

**COMPETENCY MODEL FOR
FIREBOAT MATE (2023)
CLASS CODE 5127**

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **FIREBOAT PILOT**. (Numbers refer to the order of competencies in the Competency Bank.)

- 3. Judgment and Decision-Making
- 8. Safety Focus
- 20. Job Knowledge
- 21. Technology Application
- 23. Equipment Operation
- 24. Mechanical Aptitude
- 28. Supervision
- 45. Oral Communication

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (*italicized*, **bolded**, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

3. JUDGMENT AND DECISION MAKING – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1: Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).

Level 2: General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.

Level 3: Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

Satisfactory

Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

Superior

Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.

8. SAFETY FOCUS – Performs work in a way that minimizes risk of injury to self or others.

Level of Competency Required by Job:

- Level 1: Maintain awareness of unsafe conditions and actions to avoid injury.
- Level 2: Follow safety rules/procedures; avoid known hazards in the work environment.
- Level 3: Carefully follow safety rules and procedures and consistently use all necessary safety equipment.**

Examples of Behavioral Indicators:

- Wears seat belt.
- Ensures safe physical work environment by taking actions such as eliminating unstable stacks of materials, closing drawers so filing cabinets will not tip over, and keeping pathways clear of tripping hazards.
- Reviews safety procedures before beginning each job with known hazards.
- Follows safety procedures while performing work even when it takes more time.
- Uses safety equipment such as goggles, gloves, and earplugs as required or warranted.
- Frequently checks safety equipment for proper condition and operation.

Performance Levels:

Satisfactory

Maintains awareness of personal safety to avoid injury or property damage during all work activities.

Superior

“Safety first.” Places avoidance of injury or property damage above all other job requirements. Mentions the need to follow safe work practices to co-workers. Actively seeks ways to avoid injury.

20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge acquired after hire in a brief orientation, short training program, or through on-the-job training.

Level 2: Knowledge acquired through an apprenticeship or extensive training program, or long duration of job performance.

Level 3: Knowledge acquired through a prolonged external course of study and/or extensive training and experience within the City.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.

Performance Levels:

Satisfactory

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Superior

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/programs and/or give internal and/or external presentations related to work.

Job Knowledge Areas

MARINE KNOWLEDGE

1. Knowledge of marine charts sufficient to perform such tasks as identifying locations, planning routes, and estimating time required for travel.
2. Knowledge of use of tide charts and/or tables sufficient to predict water levels and/or clearances in different parts of the harbor at various times and dates.
3. Knowledge of depths of water in various parts of Los Angeles Harbor sufficient for purposes such as determining which fireboats can gain access to a particular facility in an emergency or depth at which boats and/or divers will be working.
4. Knowledge of knots such as bowline, half hitch, clove hitch, and figure 8 knots used on fireboats and associated equipment and/or structures sufficient for purposes such as mooring the boat and attaching lines to other structures, boats, or objects.
5. Knowledge of locations of berths in Los Angeles Harbor sufficient to navigate a fireboat to them as rapidly as safety considerations permit.
6. Knowledge of locations of facilities in Los Angeles Harbor where toxic or hazardous materials spills, fires, or other emergencies are most likely to occur such as tank farms or fueling stations sufficient to navigate a fireboat to them as rapidly as safety considerations permit.
7. Knowledge of U.S. Coast Guard Rules of the Road as it applies to safe boating operations.
8. Ability to read charts sufficient to use the information to navigate a boat.
9. Ability to use parallel rulers and dividers sufficient to use them in conjunction with charts to determine positions.

COMMUNICATIONS METHODS

10. Knowledge of various communication systems on the boat such as cell phone, loudspeaker system, two-way radio, and bullhorns sufficient to turn them on and off and to check operating condition and for communication with personnel on other boats or on shore.
11. Knowledge of appearance of various objects on radar screens sufficient to estimate size, distance, and/or rate of travel of objects taking scale setting into account.
12. Knowledge of nautical terms sufficient for communication with personnel on other boats and with Port Police or Coast Guard personnel.

13. Knowledge of flags, horn signals, nautical lights and buoys (as specified in Coast Guard regulations) such as rotating blue lights for emergencies; horn signals for passing; “fuel in transfer”, “diver down”, and “storm warning” flags; and using color, size, and shape of buoy to navigate.
14. Knowledge of signals used in receiving instructions and/or directing firefighters fighting a fire sufficient to receive and/or transmit instructions correctly and unambiguously.
15. Knowledge of FCC regulations governing operation of marine radio.
16. Knowledge of SCUBA Diver Recall System during SCUBA diver operations.
17. Basic knowledge of ICS/NIMS to work within the ICS system.

