

# **U. S. Coast Guard Sector**



# **Auxiliary Assistant Barge Inspector**

# **Performance Qualification Standard**

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#### Sector Training Guide

#### Auxiliary Assistant Barge Inspector Performance Qualification Standard

#### **Qualification Code: AUX-BI**

This booklet is one section of your personal on the job training (OJT) manual. It is your OJT guide to qualification as an Auxiliary Assistant Barge Inspector. It is your responsibility to document completed unit training items.

Verifying Officers shall be experienced and qualified personnel who have demonstrated the ability to evaluate, instruct, and observe other personnel in the performance task criteria. Verifying Officers must be certified in the competencies for which they are to verify and must be Sector command designated. Verifying Officers must enter their title, name, and initials in the Record of Verifying Officers section before making entries in your workbook.

A Verifying Officer shall observe your successful performance of each task and document such with date and initials in the appropriate space provided in this booklet. It may be necessary to perform a task several times. The Verifying Officer will not give credit for any task that is not performed satisfactorily.

#### • <u>Auxiliarists are prohibited from entering confined spaces. Under no circumstances</u> <u>shall any Auxiliarist be allowed to do tasks requiring such entry.</u>

Auxiliarists do not have law enforcement authority. They cannot independently exercise COTP, OCMI, FMSC or FOSC authority and may become personally liable for actions they take outside of prescribed directives. Do not allow an Auxiliarist to be placed in a position that will compromise the limitations on the member's authority.

When you have completed all of the items required for this qualification, your COTP will issue a Letter of Designation. You must forward a copy of your Letter of Designation to your DIRAUX for entry into AUXDATA. Should any item be waived the qualification is considered local and will not be entered into AUXDATA and may not be used toward qualification for the Trident device.

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RECORD OF COMPLETION				
	Traiı	ning Prerequisites	Date	Verifying Officer's Signature
A. Complet	tion of resident	training course (Optional):	1	
1. Marine	e Inspector Cou	irse		
B. Complet	ion of correspo	ondence courses:	1	
	duction to Mar atal Protection ( 100			
3. ICS 2	200			
4. ICS 2	210 or ICS 300			
5. IS 70	00			
6. IS 80	00			
C. Favorab	le DO PSI if re	quired by COTP/OCMI		
D. Complet	tion of PQS Wo	orkbook.		
E. Successf	ul completion	of unit level oral board.		
F. Designat	ion Letter subr	nitted for approval.		
	RE	CORD OF VERIFYING	OFF	ICERS
Date	Title	Verifying Officer's		Initials

RECORD OF MAJOR TASKS COMPLETED			
<u>Task</u> <u>Number</u>	Major Tasks	<u>Completed</u> <u>Date</u>	
CD03	Review vessel documents and papers on a barge.		
CD04	Assist with discussion scope of inspection with owner's representative.		
CD05	Obtain CG-2692 for reportable marine casualties.		
CD06	Examine gas-free certificate.		
CD07	Review hull gaugings and compare with original scantlings.		
CD08	Review any outstanding CG-835s and ask if other deficiencies exist.		
CD10	Review documentation to ensure FCC compliance per 47 CFR on a SPV/barge		
CD12	Review Drug and Alcohol Program documentation per 46 CFR 16.		
CD14	Examine the Certificate of Financial Responsibility		
CD17	Examine annual firefighting and lifesaving equipment certificates on a barge.		
CS03	Inspect bulk liquid cargo system on a barge.		
CS05	Inspect freight cargo systems on a barge.		
CS10	Test and inspect the emergency shutdown station(s) on a barge.		
CS12	Inspect cargo tank vents.		
CS13	Inspect closed gauging systems.		
CS24	Inspect the cargo transfer hoses for condition and required markings.		
CS25	Check person in charge of transfer operations.		
CS26	Check that incompatible cargoes are properly separated.		
CS27	Check cargo tanks' spill valves.		
DD01	Ensure that the vessel's entire underwater body is clean for examination.		
DD02	Determine whether structural configuration match approved plans.		
DD05	Examine steel hull for damage and defects.		
DD09	Examine critical joint areas.		
DD10	Examine draft marks.		
DD11	Examine load line.		

