



DEPARTMENT OF THE NAVY
JOINT BASE PEARL HARBOR-HICKAM
850 TICONDEROGA ST STE 100
PEARL HARBOR HI 96860-5102

JBPHHINST 3502.1A

JB00

JUN 18 2015

JOINT BASE PEARL HARBOR HICKAM INSTRUCTION 3502.1A

Subj: PROCEDURES OF SELECTING, TRAINING, QUALIFYING AND
CERTIFYING GOVERNMENT TUG CREWS FOR OPERATIONS OF
CIVILIAN CONTRACT TUGS IN EMERGENCY SITUATIONS

Ref: (a) OPNAVINST 3171.2
(b) OPNAVINST 3040.5
(c) COMPACFLTINST C3040.8

Encl: (1) Final Qualification as Government Tug Master
(2) Final Qualification as Government Tug Engineer
(3) Final Qualification as Government Deckhand
(4) Semi-Annual Emergency Tug Crew Program Audit

1. Purpose

a. References (a) and (b) issue guidance and set responsibilities for military personnel assigned to train and qualify as a government Tug Crew member for contractor furnished tugs at Joint Base Pearl Harbor Hickam (JBPHH).

b. To establish responsibilities for selecting, training, qualifying and certifying Government Tug Crews.

c. To establish minimum training requirements for Government Tug Crews.

d. To establish guidelines for re-qualifying and certifying personnel previously qualified/certified as a Government Tug Crew member.

e. To ensure the member of the government Tug Crews are trained, qualified and certified to handle special ships such as submarines and aircraft carriers (if applicable) in the event duties are directed.

f. To ensure that tugs are available to respond within one hour of a request to maneuver an effected submarine in case of a nuclear reactor or radiological accident.

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g. To ensure contracted provisions allow government personnel to be trained by the contractor on operations of the tugs and allow a government crew to completely augment the contracted tug crews (military or civilian) shall be designated and trained. Training shall include, but not limited to, the full operations of the tug (e.g., reactivation from cold iron, underway operation and towage of submarines).

2. Cancellation. JBPHHINST 3502.1

3. Applicability. This instruction applies to all programs and positions (appropriated civilian, military and contractor support), under the cognizance of JBPHH, for the purpose of providing emergency tug services. The tug function is currently being performed with civilian contractor crews through the Military Sealift Command (MSC) sponsored contracts.

4. Background

a. A lack of uniformity in training can ultimately lead to confusion when coordinating efforts of tug crews. This program will ensure that qualified tug operators and crews are professionally competent and safe.

b. Reference (a) delineated the requirement to maintain the capability to respond to emergency situations (including nuclear units) utilizing government tug crews, under emergency conditions, specified in paragraph 5a.

c. This instruction is intended to be utilized in conjunction with and compliant reference (b), which delineates the requirements for Navy Tug Master, not to omit or supersede its requirements.

d. To ensure JBPHH exercises that capability, two Government Tug Crews (military and civilian) shall be trained by the contractor to operate contractor tugs utilizing contractor equipment.

e. Government furnished Tug Crews shall consist of a minimum: one Tug Master, one tug engineer and one deckhand. These personnel will be required to qualify as per the job qualification requirements (JQR) listed in enclosures (1) through (4).

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f. The Government Tug Master must have completed the required training for towing class of ship and be familiar with the U.S Coast Guard (USCG) requirements to operate a vessel of the class used at JBPHH.

5. Action. To ensure the Navy maintains the capability to respond to emergency situations for tug service including the following provisions:

a. Emergency Situations. In the event that the contractor is unwilling or unable to perform those duties as directed, or to timely respond to emergency situations and upon determination by Commander, U.S Pacific Fleet or his designated representative, the contractor agrees to relinquish custody and control of Tug(s) to the Government in order to respond to the emergency utilizing the contractor's tug(s) and equipment augmented in whole or in part by the Joint Base Commander (JBC). The period of Government operation and control shall not exceed the time required to respond to the emergency and return the tug(s) to the contractor's control.

b. Liability. The Government shall be responsible for loss or damage to the tug(s) during periods of complete crew augmentation by the government. During periods of partial crew augmentation, the government shall be liable for damages resulting from government action in accordance with the Federal Tort Claims Act.