FIREFIGHTING EQUIPMENT

18. Knowledge of different types of nozzles such as straight tip and spray tip including effects on the water stream and situations in which each is most effective.
19. Knowledge of operation of underwharf nozzles from pilot station sufficient to use the electrically controlled toggle switches to set elevation and direction of water streams.
20. Knowledge of equipment used for underwharf firefighting including floats, hoses, nozzles, portable fire extinguishers, or foam equipment (foam eductor and foam concentrate) chain saws.
21. Knowledge of using foam to fight fires and/or to blanket spill including method and/or patterns of application and most effective thickness of foam blanket.
22. Knowledge of fire hoses and sizes which will provide the correct quantity of water at the correct pressure such as using hose for direct application of water to fires or using hose to feed water to land-based units.
23. Knowledge of fittings used with fire hoses sufficient for operations such as using wyes to split the stream from one large hose to feed two smaller ones, using elbows between balwerk outlets and hose, or using adapters to connect fire hose to a different size outlet.
24. Knowledge of operation of crane including requirements for fastening snatch block at the top of the installation, positioning equipment to be raised, and attaching rigging sufficient to direct installation and operation.

SPECIALIZED EQUIPMENT ON FIREBOATS

25. Knowledge of running lights required after dark or when visibility is poor and of the controls sufficient to turn them on when needed.

26. Knowledge of reading compass to set or confirm heading of boat sufficient to set course in degrees including making corrections for common compass errors such as variation (change in local magnetic field) and deviation (effects of objects or construction of the boat on the compass).
27. Knowledge of use of depth sounder sufficient for purposes such as staying within safe operating depth for the boat, locating submerged objects, or determining the location of the boat in the harbor.
28. Knowledge of storage locations of booms and length of boom stored at various locations sufficient to get boom required for a particular spill quickly.
29. Knowledge of attachment and dragging booms into place sufficient to contain spills of toxic and/or hazardous materials.
30. Knowledge of controls and operation of floodlights and other lights used on large boats to provide illumination for firefighting or emergency work sufficient to use them personally or to direct crew in using them to provide adequate illuminations or to maneuver the boat to light the desired area most effectively.
31. Knowledge of safety equipment, emergency equipment, and first aid supplies to be carried on fireboats including locations where they are stored.
32. Knowledge of safety requirements for storing and handling cylinders of compressed gasses including SCUBA tanks (compressed air) and oxygen sufficient to check the pressure and to stow them safely on a boat.
33. Knowledge of the radar and forward looking infrared (FLIR) systems and ability to quickly and accurately interpret results sufficient to aid in the safe navigation of a fire vessel in conditions of limited visibility and the identification of objects and/or vessels in the water.

FIREFIGHTING / EMERGENCY TECHNIQUES

34. Knowledge of specialized firefighting techniques used for fighting fires from a boat including setting up water curtains under a wharf, cutting away parts of a wharf or other structure, and containing a burning spill with water streams sufficient to direct and/or assist boat crew and/or other firefighters, and to follow instructions from the incident commander, either personally or directing crew, rapidly and efficiently.
35. Ability to CPR and EMT 1 skills sufficient to perform actions such as beginning resuscitation in case of drowning, intervening in case of heart attack, immobilizing fractures, dealing with hypothermia, SCUBA dive related emergencies, or taking immediate action to prevent further harm in case of other injury.