<u>Task</u> <u>Number</u>	Major Tasks	<u>Completed</u> <u>Date</u>
DD13	Examine drydock plugs for local wastage and proper fit.	
DD22	Examine anchor chains.	
DD23	Complete applicable structural failure report.	
DD24	Examine freeing ports and scuppers.	
DD27	Examine thruster (bow or stern) and thruster tunnel.	
DD29	Conduct inspection of internal spaces and structures.	
DD30	Evaluate repair proposals and inspect completed repairs.	
DD32	Conduct Special Examination in Lieu of Drydocking (SEILOD)	
EE01	Inspect fireman's outfit(s).	
EE06	Test and inspect the general alarm system on a manned barges	
EE08	Inspect pyrotechnics.	
ES01	Inspect switchboards.	
ES02	Inspect ship's service generators.	
ES05	Inspect battery installation.	
ES07	Inspect motor controllers.	
ES08	Ensure lighting systems/fixtures are adequate and meet requirements.	
ES10	Ensure receptacle outlets are properly grounded.	
ES11	Inspect distribution panels.	
ES13	Inspect electrical cable installation.	
ES19	Inspect components installed in designated hazardous locations on a barge.	
FF01	Determine amount, type, location of fire protection equipment required.	
FF05	Inspect CO <sub>2</sub> systems on a barge.	
FF08	Inspect semi-portable firefighting equipment.	
FF09	Inspect portable firefighting equipment.	
FP03	Verify that required forms, placards and notices are posted on a barge.	
GH01	Inspect berthing accommodations.	
GH06	Inspect areas where washers and dryers are installed.	

<u>Task</u> <u>Number</u>	Major Tasks	<u>Completed</u> <u>Date</u>
GH07	Inspect paint lockers.	
GH08	Inspect ladders, railways, and gangways.	
GH10	Inspect heating and cooking equipment.	
GT03	Examine ground tackle and related equipment on a barge.	
LS02	Determine amount/type of lifesaving equipment required on a barge.	
LS04	Inspect life preservers.	
LS06	Inspect ring buoys.	
LS08	Inspect immersion suits.	
LS18	Inspect inflatable liferaft installations.	
MI11	Examine potable water system.	
MI15	Observe operational tests of machinery on a barge.	
MI18	Inspect the diesel installation and assembly on a barge.	
MI25	Internally examine UPVs requiring internal examination.	
MI26	Externally examine UPVs.	
MI27	Witness Hydrostatic test of UPV.	
MI28	Ensure all UPVs are properly equipped with pressure relief valves.	
MI29	Witness pressure relief valve test.	
MI40	Ensure insulation on steam piping provided to reduce personnel hazard.	
MI41	Inspect thermal fluid heater.	
NS12	Inspect navigation and signal lights on a barge.	
NT01	Witness dye penetrant NDT in accordance with applicable standards.	
NT02	Witness magnetic particle NDT in accordance with applicable standards.	
NT03	Witness radiography NDT in accordance with applicable standards.	
NT04	Witness ultrasonic NDT in accordance with applicable standards.	
PP04	Inspect pollution prevention equipment on a barge.	
PP08	Assist in conducting an IOPP boarding and survey, and verify that required equipment is on board and in proper	

<b>RECORD OF MAJOR TASKS COMPLETED</b>
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<u>Task</u> <u>Number</u>	Major Tasks	<u>Completed</u> <u>Date</u>
	working order on a barge.	
PP10	Verify MARPOL V compliance on a SPV and/or barge.	
SD01	Verify that the Vessel Security Plan (VSP) is approved (onboard manned vessels).	
SD02	Verify that a Marine Safety Center (MSC) letter accompanies the approved security plan.	
SD03	Verify that an acknowledgment letter from the Marine Safety Center (MSC) accompanies a security plan that is under review, if applicable.	
SD04	Verify that a copy of an approved Alternate Security Program (ASP) is available for inspection, if applicable.	
SD05	Verify that the ASP includes a letter from the owner or operator certifying which ASP is in use and that the vessel is in compliance with that plan.	
SD08	Coordinate with the owner or operator to ensure the availability of the VSP/ASP for unmanned vessels.	
SD09	Verify that the approved VSP or ASP for unmanned vessels is maintained in a secure location, not onboard.	
SD11	Examine waiver letter and verify that any conditions expressed in the letter are implemented, if applicable.	
SD12	Examine the waiver approval letter from G-MP for any equivalencies that may exist.	
SD13	Identify whether equivalencies are noted in the amendments to the security plan.	
SD15	Determine validity and accuracy of crew documents.	
SD16	Determine validity and accuracy of compliance documentation.	
SD18	Identify the Company Security Officer (CSO).	
SD19	Identify designated alternate security officers, if applicable.	
SD20	Determine the effectiveness of communications arrangements between the CSO and designated alternates.	
SD26	Identify what MARSEC directive has been issued for the port.	
SD27	Determine whether the vessel has received a copy of the current directive.	

