorea at any time, or with evidence of residual cardiac damage.

2-2.11 Lungs and Chest Wall.

2-2.11.1 General. Until re-examination indicates complete recovery without disqualifying sequelae, the causes for rejection for appointment shall be:

(a) Abnormal elevation of the diaphragm on either side.
(b) Acute abscess of the lung.
(c) Acute bronchitis until the condition is cured.
(d) Acute fibrinous pleurisy, associated with acute nontuberculous pulmonary infection.
(e) Acute mycotic disease of the lung such as coccidiodomycosis and histoplasmosis.
(f) Acute nontuberculous pneumonia.
(g) Foreign body in trachea of bronchus.
(h) Foreign body of the chest wall causing symptoms.
(i) Lobectomy, history of, for a nontuberculous nonmalignant lesion with residual pulmonary disease. Removal of more than one lobe is cause for rejection regardless of the absence of residuals.
(j) **OTHER TRAUMATIC LESIONS** of the chest or its contents.
(k) **PNEUMOTHORAX**, regardless of etiology or history thereof.
(l) **RECENT FRACTURE** of ribs, sternum, clavicle, or scapula.
(m) **SIGNIFICANT ABNORMAL FINDINGS** on physical examination of the chest.

2-2.11.2 **Tuberculous Lesion** *(see also 2-2.16.1).* The causes for rejection for appointment shall be:
(a) **ACTIVE TUBERCULOSIS** in any form or location.
(b) **PULMONARY TUBERCULOSIS**, active within the past five years.
(c) **SUBSTANTIATED HISTORY OR X-RAY FINDINGS** of pulmonary tuberculosis of more than minimal extent at any time; or minimal tuberculosis not treated with a full year of approved chemotherapy or combined chemotherapy and surgery; or a history of pulmonary tuberculosis with reactivation, relapse, or other evidence of poor host resistance.

2-2.11.3 **Nontuberculous Lesions.** The causes for rejection for appointment shall be:
(a) **ACUTE MASTITIS**, chronic cystic mastitis, if more than mild.
(b) **BRONCHIAL ASTHMA**, except for childhood asthma with a trustworthy history of freedom from symptoms since the 12th birthday.
(c) **BRONCHITIS**, chronic with evidence of pulmonary function disturbance.
(d) **BRONCHIECTASIS**.
(e) **BRONCHOPLEURAL FISTUAL**.
(f) **BULLOUS OR GENERALIZED PULMONARY EMPHYSEMA**.
(g) **CHRONIC ABDOMEN OF LUNG**.
(h) **CHRONIC FIBROUS PLEURITIS** of sufficient extent to interfere with pulmonary function or obscure the lung field in the roentgenogram.
(i) **CHRONIC MYCOTIC DISEASES** of the lung including coccidioidomycosis; residual cavitation or more than a few small-sized inactive and stable residual modules demonstrated to be due to mycotic disease.
(j) **EMPYEMA**, residual sacculation or unhealed sinuses of chest wall following operation for empyema.
(k) Extensive pulmonary fibrosis from any cause, producing dyspnea on exertion.

(l) Foreign body of the lung or mediastinum causing symptoms or active inflammatory reaction.

(m) Multiple cystic disease of the lung or solitary cyst which is large and incapacitating.

(n) New growth on breast, history of mastectomy.

(o) Osteomyelitis of rib, sternum, clavicle, scapula, or vertebra.

(p) Pleurisy with effusion of unknown origin within the preceding five years.

(q) Sarcoidosis (see also 2-2.16.1).

(r) Suppurative periostitis of rib, sternum, clavicle, scapula, or vertebra.

2-2.12 Mouth, Nose, Pharynx, Trachea, Esophagus, and Larynx.

2-2.12.1 Mouth. The causes for rejection for appointment shall be:

(a) Hard palate, perforation of.

(b) Harelip, unless satisfactorily repaired by surgery.

(c) Leukoplakia, if severe.

(d) Ranula, if extensive (for other tumors see 2-2.17).

2-2.12.2 Nose. The causes for rejection for appointment shall be:

(a) Allergic manifestations.
   1. Chronic atopic rhinitis.
   2. Hay fever if severe; or if not controllable by anti-histamines or by desensitization, or both.

(b) Choana, atresia, or stenosis of, if symptomatic.

(c) Nasal septum, perforation of:
   1. Associated with interference of function, ulceration or crusting, and when the result of organic disease.
   2. If progressive.
   3. If respiration is accompanied by a whistling sound.

(d) Sinusitis, acute.

(e) Sinusitis, chronic, when more than mild:
1. Evidenced by any of the following: Chronic purulent nasal discharge, large nasal polyps, hyperplastic changes of the nasal tissues, or symptoms requiring frequent medical attention.

2. Confirmed by transillumination or X-ray examination or both.

2-2.12.3 Pharynx, Trachea, Esophagus, and Larynx. The causes for rejection for appointment shall be:

(a) Esophagus, organic disease of, such as ulceration, varices, achalasia; peptic esophagitis; if confirmed by appropriate X-ray or esophagoscopy examinations.

(b) Laryngeal paralysis, sensory or motor, due to any cause.

(c) Larynx, organic disease of, such as neoplasm, polyps, granuloma, ulceration, and chronic laryngitis.

(d) Plica dysphonia ventricularis.

(e) Tracheostomy or tracheal fistula.

2-2.12.4 Other Defects and Diseases. The causes for rejection for appointment shall be:

(a) Aphonia.

(b) Deformities or conditions of the mouth, throat, pharynx, larynx, esophagus, and nose which interfere with mastication and swallowing of ordinary food, with speech, or with breathing.

(c) Destructive syphilitic disease of the mouth, nose, throat, larynx, or esophagus (see also 2-2.18).

(d) Pharyngitis and nasopharyngitis, chronic, with positive history and objective evidence, if of such a degree as to result in excessive time lost in the fire environment.

2-2.13 Neurological Disorders.

2-2.13.1 Degenerative Disorders. The causes for rejection for appointment shall be:

(a) Cerebellar and Friedreich’s ataxia.

(b) Cerebral arteriosclerosis.

(c) Encephalomyelitis, residuals of, which preclude the satisfactory performance of fire duties.

(d) Huntington’s chorea.

(e) Multiple sclerosis.

(f) Muscular atrophies and dystrophies of any type.
2-2.13.2 Miscellaneous. The causes for rejection for appointment shall be:

(a) Congenital malformations if associated with neurological manifestations and meningocele, even if uncomplicated.
(b) Migraine when frequent and incapacitating.
(c) Paralysis or weakness, deformity, discoordination, pain, sensory disturbances of consciousness, or personality abnormalities regardless of cause, which are of such a nature or degree as to preclude the satisfactory performance of fire duties.
(d) Tremors, spasmodic torticollis, athetosis or other abnormal movements more than mild.

2-2.13.3 Neurosyphilis. The causes for rejection for appointment shall be:
Any form of neurosyphilis, (general paresis, tabes dorsalis, meningovascular syphilis).

2-2.13.4 Paroxysmal Convulsive Disorders. The causes for rejection for appointment shall be:
Disturbances of consciousness, all forms of psychomotor of temporal lobe epilepsy or history thereof except for seizures associated with toxic states or fever during childhood up to the age of 12.