BOAT MAINTENANCE

36. Knowledge of functioning of battery operated communications equipment such as two-way radios and bullhorns sufficient to test operation, to replace batteries at specified intervals or as needed, and to send for repair if replacing batteries does not restore them to service.
37. Knowledge of functioning of electrical and auxiliary equipment such as radar, radios, alarms, generators, heavy duty battery power supplies, and medical equipment sufficient to test operation and to perform minor maintenance such as cleaning electrical contacts and replacing batteries.
38. Knowledge of air system including which controls the system operates sufficient to test it, to turn it on and off, and to check connections if controls fail to operate properly.
39. Knowledge of capabilities of propulsion engines and pump engines, of how they are operated, and exactly what they drive sufficient to identify probable location of the problem in case of trouble.
40. Knowledge of capabilities of controllable pitch propulsion system on Fireboat 4 sufficient to operate it safely and to tell when something is wrong.
41. Knowledge of capabilities of cycloidal propulsion systems on Fireboat 2 sufficient to operate them safely and to tell when something is wrong.
42. Knowledge of function of zincs in corrosion protection of hull and engines sufficient to observe their condition and to replace them at specified intervals or as needed.
43. Knowledge of effects of abnormal conditions such as various types of objects floating in the water near the boat or unsecured objects on the deck sufficient to estimate probable consequences and potential damage to the boat and/or equipment.
44. Knowledge of settings of transfer controls sufficient to operate the boat from various pilot stations.
45. Knowledge of starting engines on large fireboats including setting of transmission levers, switching and speed of engines (rpm) for normal operations sufficient to set controls at the pilot stations and to give correct orders to engineers.
46. Knowledge of capabilities and operation of engines on Fireboats 2 and 4 sufficient to use correct engines for driving the boat and for pumping water.
47. Knowledge of operation of Fireboat 4 sufficient to use transmission shift levers to change to appropriate gear for the speed and/or direction of engine operation.
48. Knowledge of operation of Fireboat 2 sufficient to use controls to change speed and direction of travel of the boat.
49. Knowledge of use of rudder lever or pitch controls for direction of travel.

50. Ability to using dual engine control levers, on all Fireboats, transmission levers, and rudder control (wheel or lever) in combination sufficient to regulate speed and direction of the boat.
51. Knowledge of orders to give, on Fireboat 4, to have hydraulic pumps, pump engines, and water pumps controlling water flow of maneuvering jets turned on and water pressure brought up to pressure required for operations of maneuvering jets sufficient to have the jets ready for operation when needed.
52. Knowledge of use of maneuvering jets on Fireboat 4 sufficient to move the boat sidewise, to compensate for effects of pumping water through firefighting hoses and fittings, and/or to use in combination with engines to hold the boat in position.
53. Knowledge of capabilities of large boats including factors such as maximum speed, space required for making turns, use of steering jets for lateral motion, amount of water they can pump, and handling characteristics in adverse weather conditions.
54. Ability to estimating stage of tides based on observation of water level and time of day sufficient to take depth of water and strength and direction of flow in channels into account when navigating a fireboat.
55. Knowledge of currents in various parts of the harbor and of how they are affected by tides and storms.
56. Knowledge of effects of winds and currents on Fireboats 2 and 4 and of boat handling operations required to compensate for them sufficient to perform maneuvers such as holding position or sweeping a wharf.
57. Ability to dropping anchor sufficient to set the anchor firmly at the correct scope to hold the boat in position with minimum assistance from engines and/or maneuvering jets.
58. Ability to raising anchor sufficient to direct the fireboat to the best position; to pull in the line, chain, and anchor; and to stow them correctly and/or to direct crew in raising and stowing the anchor and line.
59. Knowledge of use of bitts, bollards, and capstans in securing lines sufficient for purposes such as mooring the boat, towing other boats, or holding objects in place.
60. Ability to handling lines sufficient to perform tasks such as mooring or towing a boat safely considering hazards such as getting fingers caught in the line, backlash, and insecure fastenings.
61. Knowledge of selecting and confirming pressure for pumping operations either by giving orders to the engineer operating the engines through voice communications systems or by setting the dial of the engine telegraph at the

pilot's station on Fireboat 4 and observing it for compliance, and/or by confirming pressure by reading pressure gauges.

62. Knowledge of handling fire hose sufficient to deploy it rapidly without twisting or kinking and to position the boat for most effective firefighting.
63. Knowledge of lowering skiff on Fireboat 4 into water and of bringing it back on board sufficient to position boat to assist crew in these operations.
64. Knowledge of lowering and raising the skiffs on Fireboats 2 & 4 using hydraulics sufficient to position boat to assist crew in these operations.
65. Knowledge of fireboats, docks, and associated equipment and structures sufficient to detect faulty or unsafe practices in using and/or storing materials and equipment or working near boats, structures, and equipment.
66. Knowledge of "General Alarm" and "Man Overboard" procedures in applicable situations to prevent injury or death.