6. Responsibilities

a. Joint Base Commander is responsible for:

(1) The selection, training, qualification and certification of the Government Tug Crews.

(2) Ensuring that the trainees receive the minimum training required by this instruction.

(3) Ensuring that the Tug Crew training program emphasizes the skills needed to handle special ships, such as submarines.

(4) Personally certifying each member of the Government Tug Crew in writing.

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(5) Requiring appropriate entries in the Tug Crews service records to document the crewmember's achievements.

b. Operations Officer is responsible for:

(1) Ensuring proper execution and management of this instruction.

(2) Providing all resources and technical expertise needed to implement and sustain the Government Tug Crews.

(3) Monitoring the overall effectiveness of this program and provide the interface needed with MSC to ensure the contract tug providers comply with this situation.

(4) Ensuring that the contract contains appropriate language to allow training of the government Tug Crews and the use of the contractor tugs training and an actual emergency.

(5) Assign the Semi-Annual Emergency Tug Crew Program Audit to a member of JBPHH from another department other than Port Operations.

(6) Report the effectiveness of this program to the JBC semi-annually using the completed audit.

c. Port Services Officer is responsible for:

(1) Assigning sufficient military personnel to operate two contractor furnished tugs.

(2) Provide a standardized training program to qualify all assigned personnel in the positions they are assigned to.

(3) Conducting a minimum of one Government Tug Crew drill every trimester with concurrence of the tug service contractor.

(4) Monthly monitor the proficiency of the Government Tug Crews ensuring they remain fully qualified by viewing the light off and movement of the tug.

(5) Providing monitor reports as required to the Operations Officer.

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d. Tug Contractor is responsible for:

(1) Performing on the Job Training (OJT) as required for the Government Tug Crews.

e. Government Tug Master is responsible for:

(1) For overall ensuring that the crew assigned to them maintains all qualifications and proficiencies to operate contractor furnished tugs. This includes reactivation from cold iron, underway operations, and under instruction vessel movements.

(2) Shall ensure that classroom training and OJT is properly documented and sufficient in order to meet all requirements in the capability of the crew to respond to Radiological Emergency conditions or other conditions that may require their services in accordance with reference (a).

f. Government Tug Crews are responsible for:

(1) Reviewing and understanding their responsibilities and maintain basic operator proficiency. All watch standers shall read this instruction prior to completing qualifications and at a minimum of once annually in order to maintain a proficient level of knowledge of these governing documents.

7. Manning

a. JBPHH has identified billets for two Government Tug Crews. Minimum requirements and prospective tug crews shall be assigned as follows:

UIC	DEPT	RATE	TITLE
62813/47707	JB3	Officer/Chief/PO1	TUGMASTER
62813/47707	JB3	Officer/Chief/PO1	TUGMASTER
62813/47707	JB3	SN/PO3/PO2/PO1	CHIEF ENGINEER
62813/47707	JB3	SN/PO3/PO2/PO1	CHIEF ENGINEER
62813/47707	JB3	SN/PO3/PO2/PO1	DECKHAND
62813/47707	JB3	SN/PO3/PO2/PO1	DECKHAND

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b. The following prerequisites must be met prior to selection in the Tug training program:

(1) Be as a minimum, 2nd class swimmer qualified

(2) Be free of uncorrectable audio/visual blindness and have normal depth perception.

8. Training period. Original training as Tug Master will normally be conducted for six months, three months for Tug Engineer and one month for deckhands. The JBC may modify these timeframes as appropriate, provided the training requirements specified in paragraph 9 are met. Practical proficiency and in-depth understanding of the training requirements specified in paragraph 9 will be demonstrated during the midterm and final evaluation.