2-2.13.5 Peripheral nerve disorder. The causes for rejection for appointment shall be:
(a) Polyneuritis.
(b) Mononeuritis or neuralgia which is chronic or recurrent and of an intensity that is periodically incapacitating.
(c) Neurofibromatosis.

2-2.13.6 Spontaneous Subarachnoid Hemorrhage. The causes for rejection for appointment shall be:
Verified history of, unless cause has been surgically corrected.

2-2.14 Skin and Cellular Tissues. The causes for rejection for appointment shall be:
(a) Acne. Severe, when the face is markedly disfigured, or when extensive involvement of the neck, shoulders, chest, or back would be aggravated by or interfere with the wearing of fire equipment.
(b) Atopic dermatitis, with active or residual lesions in characteristic areas (face and neck, antecubital and popliteal fossae, occasionally wrists and hands), or documented history thereof.
(c) Cysts.

1. Cysts, other than pilonidal. Of such a size or location as to interfere with the normal wearing of fire fighting equipment.

2. Cysts, pilonidal. Pilonidal cysts, if evidenced by the presence of a tumor mass or a discharging sinus.

(d) Dermatitis factitia.

(e) Dermatitis herpetiformis.

(f) Eczema. Any type which is chronic and resistant to treatment.

(g) Elephantiasis or chronic lymphedema.

(h) Epidermolysis bullosa; pemphigus.

(i) Fungus infections, systemic or superficial types: If extensive and not amenable to treatment.

(j) Furunculosis. Extensive, recurrent, or chronic.

(k) Hyperhidrosis of hands or feet: chronic or severe.

(l) Ichthyosis. Severe.

(m) Leprosy. Any type.

(n) Leukemia cutis; mycosis fungoides; Hodgkin's disease.

(o) Lichen planus.

(p) Lupus erythematosus (acute, subacute, or chronic) or any other dermatosis aggravated by sunlight.

(q) Neurofibromatosis (Von Recklinghausen's disease).

(r) Nevi or vascular tumors: If extensive, unsightly, or exposed to constant irritation.

(s) Psoriasis or a verified history thereof.

(t) Radiodermatitis.

(u) Scars which are so extensive, deep, or adherent that they may interfere with the wearing of fire equipment, or that show a tendency to ulcerate.

(v) Scleroderma. Diffuse type.

(w) Tuberculosis (see also 2-2.16.1).

(x) Urticaria. Chronic.

(y) Warts, plantar, which have materially interfered with the following of a useful vocation in civilian life.

(z) Xanthoma. If disabling or accompanied by hypercholesterolemia or hyperlipemia.
(aa) Any other chronic skin disorder of a degree or nature which requires frequent outpatient treatment or hospitalization, or interferes with the satisfactory performance of duty.


2-2.15.1 Spine and Sacroiliac Joints (see also 2-2.6). The causes for rejection for appointment shall be:

(a) Arthritis (see also 2-2.6.3a).

(b) Complaint of disease or injury of the spine or sacroiliac joints either with or without objective signs and symptoms which have prevented the individual from successfully following a physically active vocation in civilian life. Substantiation or documentation of the complaint without symptoms and objective signs is required.

(c) Deviation or curvature of spine from normal alignment, structure, or function (scoliosis, kyphosis, or lordosis, spina bifida acculta, spondylolysis, etc.) if —

1. Mobility and weight-bearing power is poor.
2. More than moderate restriction of normal physical activities is required.
3. Of such a nature as to prevent the individual from following a physically active vocation in civilian life.
4. Of a degree which will interfere with the wearing of fire equipment.
5. Symptomatic, associated with positive physical finding(s) demonstrable by X-ray.

(d) Diseases of the lumbosacral or sacroiliac joints of a chronic type and obviously associated with pain referred to the lower extremities, muscular spasm, postural deformities and limitation of motion in the lumbar region of the spine.

(e) Granulomatous diseases either active or healed.

(f) Healed fracture of the spine or pelvic bones with associated symptoms which have prevented the individual from following a physically active vocation in civilian life or which preclude the satisfactory performance of fire fighting duties.

(g) Ruptured nucleus pulposus (herniation of intervertebral disk) or history of operation for this condition.

(h) Spondylolysis or spondylolisthesis that is symptomatic or is likely to interfere with performance of duty or is likely to require assignment limitations.
2-2.15.2 Scapulae, Clavicles, and Ribs (see also 2-2.6.3). The causes for rejection for appointment shall be:

(a) Fractures, until well healed, and until determined that the residuals thereof will not preclude the satisfactory performance of fire fighting duties.

(b) Injury within the preceding six weeks, without fracture, or dislocation, of more than a minor nature.

(c) Osteomyelitis of rib, sternum, clavicle, scapula, or vertebra.

(d) Prominent scapulae interfering with function or with the wearing of fire equipment.

2-2.16 Systemic Diseases and Miscellaneous Conditions and Defects.

2-2.16.1 Systemic Diseases. The causes for rejection for appointment shall be:

(a) Dermatomyositis.

(b) Lupus erythematosus; acute, subacute, or chronic.

(c) Progressive systemic sclerosis.

(d) Reiter's disease

(e) Sarcoidosis.

(f) Scleroderma, diffuse type.

(g) Tuberculosis:

(1) Active tuberculosis in any form or location.

(2) Pulmonary tuberculosis.

(3) Confirmed history of tuberculosis of a bone or joint, genitourinary organs, intestines, peritoneum or mesenteric glands at any time.

(4) Meningeal tuberculosis; disseminated tuberculosis.

2-2.16.2 General and Miscellaneous Conditions and Defects. The causes for rejection for appointment shall be:

(a) Allergic manifestations.

(1) Allergic rhinitis (hay fever) (see also 2-2.12.2).

(2) Asthma (see also 2-2.13).

(3) Allergic dermatoses (see also 2-2.14).

(4) Visceral, abdominal, and cerebral allergy, if severe or not responsive to treatment.
(b) **Any acute pathological condition**, including acute communicable diseases, until recovery has occurred without sequelae.

(c) **Any deformity which is markedly unsightly or which impairs general functional ability to such an extent as to prevent satisfactory performance of duty.**

(d) **Chronic metallic poisoning**, especially beryllium, manganese, and mercury. Undesirable residuals from lead, arsenic, or silver poisoning make the examinee medically unacceptable.

(e) **Cold injury**, residuals of (example: frostbite, chilblain, immersion foot, or trench foot) such as deep seated ache, paresthesia, hyperhidrosis, easily traumatized skin, cyanosis, amputation of any digit, or ankylosis.

(f) **Positive tests for syphilis** with negative TPI test unless there is a documented history of adequately treated lues or any of the several conditions which are known to give a false-positive S.T.S. (vaccinia, infectious hepatitis, immunizations, atypical pneumonia, etc.) or unless there has been a reversal to a negative S.T.S. during an appropriate followup period (3 to 6 months).

(g) **Filariasis; trypanosomiasis; amebiasis; schistosomiasis; uncinariasis** (hookworm) associated with anemia, malnutrition, etc., if more than mild, and other similar worm or animal parasitic infestations, including the carrier states thereof.