USE, CARE & STORAGE OF EQUIPMENT

Knowledge of the following equipment sufficient to properly use, store, and/or care for it and to observe and/or test it for wear and/or other defects:

67. hoses for firefighting in various sizes including methods of folding for storage which prevent damage and permit rapid deployment when needed;
68. hose nozzles and fittings such as elbows, wyes, and connectors;
69. floats, smoke ejectors, overshot nozzles, and other special use firefighting equipment;
70. hand and power tools including sledge hammers, pry bars, and chain saws;
71. fixed foam systems, high expansion foam, foam eductors, nozzles; methods of application; and using foam concentrate;
72. portable dry chemical, water, and carbon dioxide fire extinguishers;
73. ventilation equipment including smoke ejector and socks (fiber tubes);
74. emergency medical equipment and supplies such as defibrillators, bandages, blankets, splints, back boards, and inhalation and defibrillation equipment.

PUMPS

75. Knowledge of operating principles of pumps and of hydraulics sufficient to provide safe, efficient, and effective streams of water for firefighting.
76. Knowledge of basic hydraulics.
77. Knowledge of siphon ejectors, fixed eductor systems, portable pumps, electric submersible pumps, fixed pumping systems on boats, and hose used in dewatering including power requirements, space requirements, and efficiency of pumps sufficient to select equipment to use in a particular situation.
78. Knowledge of capacities and operating pressures of water and hydraulic pumping systems including the salvage pump system (bilge pump), water pumping system, and hydraulic control system sufficient to turn them on and off, to operate them in the absence of an engineer, and to shut them off in an emergency.

RULES AND REGULATIONS

79. Knowledge of Harbor Department rules and regulations (Harbor Tariffs) governing operation of boats in Los Angeles Harbor.
80. Knowledge of U.S. Coast Guard rules and regulations governing operation of boats in Los Angeles Harbor, in nearby harbors, and in adjacent coastal waters.
81. Knowledge of City of Los Angeles Fire Code sufficient to detect violations and/or to explain provisions to violators and/or when asked for information.
82. Knowledge of LAFD Manual of Operations and Rules and Regulations sufficient to comply with them.

SUPERVISION / ADMINISTRATION

83. Ability to read and to interpret material such as supervisors' instructions, reports of problems, or letters and memos sufficient to apply the information to specific situations.
84. Ability to write sufficient to make entries in logs, complete forms, and write notes to supervisor and/or Fireboat Mates or Pilots on other shifts.
85. Knowledge of reference sources for obtaining detailed information about harbor conditions such as books of rules and regulations, schedules for dredging and other Harbor Department operations which affect use of channels, up-to-date maps and charts showing use of harbor facilities, arrival and departure information for ships and boats, and long range tide tables.
86. Knowledge of supervisory and leadership principles and techniques such as providing direction, mentoring, giving positive or negative feedback, being approachable, and developing good working relationships among the crew.

87. Knowledge of the City's Equal Employment Opportunity (EEO) policies and procedures as they provide the ability to fulfill supervisory responsibilities based on fair employment practices in selecting, training, and promoting subordinate personnel, and maintaining a hostile-free workplace environment that is sensitive to individual differences including racial, ethnic, age, cultural, religious, sexual orientation, and gender identification sufficient to interpret and apply City and Department policies in appropriate situations and to take corrective action as needed.
88. Knowledge of EEO sufficient to prevent demonstrations of racial, ethnic, or religious prejudice or of sexual harassment and to provide workers with opportunities to learn all types of work.
89. Knowledge of Department policies such as wearing uniforms to work and being in condition to work and being in condition to work safely (not ill or under the influence of alcohol or drugs).
90. Knowledge of records required to be kept such as F-2, NFIRS, EPCR, time sheets, accident reports, inspection reports, and damage reports.

COMMUNICATIONS AND OTHER ABILITIES

91. Ability to communicate orally sufficient to discuss firefighting, boat operation, and other information with supervisors, firefighters, harbor tenants, and other interested parties to discuss problems and possible solutions, to obtain information, and to explain applicable regulations.
92. Ability to speak clearly and intelligibly sufficient to convey information accurately over marine radio, cell phone, and other communications systems.
93. Physical agility sufficient to climb, balance, and/or reach sufficient for purposes such as working on a boat in rough water or fighting fires under wharves.
94. Ability to work in conditions involving multiple tasks and to adapt rapidly to changing conditions.

21. TECHNOLOGY APPLICATION – Correctly applies technology as required on the job; conceptualizes improvements in work through introducing and/or enhancing use of technology.

Level of Competency Required by Job:

Level 1: Expert in the use of technology required for own job. May identify additional applications for currently used technology to enhance own work and/or work of others.

Level 2: Identify additional technology to be applied to improve own work and/or work of others and/or enhanced use of current technology to improve the operations of an entire function or department.

Level 3: Identify new technology application to improve/enhance work of an entire function, department, or organization.