9. Training/Qualification Requirements. The training program for Government Tugs crews should consist of, but not limited to full operation of the tug(s) including reactivation from cold iron, underway operation, and under instruction vessel movements. Training shall be documented for each individual Government crewmember to maintain proficiency. Training will be conducted by the Contract Tug crew.

a. The Government Tug Master trainees, in the course of six months, shall:

(1) Complete an approved USCG course for Master 200 TONS. During the 200 TONS course they shall receive the following minimum training:

(a) Rules of the road - Restricted visibility signals, lights and day shapes and maneuvering signals, international and inland rules of the road.

(b) Navigation Plotting - Chart reading, plotting fundamentals, compass and gyro error, cross bearings and radar fixes, set and drift, course to steer and leeway, estimating time of arrival, calculating tides and currents, and luminous and geographical ranges.

(c) General Navigation - Navigational aids, relative bearings, navigational publications, nautical charts, and weather.

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(d) General Dock Safety - Seamanship, man overboard, radiotelephone, emergency operations, life rafts, damage control and watertight integrity, fire fighting, operating limitations, part tow line/wire, Navy standard tug/hand signals machinery operations/engineering, ship construction, pollution prevention, ship handling, stability.

(e) Towing - Non-self-propelled craft, ocean towing, inland towing basics, line make up (power moor make up), dangers involved in towing and small vessel safe towing procedures. Additionally, be able to discuss and demonstrate knowledge required in working around, but not limited to unique hull configurations, protrusions and compositions of sonar domes, and side mounted sonar aboard submarines.

(2) Perform hands on training a minimum of three times a week, until qualified.

(3) Complete enclosure (1).

b. The Government Tug Engineer trainees, in the course of three months, shall:

(1) Complete an approved USCG course for Able Bodied (AB) Limited Seaman. During the Able Bodied (AB) Limited Seaman course they shall receive the following minimum training:

(a) Rules of the Road - Restricted Visibility signals, lights and day shapes and maneuvering signals, international and inland rules of the road.

(b) General Navigation - Navigational aids, relative bearings, navigational publications, nautical charts and weather.

(c) General Deck Safety - Marlinespike seamanship, man over board, watch standing, emergency procedures, life rafts, lifesaving equipment, damage control and watertight integrity, operating limitations, parted tow line/wire, steering casualty, radiotelephone distress and emergency procedures, firefighting, machinery

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operations, ship construction, pollution prevention, and survival at sea.

(2) Perform hands on training a minimum of three times a week, until qualified.

(3) Complete enclosures (2) and (3).

c. The Government Tug Deckhand trainees, in the course of one month, shall:

(1) Complete an approved USCG course for Able Bodied (AB) Limited Seaman. During the Able Bodied (AB) Limited Seaman course they shall receive the following minimum training:

(a) Rules of the Road - Restricted Visibility signals, lights and day shapes and maneuvering signals, international and inland rules of the road.

(b) General Navigation - Navigational aids, relative bearings, navigational publications, nautical charts and weather.

(c) General Deck Safety - Marlinespike seamanship, man over board, watch standing, emergency procedures, life rafts, lifesaving equipment, damage control and watertight integrity, operating limitations, parted tow line/wire, steering casualty, radiotelephone distress and emergency procedures, firefighting, machinery operations, ship construction, pollution prevention, and survival at sea.

(2) Perform hands on training a minimum of three times a week, until qualified.

(3) Complete enclosure (3).

d. After completion of the minimum training requirements outlined in paragraphs 9.a, 9.b and 9.c, the training shall be conducted as follows:

(1) Following the final certification of the Government Tug Operator, proficiency, must be observed and maintained by a continued regiment of training to include:

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(a) Hands-On training of tug crew to be monitored by the contractor for a minimum of four hours per month.

e. All Government Tug Crews and Pilots will receive annual training regarding emergency towing requirements from Pearl Harbor Naval Shipyard C105.6 personnel.