(h) **Heat pyrexia** (heatstroke, sunstroke, etc.): Documented evidence of predisposition (includes disorders of sweat mechanism and previous serious episode), recurrent episodes requiring medical attention, or residual injury resulting therefrom (especially cardia, cerebral, hepatic, and renal).

(i) **Industrial solvent** and other chemical intoxication, chronic, including carbon bisulfide, trichlorethylene, carbon tetrachloride, and methyl cellosolve.

(j) **Mycotic infection** of internal organs.

(k) **Myositis or fibrositis**, severe, chronic.

(l) **Residuals of tropical fevers** and various parasitic or protozoal infestations which in the opinion of the medical examiner preclude the satisfactory performance of duty.

2-2.17 Tumors and Malignant Diseases.

2-2.17.1 **Benign Tumors.** The causes for rejection for appointment shall be:
(a) **Any tumor of the —**

1. Auditory canal, if obstructive.
2. Eye or orbit.
4. Central nervous system and its membraneous coverings unless five years after surgery and no otherwise disqualifying residuals of surgery of original lesion.

(b) **Benign tumors of the abdominal wall** if sufficiently large to interfere with fire duty.

(c) **Benign tumors of bone** likely to continue to enlarge, be subjected to trauma during service, or show malignant potential.

(d) **Benign tumors of the thyroid or other structures of the neck, including enlarged lymph nodes,** if the enlargement is of such degree as to interfere with the wearing of fire equipment.

(e) **Tongue, benign tumor of,** if it interferes with function.

(f) **Breast, thoracic contents, or chest wall, tumors of,** other than fibromata lipomata, and inclusion of sebaceous cysts which do not interfere with fire fighting duties.

(g) **For tumors of the internal or external female genitalia.**

### 2-2.17.2 Malignant Diseases and Tumors.**

The causes for rejection for appointment shall be:

(a) **Leukemia, acute or chronic.**

(b) **Malignant lymphomata.**

(c) **Malignant tumor of any kind,** at any time, substantiated diagnosis of, even though surgically removed, confirmed by accepted laboratory procedures, except as noted in 2-2.7.1.1(f).

### 2-2.18 Venereal Diseases.

In general, the finding of acute, uncomplicated venereal disease which can be expected to respond to treatment is not a cause for medical rejection for fire service. The causes for rejection for appointment shall be:

(a) **Chronic venereal disease** which has not satisfactorily responded to treatment. The finding of a positive serologic test for syphilis following adequate treatment of syphilis is not in itself considered evidence of chronic venereal disease which has not responded to treatment (see also 2-2.16.2f).

(b) **Complications and permanent residuals** of venereal disease if progressive, of such nature as to interfere with the satisfactory performance of duty, or if subject to aggravation by fire fighting duties.
2-3 Physical Fitness.

*2-3.1 The candidate, after successfully completing the medical examination and with written authorization of the examining physician, shall run one and one-half (1.5) miles within twelve (12) minutes.

*2-3.2 The candidate shall, from a standing position, jump forward a distance of six (6) feet three (3) inches from the starting position to the most near heel mark.

*2-3.3 The candidate shall, from a completely extended arm position, pull the body upward so as to chin the horizontal bar being grasped by the hands a total of seven (7) consecutive times.

*2-3.4 The candidate shall, successfully, from a horizontal position, accomplish five (5) push ups as prescribed by the authority having jurisdiction.

*2-3.5 The candidate shall walk a four (4) inch wide beam for a distance of twenty (20) feet carrying a weight of twenty (20) pounds.

*2-3.6 The candidate, given a model in the shape of a human and weighing one hundred and fifty (150) pounds, shall lift the model from a horizontal position on a floor, and carry the model one hundred (100) feet.
Chapter 3 Fire Fighter I

3-1 General.

*3-1.1 The fire fighter shall demonstrate a knowledge of the organization of the fire department.

3-1.2 The fire fighter shall demonstrate knowledge as to the size of the department, the scope of its operation, and the standard operational procedures.

3-1.3 The fire fighter shall demonstrate knowledge of the department rules and regulations that apply to the position of fire fighter.

3-2 Forcible Entry.

*3-2.1 The fire fighter shall identify and demonstrate the use of every forcible entry tool available in the department.

3-2.2 The fire fighter shall demonstrate the method and procedure of properly cleaning, maintaining, and inspecting forcible entry tools and equipment.

3-3 Protective Breathing Apparatus.

3-3.1 The fire fighter shall name at least four hazardous respiratory environments encountered in fire fighting.

*3-3.2 The fire fighter shall demonstrate the use, in a dense smoke environment, of all protective breathing apparatus used by the authority having jurisdiction.

3-3.3 The fire fighter shall explain the physical requirements of the wearer, the limitations of the breathing apparatus, and the safety features of all protective breathing apparatus used by the authority having jurisdiction.

3-3.4 The fire fighter shall demonstrate donning breathing apparatus while wearing protective clothing.

3-3.5 The fire fighter shall demonstrate that the breathing apparatus is in a safe condition for immediate use.

3-4 First Aid.

*3-4.1 The fire fighter shall demonstrate a primary survey for life-threatening injuries.
3-4.2 The fire fighter shall demonstrate procedures for determining whether or not a victim has an open airway.

3-4.3 The fire fighter shall demonstrate procedures for establishing an open airway in a non-breathing person.

*3-4.4 The fire fighter shall demonstrate mouth-to-mouth and mouth-to-nose resuscitation.

*3-4.5 The fire fighter shall demonstrate oronasal ventilation.

3-4.6 The fire fighter shall identify the three signs of cardiac arrest.

*3-4.7 The fire fighter shall demonstrate cardiopulmonary resuscitation.

3-4.8 The fire fighter shall identify three types of external bleeding, and identify the characteristics of each type.

3-4.9 The fire fighter shall demonstrate techniques for controlling external bleeding.

3-5 Ropes.

3-5.1 The fire fighter, when given the name, picture, or actual knot used by the department, shall identify it, and describe the purpose for which it would be used.

3-5.2 The fire fighter, when given the proper size and amount of rope, shall demonstrate tying a bowline knot, a clove hitch, and a becket or sheet bend.

3-5.3 The fire fighter, given the proper rope, shall demonstrate the bight, loop, round turn, and half hitch as used in tying knots and hitches.

3-5.4 The fire fighter, using an approved knot, shall hoist any selected forcible entry tool to a height of at least 20 feet.

3-5.5 The fire fighter shall demonstrate the methods of inspecting, cleaning, and maintaining rope.

3-6 Salvage.

3-6.1 The fire fighter shall identify and describe the purpose of salvage, and its value to the public and the fire department.

3-6.2 The fire fighter, as an individual and as a member of a team, shall demonstrate folds and rolls of salvage covers as used by the authority having jurisdiction.
3-6.3 The fire fighter, as an individual and as a member of a team, shall demonstrate salvage cover throws as used by the authority having jurisdiction.

3-6.4 The fire fighter shall demonstrate the methods of inspection, cleaning, and maintaining salvage equipment.

3-7 Fire Hose, Nozzles, and Appliances.

*3-7.1 The fire fighter, given an approved fire department pumper, shall identify the sizes, types, amounts, and use of hose carried on that pumper.