RECORD OF MAJOR TASKS COMPLETED			
<u>Task</u> <u>Number</u>	Major Tasks	<u>Completed</u> <u>Date</u>	
SD28	Verify that the vessel has effective and adequate security measures for each MARSEC level and directive that is issued and has implemented such measures.		
SD29	Select a drill at random.		
SD30	Develop a scenario for the drill selected, if appropriate.		
SD31	Review the procedures contained in the vessel's security plan for handling scenario.		
SD32	Discuss the details of the drill with the VSO prior to beginning the drill.		
SD33	Review the drill log for the best practices and lessons learned from previous drills conducted.		
SD34	Critique the drill upon completion with the VSO.		
SD35	Determine whether security deficiencies exist with the approved VSP after the drill.		
SD36	Submit VSP deficiencies in writing to owner/operator.		
SD37	Verify vessel has conducted exercises and identify whether the vessel has proof of participation in the Area Maritime Security Exercise if applicable.		
SD38	Review security records for training, drills, exercises, security threats, and equipment maintenance.		
SD39	Determine whether security records are protected against unauthorized access and disclosure.		
SD40	Review internal and external communication records relating to ship security.		
SD43	Review internal audits.		
SD44	Review auditor's qualifications.		
SD45	Review security incident procedures.		
SD49	Determine whether the security sweep was in accordance with the company's security plan.		
SD50	Determine whether the sweep adhered to the locally issued MARSEC directives.		
SD51	Determine whether the vessel had implemented any alternatives documented in the security plan.		
SD52	Determine whether these alternatives are allowable by the regulations and provide an equivalent amount of security for the vessel.		
SD53	Determine whether the vessel is in noncompliance with		