10. Certification

a. Full Qualification

(1) A final evaluation will be conducted according to the appropriate JQR upon completion of training. Government Tug crew personnel demonstrating proficiency will be recommended for qualification to the Operations Officer.

(2) Government Tug Masters will be certified by the JBC after passing the final evaluation and on recommendation of the Operations Officer.

b. Recertification. The program should be structured to permit re-qualification expeditiously. Tug Master and/or Tug Crew who have previously qualified may complete necessary qualifications as approved by the JBC. Specific qualification items not considered necessary should be deleted as specified by paragraph 11.a.

11. Records. Records shall be maintained by the Dock Master LCPO, showing the progress and status of qualification of each Government Tug Crew member trainee. JQR's listed in enclosures (1) through (3) used by each person in qualifying as a tug crew member, should be retained as part of these records while the person is assigned to JBPHH. The following procedures should be followed in completing JQR's:

a. When an item on a card is not considered necessary for individual qualification, there should be an "N/A" in the signature block and initialed by the Operations Officer.

b. All items, requiring signature, on a JQR should be signed and dated. Ditto marks and arrows shall not be used.

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c. Prior to final qualification each JQR should be checked; errors and omissions should be noted and corrected before submission.

d. Prior to transferring a qualified Tug Crew member, appropriate entries will be made in the person's service record, documenting their qualification achievements. Once transferred, a person's individual JQR may be destroyed.

12. Audit. On a semi-annual basis the Emergency Tug Crew Program will be audited using the checklist in enclosure (4). The audit will be assigned, by the Operations Officer, to personnel outside of the Port Operations Department to preclude any conflict of interest.



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FINAL QUALIFICATION AS
GOVERNMENT TUG MASTER

NAME: _____

This page is to be as a record of satisfactory completion of the Job Qualification Requirements (JQR) for the above watch station. Only specified qualifiers may signify completion of applicable sections either written or oral examination, or by observation of performance. Should qualifiers "give away" their signatures, unnecessary difficulties can be expected in the future operations.

This JQR Card is to be maintained by the trainee and reviewed periodically to ensure awareness of progress. Upon completion of this JQR card, it is to be filed in the Trainee's Training record.

Trainee has been indoctrinated in the JQR and has been assigned a target completion date of: _____.

Signature: _____ Date: _____

FINAL QUALIFICATIONS

Having observed satisfactory performance, it is recommended the trainee be designated a qualified TUG MASTER.

RECOMMENDED _____ DATE _____
(Port Services Officer)

RECOMMENDED _____ DATE _____
(Operations Officer)

QUALIFIED _____ DATE _____
(Commanding Officer)

WATCH STATION - TUG MASTER

Estimated Completion Time: 6 Months

PREREQUISITES:

Attend an approved USCG course for Master 200 TONS and provide certificate of completion.

_____ Date: _____
(Operations Officer)

TASKS:

1. Indicate familiarities with Joint Base Pearl Harbor-Hickam piers, wharves, berths, dry docks; the west loch piers and wharves; and locally used navigational aids and charts.

Contract Tug Master _____ Date _____

2. Demonstrate complete knowledge of all Tugboat signals including hand signals.

Contract Tug Master _____ Date _____

3. Demonstrate familiarity with Tug make-ups for the following:

a. SSN/SSBN Contract Tug Master _____ Date _____

b. Carrier Contract Tug Master _____ Date _____

c. SSN/SSBN undocking
Contract Tug Master _____ Date _____

d. (SSN) Contract Tug Master _____ Date _____
(SSBN)

e. SSN/SSBN "Dead Stick" moves in power make-up.