3-7.2 The fire fighter, given an approved fire department pumper, shall identify the use of hose adaptors, and other hose appliances carried on that pumper.

3-7.3 The fire fighter, given the necessary equipment and operating as an individual and as a member of a team, shall advance dry hose lines of two different sizes, both of which shall be 1\(\frac{1}{2}\) -inch or larger, from a pumper:

(a) into a structure
(b) up a ladder into an upper floor window
(c) up an inside stairway to an upper floor
(d) up an outside stairway to an upper floor
(e) down an inside stairway to a lower floor
(f) down an outside stairway to a lower floor
(g) to an upper floor by hoisting.

3-7.4 The fire fighter shall demonstrate cleaning fire hose, couplings, and nozzles; and inspection for damage.

3-7.5 The fire fighter shall demonstrate the connection of fire hose to a hydrant, and the operation of fully opening and closing the hydrant.

3-7.6 The fire fighter shall demonstrate the loading of fire hose on fire apparatus as prescribed by the authority having jurisdiction; and shall also identify the purpose of at least three types of hose loads and finishes.

3-7.7 The fire fighter shall demonstrate at least three hose rolls as specified by the authority having jurisdiction.

3-7.8 The fire fighter shall demonstrate at least two hose carries as specified by the authority having jurisdiction.

3-7.9 The fire fighter shall demonstrate at least two hose drags as specified by the authority having jurisdiction.
3-7.10 The fire fighter shall demonstrate at least two methods of coupling and uncoupling fire hose as specified by the authority having jurisdiction.

3-8 Fire Streams.

3-8.1 The fire fighter shall define a fire stream.

*3-8.2 The fire fighter, given the necessary resources, shall manipulate the nozzle so as to attack at least two live fires including: a Class A fire and a Class B fire.

3-8.3 The fire fighter shall define water hammer and at least one method for its prevention.

3-9 Ladders.

3-9.1 The fire fighter shall identify all ladders specified by the authority having jurisdiction, and describe their uses.

3-9.2 The fire fighter, operating as an individual and as a member of a team, shall demonstrate the following ladder carries as specified by the authority having jurisdiction:

(a) one man carry
(b) two man carry
(c) three man carry
(d) four man carry
(e) five man carry
(f) six man carry.

3-9.3 The fire fighter, operating as an individual and as a member of a team, shall raise every type and size of ground ladder as specified by the authority having jurisdiction; and use several different raises for each ladder.

3-9.4 The fire fighter shall correctly climb the full lengths of every type of ground and aerial ladders, specified by authority having jurisdiction.

3-9.5 The fire fighter shall correctly climb the full lengths of every type of ground and aerial ladders, as specified by the authority having jurisdiction, carrying fire fighting tools or equipment while ascending and descending the ladder.

*3-9.6 The fire fighter shall correctly climb the full lengths of every type of ground and aerial ladders as specified by the au-
authority having jurisdiction, and bring an “injured person” down the ladders.

3-10 Ventilation.

3-10.1 The fire fighter shall define ventilation, and identify the advantages and effects of ventilation.

3-10.2 The fire fighter shall identify the dangers present, and precautions to be taken in performing ventilation.

*3-10.3 The fire fighter shall demonstrate breaking window or door glass, and removing obstruction, without harm to himself or others.

3-10.4 The fire fighter, given a fire axe, shall demonstrate the ventilation of a roof and a floor.

3-10.5 The fire fighter shall identify and explain a back draft explosion.

3-11 Inspection.

3-11.1 The fire fighter shall demonstrate, in writing, knowledge of the common causes of fires and their prevention.

3-11.2 The fire fighter shall demonstrate a knowledge of the fire inspection procedures used by the fire department.

3-11.3 The fire fighter shall describe the importance of public relations relative to the inspection programs of the fire department.

3-11.4 The fire fighter shall identify dwelling inspection procedures established by the authority having jurisdiction.

3-12 Rescue.

3-12.1 The fire fighter shall demonstrate the removal of injured persons from the immediate hazard by the use of carries, drags, and stretchers.

3-12.2 The fire fighter shall demonstrate the procedure for searching for victims in burning, smoke-filled buildings, or other hostile environments.

*3-12.3 The fire fighter shall demonstrate and explain the uses of a life belt.

3-12.4 The fire fighter shall demonstrate the use of a life net, when provided by the authority having jurisdiction.
3-13 Sprinklers.

3-13.1 The fire fighter shall identify the fire department sprinkler connection, and water motor alarm.

3-13.2 The fire fighter shall connect hose line(s) to a fire department connection of an automatic sprinkler system.

3-13.3 The fire fighter, when given a sprinkler head in serviceable use, shall demonstrate his knowledge of how the automatic sprinkler head opens and releases water.

3-13.4 The fire fighter, when given the necessary equipment, shall effect a temporary stop to flow of water from a sprinkler head, while water is flowing under pressure from the sprinkler head.

3-14 Fire Alarm and Communications.

3-14.1 The fire fighter shall demonstrate knowledge of the correct procedure for a citizen to report a fire, or other emergencies.

3-14.2 The fire fighter shall demonstrate correctly receiving an alarm or a report of an emergency, and initiate proper action.

3-14.3 The fire fighter shall describe the purpose and functioning of all alarm receiving instruments, and personnel alerting equipment provided local fire stations.

3-14.4 The fire fighter shall demonstrate station watch duties as assigned by the authority having jurisdiction.

3-14.5 The fire fighter shall demonstrate any traffic control devices installed in the fire station to facilitate the response of apparatus.

3-14.6 The fire fighter shall demonstrate procedures required for receipt and processing of business and personal calls.

3-14.7 The fire fighter shall demonstrate prescribed fire department radio procedures.

3-14.8 The fire fighter shall demonstrate policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance.

3-14.9 The fire fighter shall identify and explain all fire alarm signals, including multiple alarm, and special signals, governing the movements of fire apparatus; and the action to be taken upon the receipt of each signal.
3-15 Safety.

3-15.1 The fire fighter shall identify and explain dangerous building conditions created by fire or disaster, and precautions to protect other fire fighters as prescribed by the authority having jurisdiction.

3-15.2 The fire fighter shall demonstrate procedures for action when trapped or disoriented in a fire situation, or in a hostile environment.
Chapter 4 Fire Fighter II

4-1 General.

4-1.1 The fire fighter shall demonstrate responsibilities in determining the point of origin, cause, and protection of evidence in fires of a suspicious nature in accordance with authority having jurisdiction.

4-1.2 The fire fighter shall demonstrate shutting off the gas services to a building.

4-1.3 The fire fighter shall demonstrate shutting off electrical service to a building.

4-2 Forcible Entry.

4-2.1 The fire fighter shall identify materials and construction features of doors, windows, roofs, floors, and vertical barriers found in the area of the authority having jurisdiction; and shall also identify dangers associated with each in an emergency situation.

4-2.2 The fire fighter shall demonstrate the method and procedure of forcible entry through any door, window, ceiling, roof, floor, or vertical barrier specified by the authority having jurisdiction.

4-3 Protective Breathing Apparatus.

4-3.1 The fire fighter shall demonstrate the procedure for inspection and maintenance of the breathing apparatus.