RECORD OF MAJOR TASKS COMPLETED			
<u>Task</u> <u>Number</u>			
	their security plan.		
SD54	Advise the Captain of the Port of findings, if applicable.		
SD55	Describe how a CG-835 is issued to suspend, restrict, or continue operations, if applicable.		
SD56	Witness receipt of enforcement decision from Captain of the Port.		
SD57	Describe how to Advise master of enforcement actions.		
SD58	Complete MISLE case documentation.		
WI01	Inspect watertight doors.		
WI04	Inspect watertight bulkhead penetrations.		
WI08	Inspect port light covers.		
WR01	Evaluate welding repair proposal.		
WR02	Complete initial visual inspection of weld repair.		
WR03	Complete intermediate visual inspection of weld repair.		
WR04	Complete final visual inspection of weld repair.		
WR05	Witness pressure testing of welded repairs.		
WR06	Assist in Completing steps to approve Weld Procedure Specification (WPS) for engineering and cargo system construction or repair IAW Subchapter F of the Code of Federal Regulations.		
WR07	Assist in Completing steps to approve Weld Performance Qualifications (WPQ) for engineering and cargo system construction or repair IAW Subchapter F of the Code of Federal Regulations.		
WR08	Review approved Weld Procedure Specification (WPS) for engineering and cargo system construction or repair.		
WR09	Review approved Welder Performance Qualification (WPQ) for engineering and cargo system construction or repair.		
WR10	Assist in Determining suitability of hull construction and repair welding procedures.		
WR11	Assist in Determining suitability of hull welders.		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
CD03 CD04	Review vessel documents listed in MISLE and papers on a barge. Assist in Discussing scope of inspection with owner's representative. Decide on general sequence of inspection.		
CD05	Obtain CG-2692 for reportable marine casualties/ structural failure report.		
CD06	<ul> <li>Examine gas-free certificate issued by an NFPA-certified marine chemist for hot work and/or confined space entry.</li> <li>Information on the gas-free certificate meet the requirements of NFPA Standard 306 and Coast Guard confined space entry/benzene exposure policy</li> <li>Gas-free certificate been maintained by a designated competent person and records kept as required by OSHA regulations</li> </ul>		
	<ul> <li>Marine chemist certified by NFPA</li> <li>Review benzene and confined space entry policies</li> </ul>		
CD07	<ul> <li>OSHA Competent Person log up to date</li> <li>Meters used by OSHA Competent Person are calibrated Review hull gaugings and compare with original scantlings.</li> </ul>		
CD08	Consider spot gauging by NDT or drilling. Review any MSIS inspection notes and outstanding deficiencies (CG-835s). Ask owner's representative if any other deficiencies		
CD10	<ul> <li>exist.</li> <li>Review documentation to ensure FCC compliance per 47 CFR on a SPV/barge:</li> <li>FCC Station License</li> <li>FCC Safety Certificate</li> <li>FCC Operations Permit</li> </ul>		
CD12	<ul> <li>FCC Marine Radio Operator Permit Review Drug and Alcohol Program documentation per 46 CFR 16:</li> <li>Employee Assistance Program</li> <li>Annual Program Audits</li> <li>Records</li> </ul>		
CD14 CD17	<ul> <li>Types of chemical testing conducted</li> <li>Examine the Certificate of Financial Responsibility.</li> <li>Examine annual firefighting and lifesaving equipment certificates on a barge.</li> </ul>		

<u>Task</u> <u>Number</u>

#### <u>AUX-EC</u> <u>Task</u>

<u>Date</u> Completed <u>Verifying</u> Officer's Initials

CS03 Inspect bulk liquid cargo system on a barge.

- Pumprooms and/or pumping equipment:
  - Lighting fixtures and all electrical equipment are explosion proof
  - No dead ended, loose or frayed cabling
  - No jury-rigged wiring, extension cords, etc.
  - Bulkheads gas tight
  - o Ladders
  - Ventilation system complete and operating
  - Pumps and controls operational
  - o No leaking seals
  - Mechanical and electrical remote operating devices attached and operational
- Cargo piping:
  - Piping
  - o Valves
  - Fittings
  - Gaskets
  - Supports
  - o Materiel condition of all components
  - Expansion joints
  - Last hydrostatic test date within required time frame
- Gauging and venting system:
  - Type of gauging (open, closed, restricted)
  - Gauging type approved for cargo carried
  - Gauging systems operational
  - High and low level alarms
  - o Overfill controls
  - Condition of vent piping and vent masts
  - Vent outlets at proper height
  - Required valves installed and operational
  - Pressure relief valves tested and certified no signs of tampering
  - Pressure vacuum valves and headers free of corrosion or dirt
  - Flame screens installed and acceptable
  - Vapor recovery system
    - Indicate which tanks
    - Separate from hotel services for toxic cargoes
    - Contamination detection available for toxic cargo
  - System operational
- Operational procedures:
  - o Aboard vessel
  - o Procedures in compliance with applicable CFR parts
  - Transfer system adequately described