Examples of Behavioral Indicators:

- Demonstrates mastery of technical applications required for current work.
- Suggests additional applications of existing technology that improve productivity.
- Identifies new technology that can be applied to improve existing operations.
- Provides convincing justification for investment in new technology versus anticipated benefits.
- Presents compelling arguments to justify purchase of existing software (with or without modification) versus in-house development.

Performance Levels:

Satisfactory

Knows and correctly applies current technology as required on the job. Extends use of current technology to improve efficiency of accomplishing additional tasks.

Superior

Recognizes opportunities to apply technology to improve work processes in a function, department, or the entire organization. Identifies and justifies specific technology for specific uses. equipment with extreme proficiency and correctly answers questions about its operation. Trains and/or coaches others in the operation of equipment.

23. EQUIPMENT OPERATION – Operates specialized equipment in performance of job duties.

Level of Competency Required by Job:

Level 1: Operate equipment based on on-the-job training.

Level 2: Operate equipment based on attendance at a training program and practice.

Level 3: Operate equipment for which in-depth, complex training was required and which may require certification.

Examples of Behavioral Indicators:

- Operates equipment proficiently.
- Operates equipment with strict adherence to safety procedures.
- Understands the operation of equipment used on the job and correctly answers questions about it.
- Willingly participates in any training necessary to maintain up-to-date knowledge of equipment operation.

Performance Levels:

Satisfactory

Operates equipment safely and with a high degree of proficiency.

Superior

Operates equipment with extreme proficiency and correctly answers questions about its operation. Trains and/or coaches others in the operation of equipment.

24. MECHANICAL APTITUDE – Accurately predicts the impact of forces on objects and assesses the behavior of other physical phenomena (e.g., volume, weight, velocity). Readily learns work involving the application of mechanical principles.

Level of Competency Required by Job:

Level 1: Maintain a safe work environment by ensuring objects in it are stable, tools and equipment are properly used.

Level 2: Know the physical properties of objects in the work environment and correctly anticipate the action of forces upon them; performs work accordingly (correctly and safely).

Level 3: In-depth understanding of mechanical and physical phenomena sufficient to design and/or oversee the construction of systems.

Examples of Behavioral Indicators:

- Operates equipment proficiently.
- Operates equipment with strict adherence to safety procedures.
- Understands the operation of equipment used on the job and correctly answers questions about it.
- Willingly participates in any training necessary to maintain up-to-date knowledge of equipment operation.

Performance Levels:

Satisfactory

Operates equipment safely and with a high degree of proficiency.

Superior

Operates equipment with extreme proficiency and correctly answers questions about its operation. Trains and/or coaches others in the operation of equipment.

28. SUPERVISION – Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/or ability in the areas of:

- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and teambuilding
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU's and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers'
- Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

Level 1: Supervises small workgroup of employees performing the same or highly related work.

Level 2: Supervises a larger workgroup of employees performing various types of work.

Level 3: Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.
- Displays knowledge of legal requirements including applicable Federal and State laws, Administrative Code provisions, Civil Service Commission Rules and Policies, and MOU provisions.

Performance Levels:

Satisfactory

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

Superior

Proficiency in supervision sufficient to serve as a resource to others and/or represent department position in a public forum.

45. ORAL COMMUNICATION – Communicates orally in a clear, concise, and effective manner.

Level of Competency Required by Job:

Level 1: Exchange specific, job-related information orally with others in the immediate work environment or via telephone and/or radio.

Level 2: Obtain/provide/present general and/or job-specific information orally to a variety of others in various situations.

Level 3: Obtain/provide/present a diverse array of information orally at varying levels of complexity to a wide range of others across many different situations and circumstances.

Examples of Behavioral Indicators:

- Audience clearly understands the intended message.
- Rarely must repeat information in response to questions.
- Refrains from use of unnecessary words, phrases, or jargon.
- Provides a level of detail appropriate to the situation (avoids too much or too little detail).
- Speaks at a level appropriate to the audience in terms of terminology, sentence structure, and simplicity/complexity of ideas expressed.
- Uses words with precision (vocabulary) to convey exact information.

Performance Levels:

Satisfactory

Speaks clearly and audibly, providing the appropriate information and level of detail. Typically conveys the message on the first attempt. Answers questions accurately and directly.

Superior

Speech is direct and to the point. Speaks convincingly and with authority when appropriate. Maintains sensitivity to the audience while providing thorough information with the appropriate level of detail through the use of precise language.