4-3.2 The fire fighter, given a cascade system or an air compression system, shall demonstrate recharging breathing apparatus.

*4-3.3 The fire fighter shall demonstrate the correct use of emergency procedures including breathing apparatus to assist other fire fighters, conservation of air and restrictive use of by-pass valves.

4-4 First Aid.

4-4.1 The fire fighter shall identify four sources from which he might gather information as to the nature of an accident victim's injuries.

4-4.2 The fire fighter, given specified situations, shall identify what injuries he might suspect from his observation of the injury-producing mechanisms, in addition to those injuries that are obvious.
*4-4.3 The fire fighter, given a victim, shall conduct a secondary survey for other than life-threatening injuries.

4-4.4 The fire fighter shall identify the symptoms of internal bleeding.

4-4.5 The fire fighter shall demonstrate caring for a person with known or suspected internal bleeding.

4-4.6 The fire fighter shall list the classes of thermal burns according to severity and shall explain the physical characteristics of each class.

4-4.7 The fire fighter, given a specified situation, shall demonstrate the emergency care procedure indicated, and shall explain the significance of each step.

4-4.8 The fire fighter shall identify the emergency care for chemical burns, including chemical burns of the eyes.

4-4.9 A fire fighter shall identify the types of fractures and describe the differences.

4-4.10 A fire fighter shall identify three general symptoms of fractures.

4-4.11 The fire fighter, given an identified fracture, shall demonstrate the emergency care necessary to transport the victim.

4-4.12 The fire fighter shall demonstrate the process of breathing.

4-4.13 The fire fighter shall demonstrate the heart-lung-brain relationship as it affects life and shall explain what occurs when an airway obstruction is not corrected.

4-4.14 The fire fighter shall demonstrate cardiopulmonary resuscitation employing the two-man technique.

4-4.15 The fire fighter shall identify symptoms of shock.

4-4.16 The fire fighter shall demonstrate how to treat shock.

4-5 Ropes.

4-5.1 The fire fighter, when given a simulated fire fighting or rescue task, shall select the appropriate size and length rope for the task.

4-5.2 The fire fighter shall select and tie a rope between two objects at least 15 feet apart, using an approved hitch or knot, that will support the weight of a fire fighter on the rope.
4-5.3 The fire fighter shall demonstrate the use of rope, using approved knots and hitches, to tie ladders, hose, and other equipment, so as to secure them to immovable objects.

4-6 Salvage.

4-6.1 The fire fighter, given salvage equipment, and operating as an individual and as a member of a team, shall demonstrate the construction and use of a water chute.

4-6.2 The fire fighter, given salvage equipment, and operating as an individual and as a member of a team, shall demonstrate the construction and use of a water catch-all.

4-6.3 The fire fighter, given salvage equipment but excluding salvage covers, shall demonstrate the removal and routing of water.

4-7 Fire Hose, Nozzles, and Appliances.

4-7.1 The fire fighter, given approved fire department pumper, shall identify, select, and demonstrate the use of any nozzle carried on that pumper.

4-7.2 The fire fighter, given the necessary equipment, shall demonstrate all hand hose lays specified by the authority having jurisdiction.

4-7.3 The fire fighter shall demonstrate inspection and maintenance of fire hose, couplings, and nozzles; and recommend replacement or repair as needed.

4-7.4 The fire fighter shall demonstrate all hydrant/pumper connections as required by the authority having jurisdiction.

4-7.5 The fire fighter, given the necessary equipment and operating as an individual and as a member of a team, shall advance charged attack lines of two different sizes, both of which shall be 1½-inch or larger, from a pumper:

(a) into a structure
(b) up a ladder into an upper floor window
(c) up an inside stairway to an upper floor
(d) up an outside stairway to an upper floor
(e) down an inside stairway to a lower floor
(f) down an outside stairway to a lower floor
(g) to an upper floor by hoisting.
4-8 Fire Streams.

4-8.1 The fire fighter, given fire situations, for each situation shall:

(a) Identify the phase of burning

(b) Select the proper nozzle and hose size.

4-8.2 The fire fighter shall identify characteristics of the major types of fire streams.

4-8.3 The fire fighter, given five fire ground situations, shall select and identify the proper adaptors or appliances.

*4-8.4 The fire fighter shall identify several precautions to be followed while advancing hose lines to a fire.

4-8.5 The fire fighter shall identify three conditions that result in pressure losses in a hose line.

4-8.6 The fire fighter shall identify four special stream nozzles and demonstrate at least two uses or applications for each.

4-8.7 The fire fighter shall identify and explain foam making appliances used, and shall demonstrate a simulated foam stream from all foam making appliances used by the authority having jurisdiction.

4-8.8 A fire fighter shall identify three observable results that are obtained when the proper application of a fire stream is accomplished.

4-8.9 The fire fighter, given the necessary resources, shall identify, select, and assemble those items required to develop at least three types of fire streams.

4-9 Ladders.

4-9.1 The fire fighter shall identify the materials used in ladder construction.

4-9.2 The fire fighter shall identify the load safety features of all ground and aerial ladders used by the authority having jurisdiction.

4-9.3 The fire fighter shall demonstrate inspection, care, and maintenance procedures for all different types of ground and aerial ladders used by the authority having jurisdiction.
4-10 Ventilation.

4-10.1 The fire fighter shall demonstrate the use of all different types of power saws and jack hammers used by the authority having jurisdiction.

4-10.2 The fire fighter shall identify the different types of roofs, demonstrate the methods used to ventilate each type, and identify the necessary precautions.

4-10.3 The fire fighter shall demonstrate how to determine the size of an opening for ventilation, how to locate these openings, and identify and explain the precautions to be taken during ventilation.

4-10.4 The fire fighter shall demonstrate opening various types of windows from inside and outside — with, and without the use of fire department tools.

4-10.5 The fire fighter shall demonstrate the removal of skylights, scuttle covers, and other covers on roof tops.

4-10.6 The fire fighter shall demonstrate all different types of equipment for forced ventilation used by the authority having jurisdiction.

4-10.7 The fire fighter shall demonstrate ventilation using water fog.

4-11 Inspection.

4-11.1 The fire fighter shall prepare diagrams or sketches to record the locations of items of concern during pre-fire planning operations.

4-11.2 The fire fighter shall collect and record in writing information required for the purpose of preparing a report on a building inspection or survey.

4-11.3 The fire fighter shall demonstrate school exit drill procedures as specified by the authority having jurisdiction.

*4-11.4 The fire fighter shall demonstrate life safety programs for the home.

4-11.5 The fire fighter shall identify common fire hazards and make recommendations for their correction.

4-12 Rescue.

4-12.1 The fire fighter shall demonstrate the procedure to remove debris, rubble and other materials found at a cave-in.
4-12.2 The fire fighter shall demonstrate the use of the following rescue tools:
   (a) Shoring blocks
   (b) Trench jacks
   (c) Block and tackle
   (d) Hydraulic jacks
   (e) Screw jacks.

4-12.3 The fire fighter shall demonstrate how to prepare a victim for emergency transportation by using standard available equipment, or by improvising a method.

4-12.4 The fire fighter shall identify some dangers of search and rescue missions in tunnels, caves, construction sites and other hazardous areas as specified by the authority having jurisdiction.