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> Officer's Initials
CS05	<ul> <li>Inspect freight cargo systems on a barge.</li> <li>Lashings/securing devices</li> <li>Valid cargo gear certificates aboard</li> <li>Cargo gear examined in absence of cargo gear certificate</li> <li>Vessel loading manual available</li> <li>Fire detection system in hatches</li> </ul>		
	<ul> <li>Fire safety and personnel hazards</li> </ul>		
CS10	<ul> <li>Test and inspect the emergency shutdown station(s) on a barge.</li> <li>Minimum number of stations</li> <li>Stations properly located and marked</li> <li>Means provided to stop cargo pumps and close valves</li> <li>Pump and valve shutdowns operate in the prescribed time</li> <li>Valves may be operated manually and fail safe (closed)</li> </ul>		
CS12	<ul> <li>Fusible elements correctly installed</li> <li>Emergency shutdown controls installed at the cargo control station</li> <li>Inspect cargo tank vents.</li> </ul>		
0312	<ul> <li>Vents heights adequate and within CFR and IMO requirements</li> <li>Vents located properly with respect to discharge areas</li> <li>Drain traps installed</li> <li>PV valves set to lift at proper pressure</li> </ul>		
CS13	<ul> <li>If v valves set to fit at proper pressure</li> <li>Inspect closed gauging systems.</li> <li>High level alarms provided</li> <li>High levels alarms have audible and visual indicators at the cargo control station</li> <li>Alarm level set within the limits prescribed by IMO or CFRs</li> </ul>		
CS24	Inspect the cargo transfer hoses for condition and required markings.		
CS25	Ensure that the person in charge of transfer operations is eligible and properly designated.		
CS26	Ensure that incompatible cargoes are properly separated.		
CS27	Ensure that cargo tanks' spill valves operate properly.		
DD01	Ensure that the vessel's entire underwater body is clean and exposed for examination (areas in way of blocking excluded).		
DD02	Determine whether structural configurations match approved plans.		
DD05	Examine steel hull for damage and defects.		
DD09	<ul><li>Examine critical joint areas.</li><li>Sheer strake</li><li>Stringer plate</li></ul>		
DD10	Examine draft marks (placement of marks consistent with stability letter and properly scribed).		
DD11	Examine load lines (placement of marks consistent with load line certificate and properly scribed).		
DD13	Examine drydock plugs for local wastage and fit.		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> Officer's Initials
DD22	Examine anchor chains and determine if links are distorted or deteriorated excessively.		
DD23	<ul> <li>Complete applicable structural failure report.</li> <li>Obtain report on CG-2692 as per MSMVol II Section A, Chapter 5.F.3</li> <li>Notify CG3-PCV-1 IAW MSMVol II Section A, Chapter 5.F.3.</li> </ul>		
DD24	Examine freeing ports and scuppers.		
DD27	<ul> <li>Examine thruster (bow or stern) and thruster tunnel.</li> <li>Deterioration and cracks</li> <li>Erosion of welds</li> <li>Shaft seal or packing gland leakage</li> <li>Evidence of electrolytic corrosion</li> </ul>		
DD29	<ul> <li>Conduct inspection of internal spaces and structures for fractured welds, fractured structural members, coating failure, deterioration, and buckled or distorted structure.</li> <li>Marine Chemist Certificate and OSHA Competent person log required for confined space entry</li> <li>Deck beams, underdeck longitudinals, deck girders</li> <li>Side and bottom longitudinals</li> <li>Center vertical keel and keelsons Frames, stiffeners, and brackets</li> <li>Hatch covers</li> </ul>		
DD30	<ul> <li>Fractic covers</li> <li>Evaluate repair proposals and inspect completed repairs.</li> <li>Sketch and bill of materials</li> <li>Materials and welding details same as original</li> <li>Inserts properly made</li> <li>Fit up and joint preparation</li> <li>Back gouging</li> <li>Weld sequencing</li> <li>Visual inspection of completed repair</li> <li>Pressure test repairs (hose, air, hydro)</li> </ul>		
DD32	<ul> <li>Conduct Special Examination in Lieu of Drydocking (SELOID)</li> <li>Inspect contents of diving operations manual on board.</li> <li>Check designation of diving supervisor.</li> <li>Check designation of person-in-charge.</li> <li>Inspect diving equipment.</li> <li>Ensure proper diving procedures are used in each diving mode.</li> <li>Ensure SEILOD proposal contains required information.</li> <li>Ensure CG accepted SEILOD proposal is on board and being followed.</li> <li>Inspect contents of diving operations manual on board.</li> <li>Monitor diver video examination and evaluate results.</li> </ul>		
EE01	<ul> <li>Inspect fireman's outfit(s).</li> <li>Proper number aboard vessel</li> <li>Outfits correctly stowed</li> <li>Describe what constitutes a fireman's outfit</li> </ul>		