Contract Tug Master _____ Date _____

4. Discuss the effects of the following on steering a tug:

- a. Wind
- b. Current
- c. Going alongside another vessel
- d. Following seas

- e. Shallow water
- f. Bank cushion/bank suction

Contract Tug Master _____ Date _____

5. Discuss the procedure for loss of Z-drivers.

Contract Tug Master _____ Date _____

6. Discuss the following characteristics of the Z-tug.

- (1) Overall length
- (2) Beam
- (3) Fuel capacity
- (4) Height from the waterline
- (5) Horse power, bollard pull, ahead, astern

Contract Tug Master _____ Date _____

7. Discuss Tug Handling and Operating.

- (1) Barge alongside
- (2) Ship/submarine
- (3) Cold Iron Move (Ship or Submarine)

8. Make the following approaches under instruction (2 each).

- (1) Pier Landing

Contract Tug Master _____ Date _____

Contract Tug Master _____ Date _____

- (2) Other vessel of opportune

Contract Tug Master _____ Date _____

Contract Tug Master _____ Date _____

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FINAL QUALIFICATION AS
GOVERNMENT TUG ENGINEER

NAME: _____

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This JQR Card is to be maintained by the trainee and reviewed periodically to ensure awareness of progress. Upon completion of this JQR card, it is to be filed in the Trainee's Training Record.

Trainee has been indoctrinated in the JQR and has been assigned a target completion date of: _____.

Signature: _____ Date: _____

FINAL QUALIFICATIONS

Having observed satisfactory performance, it is recommended the trainee be designated a qualified GOVERNMENT TUG ENGINEER.

RECOMMENDED _____ DATE _____
(Waterfront Services Officer)

RECOMMENDED _____ DATE _____
(Port Services Officer)

QUALIFIED _____ DATE _____
(Operations Officer)

WATCH STATION - GOVERNMENT TUG ENGINEER

Estimated Completion Time: 3 Months

PREREQUISITES:

Complete Government Deckhand JQR

Attend approved USCG course for Able Bodied (AB) Limited Seaman and provide certificate of completion.

_____ Date: _____
Operations Officer)

TASKS:

a. Prior to Final sign off for this watch station, you must complete:

(1) Lineup, operate and secure tug's main engine

Contract Tug Crew/Master _____ Date: _____

(2) Check oil levels in P/S Z-Drives

Contract Tug Crew/Master _____ Date _____

(3) Check oil levels in P/S Main Engines

Contract Tug Crew/Master _____ Date _____

(4) Check oil levels in P/S Hydraulic Tanks

Contract Tug Crew/Master _____ Date _____

(5) Check oil levels in P/S Main Engine Governors

Contract Tug Crew/Master _____ Date _____

(6) Check oil levels in FWD/AFT Generator Engines

Contract Tug Crew/Master _____ Date _____

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(7) Drain Water Traps on Air Receivers

Contract Tug Crew/Master _____ Date _____

(8) Drain Water Traps on Z-Drives

Contract Tug Crew/Master _____ Date _____

(9) Drain Water Traps on Compressors

Contract Tug Crew/Master _____ Date _____

(10) Start Forward Generator

Contract Tug Crew/Master _____ Date _____

(11) Pre-lube Main Engines

Contract Tug Crew/Master _____ Date _____

(12) Pump Bilges

Contract Tug Crew/Master _____ Date _____

(13) Firemain System

(a) Lineup System

(b) Light off System

Contract Tug Crew/Master _____ Date _____

(14) Hydraulic System

(a) Lineup System

(b) Light off System

Contract Tug Crew/Master _____ Date _____

(15) Z-Drive System

(a) Lineup System

(b) Light off System

Contract Tug Crew/Master _____ Date _____

(16) Main Engines

(a) Lineup System

(b) Light off System

Contract Tug Crew/Master _____ Date _____

(17) Fuel System

(a) Lineup System

(b) Light off System

(c) Transfer Fuel

Contract Tug Crew/Master _____ Date _____

(18) Ballast System

(a) Lineup System

(b) Light off System

(c) Transfer ballast

Contract Tug Crew/Master _____ Date _____

(19) Personnel Transfer

(a) Light off crane

(b) Shift brow over to sub/pier

(c) Light off Hydraulics

Contract Tug Crew/Master _____ Date _____

(20) Shore Power

(a) Lineup for disconnect from shore power bunker

(b) Lineup for connect to shore power bunker

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Contract Tug Crew/Master _____ Date _____

Complete 5 satisfactory under instruction watches

Contract Tug Crew/Master _____ Date _____

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FINAL QUALIFICATION AS
GOVERNMENT DECKHAND

NAME: _____

This page is to be as a record of satisfactory completion of the Job Qualification Requirements (JQR) for the above watch station. Only specified qualifiers may signify completion of applicable sections either written or oral examination, or by observation of performance. Should qualifiers "give away" their signatures, unnecessary difficulties can be expected in the future operations.