4-12.5 The fire fighter, given equipment used by the authority having jurisdiction and operating as a member of a team, shall demonstrate the extrication of a victim from a vehicle accident.

4-12.6 The fire fighter, given the proper rope, shall tie the proper knot on himself and lower himself from a third floor window.

4-12.7 The fire fighter shall demonstrate the use of breathing aid equipment, and explain the precautions of care and maintenance of the unit.

4-13 Water Supplies.

*4-13.1 The fire fighter shall demonstrate knowledge of the water system in the local community.

4-13.2 A fire fighter shall identify the following parts of a water distribution system:
   (a) Primary feeders
   (b) Secondary feeders
   (c) Distributors.

4-13.3 A fire fighter shall identify the following types of fire hydrants:
   (a) Dry-barrel fire hydrant
   (b) Wet-barrel fire hydrant

4-13.4 A fire fighter shall identify the following:
   (a) A water systems normal operating pressure
(b) A water systems residual pressure  
(c) The flow pressure from an opening which is flowing water.

4-13.5 The fire fighter shall identify the following types of water main valves:
   (a) Indicating  
   (b) Nonindicating  
   (c) Post Indicator Valve  
   (d) Open Stem and Yoke Valve.

4-13.6 The fire fighter shall inspect fire hydrants for use by determining:
   (a) Obstructions to use of hydrant  
   (b) Direction of hydrant outlets to suitability of use  
   (c) Mechanical above-ground damage  
   (d) Condition of paint or rust and corrosion  
   (e) The full flow by fully opening and closing the hydrant  
   (f) Ability to drain.

4-14 Sprinklers.

4-14.1 The fire fighter shall identify the main drain valve on an automatic sprinkler system.

4-14.2 The fire fighter shall open and close a main drain valve on an automatic sprinkler system.

4-14.3 The fire fighter shall identify the main control valve on an automatic sprinkler system.

4-14.4 The fire fighter shall operate a main control valve on an automatic sprinkler system from "open" to "closed" and then back to "open".

4-14.5 The fire fighter shall demonstrate knowledge of the value of automatic sprinklers in providing safety to life of occupants in a structure.

4-14.6 The fire fighter shall identify and explain the dangers of premature closure of sprinkler main control valve, and of using fire hydrants to supply fire hose streams when the same water system is supplying the automatic sprinkler system.

4-14.7 The fire fighter shall identify the difference between an automatic sprinkler system that affords complete coverage as to a partial sprinkler system.
4-14.8 The fire fighter shall identify at least three sources of water for supply to an automatic sprinkler system.

4-14.9 The fire fighter shall identify the following:

(a) Wet sprinkler system
(b) Dry sprinkler system
(c) Deluge sprinkler system.

*4-14.10 The fire fighter, when given the tools and sprinkler head, shall properly remove one head from the system and replace it with a head of the same type.

4-15 Fire Alarm and Communications.

4-15.1 The fire fighter shall identify and demonstrate knowledge of areas assigned for first alarm response.

4-15.2 The fire fighter shall demonstrate proper use as specified by the authority having jurisdiction, of radio equipment, both mobile and portable.

4-15.3 The fire fighter shall demonstrate arrival and situation reports over fire department radios in the manner specified by the authority having jurisdiction.

4-15.4 The fire fighter shall demonstrate any supervisory alarm equipment provided in the fire station and the prescribed action to be taken upon receipt of designated signals.

4-15.5 The fire fighter shall identify and explain fire location indicators provided to direct fire fighters to specific locations in protected public or private properties.

4-16 Portable Extinguishers.

*4-16.1 The fire fighter shall demonstrate a knowledge of the chemistry of fire.

4-16.2 The fire fighter shall identify the classification of types of fire as they relate to the use of portable extinguishers.

*4-16.3 The fire fighter, given a group of differing extinguishers, shall demonstrate the appropriate extinguishers for the various classes of fire.

4-16.4 The fire fighter shall identify the portable extinguisher rating system.
Chapter 5 Fire Fighter III

5-1 General.

5-1.1 The fire fighter shall demonstrate writing a basic fire incident report.

5-1.2 The fire fighter shall demonstrate the principal types of building construction as defined in the local building code.

5-1.3 The fire fighter shall demonstrate the general fire behavior expected with each type of building construction including the spread of fire, safety of the building, occupants, and fire fighters.

5-2 Protective Breathing Apparatus.

5-2.1 The fire fighter shall demonstrate the operational functions of all types of breathing apparatus used by the authority having jurisdiction.

5-2.2 The fire fighter shall demonstrate the principles of operation of the following types of breathing apparatus:

(a) Demand Air
(b) Oxygen Generating
(c) Constant Air Flow.

5-3 Fire Hose, Nozzles, and Appliances.

*5-3.1 The fire fighter shall demonstrate conducting an annual service test for fire hose.

5-4 Fire Streams.

5-4.1 The fire fighter shall construct a diagram to identify three types of fog nozzles, and identify the major parts and trace water flow through them.

5-4.2 The fire fighter, given a selection of nozzles and tips, shall identify their type, design, operation, nozzle pressure, and flow in GPM for proper operation of each.

5-5 Ladders.

*5-5.1 The fire fighter shall demonstrate a nationally accepted annual service test for ground ladders.
5-6 Inspection.

5-6.1 The fire fighter shall demonstrate, in writing, inspection reports as required by the authority having jurisdiction.

5-6.2 The fire fighter shall demonstrate that fire extinguishers in an inspected premises are of required types and ratings, conform to fire prevention code requirements where applicable, and have been inspected and serviced within the required period.

5-6.3 The fire fighter shall identify the action to be taken under designated procedures whenever fire hazards, or suspected fire hazards, are encountered during inspections.

5-6.4 The fire fighter shall demonstrate, in writing, the procedure for effective participation in the pre-fire planning of operation practiced by the authority having jurisdiction, including the information to be obtained during fire company inspections to facilitate such plans.

5-6.5 The fire fighter shall identify the duties and responsibilities of fire company inspectors assigned to a fire prevention detail in places of public assembly.

*5-6.6 The fire fighter, given details of different occupancies, shall identify the fire exit facilities for each occupancy as required by the authority having jurisdiction.

5-6.7 The fire fighter shall demonstrate the use and operation of various roof vents, both manual and automatic.

5-6.8 The fire fighter shall demonstrate the inspection of standpipe systems for fire protection, including visual inspection of hose (where provided), nozzles, hose outlet threads and fire department connections.

5-6.9 The fire fighter shall demonstrate a private water system for fire protection, including fire pumps, yard hydrants, hose houses, gravity and pressure types of water storage tanks, reservoirs, and draft sources.

5-6.10 The fire fighter shall identify smoke detection, and fire detection alarm systems.

5-6.11 The fire fighter shall identify local and state fire codes concerning subjects to be noted in fire company inspections.

5-6.12 The fire fighter shall identify the areas of responsibility of other municipal and state inspection agencies — other than fire department — which exist in the city, county, and state.
5-6.13 The fire fighter shall identify the fire hazards commonly found in manufacturing, commercial, residential, and public assembly occupancies.

5-6.14 The fire fighter shall identify common deficiencies in electrical services and electrical appliances.