Revision Date: 05 August 2015

<u>Task</u> <u>Number</u>

**EE06** 

#### <u>AUX-EC</u> <u>Task</u>

<u>Date</u> Completed <u>Verifying</u> Officer's Initials

٠	What spare equipment is required
•	Location(s) of fireman's outfits list

- Location(s) of fireman's outfits listed on fire safety plan
  Location(s) marked in accordance with applicable
- regulations
- Steps been taken to thwart pilfering and do they deny legitimate access to equipment
- Communications system to the bridge necessary

#### Test and inspect the general alarm system on a manned barge

- Contact makers located in accordance with applicable regulations
- General alarm bells located in accordance with applicable regulations
- Sound levels produced meet the minimum criteria required by regulations (is it loud enough)
- Any of the alarm bells inoperative
- Visual signals installed in areas of high ambient noise level
- Contact makers and general alarm bells marked in accordance with regulations

#### EE08 Inspect pyrotechnics.

- Proper type equipment provided for vessel being inspected
- Equipment provided within time limits for service life
- Equipment properly stowed
- Persons in charge of lifeboats knowledgeable in use of equipment

#### ES01 Inspect switchboards.

- Nonconductive mat on deck in front of board
- Nonconductive rails on board face
- Nonconductive rails at the rear and sides
- Dripshield on the board's top
- Ground detection indicators working with no grounds indicated
- Meters calibrated and working
- Synchronizing controls working.
- Identification for controls and meters
- Area is dry and clean
- Working space is provided in accordance with regulations
- Overcurrent protection properly labeled

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
ES02	Inspect ship's service generators.		
	<ul> <li>Generators of a size or arrangement which require overspeed trips</li> </ul>		
	• Operational test of overspeed trips and alarms within		
	<ul><li>specified limits</li><li>If the DC or AC generators operate in parallel, are the</li></ul>		
	reverse power/current trips working		
	• Guards installed around rotating or live machinery		
	Discoloration from overheating apparent     Eiters on air inteless working to loop interrupts from from		
	<ul> <li>Filters on air intakes working to keep internals free from dust and dirt</li> </ul>		
	Windings oily or dirty		
	Odd bearing noises present		
	• Voltage regulated within limits specified by CFR		
	<ul><li>Working diesel low lube oil pressure trip and alarms</li><li>Working high temperature detectors and alarms for AC</li></ul>		
	generators		
	Nameplates properly in place		
ES05	Inspect emergency batteries.		
	<ul><li>Size of installation and required ventilation</li><li>Battery box is properly lined</li></ul>		
	<ul> <li>Batteries are secure in the trays</li> </ul>		
	<ul> <li>Adequate space provided over the cells</li> </ul>		
	• A means of charging is provided		
	Conductor overcurrent protection is provided		
ES07	• Ventilation/charger interlocked Inspect motor controllers.		
LSUT	<ul> <li>Units are installed in suitable cases, or if open type, within</li> </ul>		
	limited access enclosure		
	• Wearing parts are accessible		
	Controls are marked for each motor served		
	<ul> <li>Wiring diagram is affixed to the controller enclosure</li> <li>Motor controllers are drip-proof/watertight</li> </ul>		
ES08	Ensure lighting systems and fixtures are adequate and meet		
	regulations.		
	Passageways and public areas		
	<ul><li>Machinery spaces</li><li>Passenger and crew spaces</li></ul>		
	<ul><li>Passenger and crew spaces</li><li>Berth lights</li></ul>		
	• Exit lights		
	• Pilot ladders		
	Navigation		
	<ul> <li>Signaling lights</li> <li>Lifeboot and liferaft ambarkation stations</li> </ul>		
ES10	• Lifeboat and liferaft embarkation stations Ensure receptacle outlets have grounding poles and are properly		
2010	grounded.		
ES11	Inspect distribution panels.		
	Circuit directory provided		
	• Amperage ratings of the protective devices in accordance		