This JQR Card is to be maintained by the trainee and reviewed periodically to ensure awareness of progress. Upon completion of this JQR card, it is to be filed in the Trainee's Training Record.

Trainee has been indoctrinated in the JQR and has been assigned a target completion date of: _____.

Signature: _____ Date: _____

FINAL QUALIFICATIONS

Having observed satisfactory performance, it is recommended the trainee be designated a qualified GOVERNMENT DECKHAND.

RECOMMENDED _____ DATE _____
(Port Operations DLCPO)

RECOMMENDED _____ DATE _____
(Port Services Officer)

QUALIFIED _____ DATE _____
(Operations Officer)

WATCH STATION - GOVERNMENT DECKHAND

Estimated Completion Time: 1 Month

PREREQUISITES:

Attend approved USCG course for Able Bodied (AB) Limited Seaman and provide certificate of completion.

_____ Date: _____
(Operations Officer)

TASKS:

1. Demonstrate a working knowledge of the following:

a. Capstan

- (1) Danger Zone
- (2) Placement of hands
- (3) Operating procedures
- (4) Leading of the line

Contract Tug Crew/Master _____ Date _____

b. Z-Tractor Characteristics

Contract Tug Crew/Master _____ Date _____

c. Towing

- (1) Assist in rigging for stern tow/towing
- (2) Assist in rigging alongside tow
- (3) Assist in going alongside/getting underway
- (4) Assist in mooring tug to pier
- (5) Rig/discuss emergency tow

Contract Tug Crew/Master _____ Date _____

d. Stowage of deck equipment

- (1) Line - stowage and care of
- (2) Deck equipment - i.e. heaving lines/tools
- (3) Safety equipment

Contract Tug Crew/Master _____ Date _____

e. Line Handling

(1) Describe each make-up line placement on the tug and ship, submarine or barge and why they are used in the given situation.

- (a) Full abreast
- (b) Single head line
- (c) Split head line
- (d) Head and quarter
- (e) Power (HP) make-up
- (f) Towing astern

Contract Tug Crew/Master _____ Date _____

f. Set as lead deckhand, setting the deck for handling lines from start to finish.
(3 times)

Contract Tug Crew/Master _____ Date _____

Contract Tug Crew/Master _____ Date _____

Contract Tug Crew/Master _____ Date _____

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Semi-Annual Emergency Tug Crew Program Audit

The Emergency Tug program is required to be audited on an semi-annual basis. The audit shall include checks of the following:

1. Tug program binder maintained:

a. Copies of all instructions.

Initial _____

b. Copies of USCG training certificates.

Initial _____

c. Fully signed qualification cards of all qualified members.

Initial _____

d. Qualification Matrix.

Initial _____

e. Watchbill/Recall Bill.

Initial _____

2. Training Records:

a. Proficiency training documented for qualified crew (minimum of four hours per month).

Initial _____

b. Minimum of 3 trainings per week for unqualified personnel.

Initial _____

3. Discrepancies:

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I have personally viewed all qualification/training documents and signatures and have verified that JBPHH is maintaining at least two (One Tug Master, One Engineer, One Deckhand each) Emergency Government Tug Crews.

Auditor

Date

Audit sheet will be routed to the Operations Officer for review and signature:

Operations DLCPO _____

Port Operations Officer _____

Operations Officer _____

The Semi-Annual Emergency Tug Crew Program Audit Sheet will be maintained in Tug program binder for a minimum of 3 years.