5-6.15 The fire fighter shall identify standard types of chimneys and flues, including recognizing deficiencies likely to cause fires in such equipment.

5-6.16 The fire fighter shall demonstrate knowledge of spread of fire through air conditioning and utility ducts, and identify and explain the functions of automatic and manual controls of these systems.

5-6.17 The fire fighter shall identify and explain local code requirements covering the proper storage and use of flammable liquids and gases.

5-6.18 The fire fighter shall identify and explain storage codes and practices contributing to fire safety in buildings, including: proper piling, aisles, clearances, access to fire equipment and exits.

5-6.19 The fire fighter shall identify and explain recommendations of proper outside storage and how it affects fire fighting, including: aisles, roadways, access to hydrants, access to buildings, exposure hazards, and dangers for fire-fighting personnel.

5-6.20 The fire fighter shall identify water and smoke damage potential to goods, to office and manufacturing machinery, and to other valuable objects.

5-7 Rescue.

5-7.1 The fire fighter shall demonstrate an ability to assume command of a rescue operation in the absence of a fire officer.

5-8 Water Supplies.

5-8.1 The fire fighter shall identify and explain the four basic fundamental components of a modern water system.

5-8.2 The fire fighter, given a pitot tube and gage, shall demonstrate its use and properly read and record several various flow pressures.

5-8.3 The fire fighter, given a chart, table, size of openings, and velocity pressures, shall determine the quantity of water flowing from the openings.
5-8.4 The fire fighter, given a chart and table, shall identify and explain the approximate discharge capacities of various water pipe sizes.

5-8.5 A fire fighter shall identify the pipe sizes used in water distribution systems for residential, business, and industrial districts.

5-8.6 A fire fighter shall identify at least two causes of increased resistance or friction loss with water flowing in water mains.

5-9 Sprinklers.

5-9.1 The fire fighter, given an alarm valve of an automatic sprinkler system, shall demonstrate the operation of the valve.

5-9.2 A fire fighter, given twelve various sprinkler heads, shall identify all of them correctly as to:
   (a) Temperature rating
   (b) Pendant or upright
   (c) Special types.

5-9.3 A fire fighter shall identify the alarm test valve on an automatic sprinkler system.

5-9.4 The fire fighter, given an automatic sprinkler system, shall operate the alarm test valve in such a manner as to actually test the system.

5-9.5 The fire fighter, given a velocity drain valve or ball drip valve on the fire department connection of an automatic sprinkler system, shall demonstrate that the valve is operating and the pipe drained.

5-9.6 The fire fighter, given a check valve on the fire department connection to an automatic sprinkler system, shall demonstrate the direction of flow of water through the valve.

5-9.7 The fire fighter shall read and record the indicated pressures on all gages provided on a standard wet automatic sprinkler system and name each gage.

5-9.8 The fire fighter shall read and record the indicated pressures on all gages provided on a standard dry pipe automatic sprinkler system and name each gage.

5-9.9 The fire fighter shall identify and explain the reliability of automatic sprinkler systems, and shall identify eight reasons for unsatisfactory performance.
5-9.10 The fire fighter, by inspection of an automatic sprinkler system in a building, shall identify and explain if obstructions to sprinkler heads are present and what is the required clearance for the sprinkler head from obstructions.

5-11 Fire Alarm and Communications.

5-11.1 The fire fighter shall demonstrate the rewinding, resetting, or both, of any fire alarm boxes or devices on the public fire alarm system as specified by the authority having jurisdiction.

5-11.2 The fire fighter shall demonstrate the ordering of multiple alarms and other calls for assistance from the fire ground when authorized to do so.

5-11.3 The fire fighter shall identify the types of supervisory alarm systems in the area of the authority having jurisdiction.

5-12 Safety.

5-12.1 The fire fighter shall identify and explain the symbols used to designate hazardous materials and areas, and identify precautions that fire fighters are expected to observe and follow in such areas.

5-13 Overhaul.

5-13.1 The fire fighter shall demonstrate methods and procedures used to detect and extinguish hidden fires.
Appendix A

This Appendix is not a part of this NFPA Standard, Fire Fighter — Professional Qualifications, but is included for information purposes only.

A2-1 The specialized and hazardous nature of fire fighting requires that applicants demonstrate the ability to perform or at least demonstrate the ability to acquire certain skills, knowledge and attitudes.

The following are considered the minimum entrance standards which applicants should be required to meet.

A2-1.1 Education. Applicants shall have graduated from high school or have obtained an equivalency certificate.

From the beginning of a fire service career an individual must be able to acquire and correctly associate significant quantities of information covering a wide variety of subject areas. Initially, training will be concentrated on development of manual skills and knowledge of the physical sciences. Continuing education will include humanities and administration, particularly if the fire fighter is to progress in the career ladder.

Although a considerable quantity of the knowledge will be obtained through in-service training, certain required levels of educational achievement can only be obtained through community colleges or similar programs at institutions of higher learning. Completion of high school (or an equivalency certificate) is considered a reasonable and identifiable benchmark whereby an applicant demonstrates through past performance the self-discipline and ability to acquire new knowledge necessary to fulfill the immediate and long-range training and education needs of a fire-service career.

A2-1.2 Age. Minimum entrance age of 18 years.

Two factors indicate the need to establish a minimum age of 18 for new applicants. First, it provides an opportunity to complete minimum educational requirements (see A2-1.1).

In addition, the nature of a fire fighter's job requires a high degree of motivation and maturity due to the team work and close cooperation demanded to insure efficiency and safety. It is recognized that evaluating motivation and maturity may not be a completely objective process, nevertheless, an applicant's behavior pattern should be sufficiently well established by age 18 to permit a reasonable assessment of interest and emotional stability necessary to carry out the duties of a fire fighter.
A2-1.3 **Medical and Physical Standards.** Applicants shall be required to successfully pass a rigorous medical examination and physical fitness test.

The nature of the tasks which a fire fighter will be called upon to perform requires an unusually high degree of physical fitness, agility and dexterity. Fire fighters experience an exceptionally high rate of service connected injuries and deaths which is indicated by the studies revealing that fire fighting is the most hazardous occupation.

A2-1.4 **Background Investigation.** Applicants' background, including personal, work and criminal history should be evaluated.

A fire fighter will be called upon to perform a variety of duties that require a high degree of public trust and confidence. These duties include inspection of property (public and private), enforcement of codes and ordinances, personalized care of the sick or injured, and protection of valuable property. These and other duties demand a degree of integrity and honesty that may not be required in other public service positions.

A2-3.1 Physical fitness is defined as an individual’s cardiovascular efficiency or the ability to move oxygen through muscles and elimination of various by-products in the process. It is dependent on an ability to:

- Rapidly breathe large amounts of air.
- Forcefully deliver large volumes of blood.
- Effectively deliver oxygen to all parts of the body.

This ability is called "aerobic capacity," and because it measures the condition of the lungs, heart, and vascular system, it is the best known index to a person's overall physical fitness.

The aerobic capacity can be obtained with a field test requiring a stop watch and a measured place to run. The entering fire fighter must run at least one and one half (1.5) miles in a time period of twelve (12) minutes or less.