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<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> Officer's Initials
ES13	<ul> <li>with required circuit directory</li> <li>Panelboard blanks installed, where necessary</li> <li>Inspect electrical cable installation and determine:</li> <li>Vertical and horizontal supports properly spaced</li> <li>Radius of the bends exceed CFR specifications</li> <li>Portable cables used for unauthorized purposes</li> <li>Acceptable materials used</li> </ul>		
ES19	<ul> <li>Hazardous conditions exist (jury rigs, dead end cables, splices, etc.)</li> <li>Inspect components installed in designated hazardous locations on a barge.</li> <li>Paint locker</li> </ul>		
FF01	• Cargo area Determine amount, type and location of fire protection equipment required.		
FF05	<ul> <li>By the vessel's Certificate of Inspection</li> <li>By the respective regulations</li> <li>Inspect fixed CO2 systems on a barge.</li> <li>Obtain servicing reports</li> <li>Bottles underweight</li> <li>Flexible loops serviced and tested</li> </ul>		
FF08	<ul> <li>Diffuser heads clear</li> <li>Access to CO2 room free of obstruction</li> <li>Hydrostatic test required by regulations</li> <li>Instructions posted</li> <li>Inspect semi-portable fire fighting equipment.</li> </ul>		
	<ul> <li>Installation approved</li> <li>System serviceable</li> <li>Instructions posted</li> <li>Correct type and amount on hand</li> <li>Markings correct</li> </ul>		
FF09	<ul> <li>Inspect portable firefighting equipment.</li> <li>Fire extinguishers approved</li> <li>Each unit serviceable</li> <li>Adequate spare charges provided</li> <li>Correct type and amount on hand</li> <li>Distributed per fire control plan</li> <li>Markings correct</li> </ul>		
FP03	<ul> <li>Servicing properly logged</li> <li>Verify that the required forms, placards, and notices are posted on a barge.</li> <li>Pollution/MARPOL: <ul> <li>Placard</li> <li>Waste management plan</li> </ul> </li> <li>Coast Guard forms: <ul> <li>CG-841: Certificate of Inspection</li> <li>CG-3372: Oil Pollution</li> </ul> </li> <li>Markings: conspicuous and legible</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> Officer's Initials
GH01	<ul> <li>Inspect berthing accommodations.</li> <li>Spaces provided of size required by regulations</li> <li>Appropriate number of berths provided</li> <li>Proper seating available for passengers</li> <li>Lockers of proper size provided for each berth</li> <li>Screens provided for ventilation ports on non-air conditioned vessels</li> <li>Mechanical ventilation/air-conditioning systems operating properly</li> <li>Adequate number of toilets and washrooms provided for number of persons in crew specified on certificate of inspection, kept in good repair and in a sanitary condition</li> <li>Lights provided for each berth</li> </ul>		
GH06	<ul> <li>Hot water heating piping within the space properly lagged</li> <li>Electrical hazards</li> <li>Two means of escape provided from each berthing space and other areas where personnel would normally be employed</li> <li>Inspect areas where washers and dryers are installed.</li> <li>Dryer unit is properly vented and no fire hazard due to lint buildup exists</li> </ul>		
GH07	<ul> <li>"Jury-rigged wiring" systems for units are employed</li> <li>Units securely mounted</li> <li>Inspect paint lockers.</li> <li>Required fire protection equipment provided in accordance with applicable regulations and vessel's approved fire safety plan</li> </ul>		
GH08	<ul> <li>Space(s) designated constructed of or wholly lined with metal</li> <li>Space(s) well vented and means provided to secure ventilation if necessary</li> <li>Inspect ladders, rails and gangways.</li> <li>An approved pilot ladder provided and maintained in good</li> </ul>		
GH10	<ul> <li>repair</li> <li>Accommodation ladder of sufficient size provided to be used when distance from sea level to vessel's deck is more than 30 feet</li> <li>"Rails" are provided on accommodation ladders, when used Inspect heating and cooking equipment.</li> </ul>		
GT03	<ul> <li>Thermal cutouts for electric space heaters</li> <li>Grab rails for electric ranges</li> <li>LPG/CNG installed in accordance with regulations</li> <li>Verify that ground tackle and related equipment is in satisfactory condition on a barge.</li> </ul>		