The hazard of the field-test method of measuring a person's "aerobic capacity" is the inability to constantly measure the heart rate and blood pressure. This requires a physician's approval prior to the test.

The following precautions shall be adhered to:

(a) The candidate should not take a fitness test prior to beginning an exercise program if the candidate is over 30 years of age.

(b) If the candidate is over 30, it is safer to postpone the test until completion of a six-week exercise program.

(c) If the above two are complied with, yet the candidate experiences extreme fatigue, shortness of breath, light-headedness,
or nausea during the physical fitness test, STOP the test immediately, and refer the candidate to a medical doctor. DO NOT repeat the test until the candidate’s fitness level has been gradually improved through regular exercise as outlined by a medical doctor.

A2-3.2 This physical fitness standard also includes a measure of the candidate’s physical agility. Agility as it pertains to the entering fire fighter should determine the individual’s ability to physically act and perform future tasks with rapidity, lightness of movement and dexterity prescribed by these standards: The broad jump (2-3.2) is to simulate the individual’s ability to cross objects such as ditches or equipment when it presents itself on the fire ground.

A2-3.3 The chin-ups will simulate the fire fighter’s ability to lift or pull equipment, hoses, ropes, etc. on the fire ground.

A2-3.4 The push-ups will simulate the fire fighter’s need to push on the fire ground as may be required in the use of pike poles, battering rams and other equipment.

A2-3.5 The beam walk will demonstrate the individual’s ability to maintain vertical balance of the body when the footing may not be sound.

A2-3.6 The removal of humans from emergency situations requires a degree of strength and stamina and this test is designed to determine if candidate possesses this ability.

A3-1.1 The intent of the objective is for the fire fighter to know the chain of command within the fire department and know the type of governing body that controls the fire department.

A3-2.1 The intent of the objective is for the fire fighter to have an operational use of any forcible entry tool within the department and thoroughly understand the dangers involved in the use of any of these tools.

A3-3.2 In training a fire fighter in this objective, the authority having jurisdiction may wish to substitute something for smoke that would have the same effect in demonstrating the value of protective breathing apparatus.

A3-4.1 The fire fighter should examine the victim from head to toe, indicating the areas that were most susceptible to injury and what type of symptoms he would be looking for in his primary survey.

A3-4.2 The fire fighter would describe the process of breathing and what happens to a diaphragm and rib cage during the process.
A3-4.4 This objective should be carried out in a rhythmic method for at least five minutes on a training manikin, if at all possible.

A3-4.5 This objective should be done for five minutes on an infant manikin with the monitoring of rhythm.

A3-4.7 The cardiopulmonary resuscitation should be done on a training manikin, if at all possible.

A3-7.1 An approved fire department pumper shall be that which meets the specifications of National Fire Protection Association Standard Number 19.

A3-8.2 If it is possible, in the area of jurisdiction for a training exercise, for a department to burn a structure of some type to accomplish the Class A fire, this would be a more desirable situation. However, realizing environmental laws and certain restrictions in areas, the size of fires recommended in this objective may have to be modified to meet local restrictions under which the department must train.

A3-9.6 The intent of the objective is for the fire fighter to be able to demonstrate a method of bringing an injured person down a ladder using another fire fighter as the victim.

A3-10.3 The intent is for the fire fighter to breech windows, door glass and other obstructions such as shutters, screens, shades, curtains, and blinds, if it is possible to find a building for this to be demonstrated in.

A3-12.3 Life belts may not be available in the area and this objective should be at the discretion of the authority having local jurisdiction.

A4-2.1 The intent of the objective relating to the dangers associated with the emergency situation is for the fire fighter to explain what signs of warning may be given before a building is ready to collapse.

A4-3.3 The intent of this objective is to assure that the fire fighter understands the buddy breathing system and is familiar with the manner of assisting another fire fighter who may, due to equipment breakdown or other emergencies, be without air.

A4-4.3 The intent of this objective is that the fire fighter give examination to the victim in order to determine injuries that may not be obvious on the primary search. An example would be fluid from the ears, depressions of the skull or spasm or tenderness in the abdomen.
A4-8.4 There should be at least eight different situations that the fire fighter should avoid while advancing hose lines to a fire. Such hazards could include: fences, sharp objects that damage the hose, anything that might bind or catch or cramp the hose while the lines are being advanced.

A4-11.4 The intent of this objective is for a fire fighter to explain "OPERATION EDITH" giving its goals and objectives and describing the type of participation that is carried on in the local area.

A4-13.1 The intent of the objective is for the fire fighter to be able to go to a map showing the distribution of the water supply throughout the city. He should know the primary source of water, the amount of in-town storage that creates pressure to the system and he should be familiar with the minimum standards of sizes of mains the city codes might require.

A4-14.10 Some local jurisdictions may require that a licensed plumber be present when any work of this nature is being done. This is only recommended as a training exercise and not to indicate that the fire fighter should be responsible for maintenance of any private company or corporation's system. We would recommend that for any type of maintenance being done the system be completely shut down and everyone in the building and area be aware that the system has been shut down for repair.

A4-16.1 The fire fighter should be able to thoroughly demonstrate the tetrahedron theory.

A4-16.3 The intent of this objective is for the fire fighter to make a discriminating selection from several different types of extinguishers and to know why a Type A extinguisher may not be effective on a Type B fire or Type B extinguisher may not be too effective on a Type A fire.

A5-3.1 The annual hose test should be such as described by the local office of Insurance Services or a rating bureau within whose jurisdiction the local department falls.

A5-5.1 The National Fire Protection Association has a standard for testing ground ladders.

A5-6.6 The intent is for the fire fighter to be able to recognize the needed exit facilities to meet life safety codes and other codes that may be adopted within the authority having local jurisdiction and apply to any type of public assemblages. This might be demonstrated with an actual walking tour through a public assembly in the jurisdiction of the department.
Appendix B

Referenced Publications

IFSTA 101 — *Forcible Entry*, 5th edition
IFSTA 103 — *Hose Practices*, 5th edition
IFSTA 104 — *Salvage and Overhaul Practices*, 5th edition
IFSTA 204 — *Automatic Sprinkler Systems*, 1st edition
IFSTA 205 — *Water Supplies*, 2nd edition
IFSTA 206 — *Aircraft*, 1st edition
NFPA Standard No. 19 — 1973, *Automotive Fire Apparatus*
NFPA Standard No. 196 — 1972, *Fire Hose*
NFPA Standard No. 198 — 1972, *Care, Maintenance, and Use of Fire Hose*
NFPA Standard No. 604 — 1964, *Salvaging Operations*
*Fire Service Communications*, Kimball, 1972, NFPA
*Handling Hose and Ladders*, NFPA, 1969
*Training Firemen to Make Dwelling Inspections*, NFPA, 1964
Operating Fire Department Pumpers, NFPA, 1965
“Open Up!”, Kimball, 1965
Emergency Care, Grant and Murray, 1971, R. J. Brady Co.
Standards For Fire Fighters, International Association for Fire Fighters, 1970
Apprenticeship Training Standards, International Association of Fire Fighters
Master Plan of the Training and Education System for the California Fire Service, California Fire Chiefs Association, 1972
The New Aerobics, Cooper, May, 1970