LS02	<ul> <li>Anchors</li> <li>Chain</li> <li>Winch and foundations</li> <li>Anchor chain stoppers</li> <li>Anchor handling davits</li> <li>Determine amount and type of lifesaving equipment required on</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
LS04	<ul> <li>a barge.</li> <li>Certificate of Inspection</li> <li>CFR</li> <li>Inspect life preservers.</li> </ul>		
	<ul> <li>Properly equipped with lights, whistles and reflective tape</li> <li>Approved for intended service</li> <li>Sufficient serviceable units aboard and properly stowed</li> <li>Properly marked</li> </ul>		
LS06	<ul> <li>Inspect ring buoys.</li> <li>Approved for intended service</li> <li>Properly colored and marked</li> <li>Correctly equipped with waterlights and line</li> <li>Serviceable</li> </ul>		
LS08	<ul> <li>Sufficient number of ring buoys aboard Inspect immersion suits.</li> <li>Equipped as required</li> <li>Physically serviceable</li> <li>Sufficient number of units aboard and properly stowed</li> </ul>		
LS18	<ul> <li>Sufficient number of units aboard and properly stowed Inspect inflatable liferaft installations.</li> <li>Serviced annually</li> <li>Last servicing date at approved facility</li> <li>Properly secured in the cradle designed for them</li> <li>Hydrostatic releases serviced</li> <li>Alternative means of securing meets criteria promulgated in NVIC 4-86</li> <li>Suspension test</li> <li>Davit weight test</li> </ul>		
MI11	<ul> <li>Operating instructions posted at embarkation station Examine potable water system.</li> <li>Dedicated tanks; treated or coated</li> <li>Tanks ventilated with insect screens installed</li> <li>Water pump(s) and pressurization system operable</li> <li>Pressure tank installation</li> </ul>		
MI15	<ul> <li>Determine what prime mover operational tests are required; witness tests and state if results are satisfactory on a barge.</li> <li>Overspeed trips</li> <li>Low lube oil shutdowns and alarms</li> <li>High coolant temperature alarm</li> </ul>		
MI18	<ul> <li>Ingli coolait temperature alarm</li> <li>Inspect the diesel installation and assembly on a barge, paying particular attention to the following:</li> <li>Fuel and lube oil fittings (checking for leakage)</li> <li>Instrumentation</li> <li>Guards over rotating machinery</li> <li>Exhaust system: <ul> <li>Leaks</li> <li>Lagging</li> </ul> </li> <li>Water cooling system</li> <li>Air intakes</li> <li>Crankcase vents (clear)</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> <u>Officer's Initials</u>
MI25	<ul> <li>Starting system</li> <li>Emergency shutdown linkage</li> <li>Internally examine unfired pressure vessels requiring internal examination.</li> </ul>		
MI26	<ul> <li>Check for corrosion, scale, pitting, cracks and erosion</li> <li>Examine welded connections internally</li> <li>Externally examine unfired pressure vessels.</li> <li>Pressure gauge</li> <li>Evidence of structural damage</li> </ul>		
MI27	<ul> <li>Data plate legible</li> <li>Foundations structurally sound</li> <li>Attachments secure</li> <li>Witness Hydrostatic test of unfired pressure vessel.</li> <li>Determine when hydrostatic test required</li> </ul>		
MI28	<ul> <li>Determine MAWP</li> <li>Observe pressure test</li> <li>Ensure all unfired pressure vessels are properly equipped with pressure relief valves.</li> </ul>		
MI29	<ul> <li>Witness pressure relief valve test.</li> <li>MAWP not exceeded</li> <li>Valve seats tightly</li> <li>Spring set within range</li> <li>Correct valve type</li> <li>Hand lifting device</li> </ul>		
MI40	Ensure insulation is provided to reduce personnel hazard.		
MI41	Inspect thermal fluid heater.		
	<ul> <li>External fittings</li> <li>Mountings opened or removed if deemed necessary</li> <li>Hydrostatic test</li> <li>Relief valve tested</li> <li>Automation tested per approved procedure</li> <li>Illegal bypasses or jury rigging</li> </ul>		
NS12	<ul> <li>Inspect navigation and signal lights on a barge.</li> <li>Properly functioning</li> <li>Correctly placed in accordance with applicable regulations</li> <li>Certificate of alternative compliance on</li> <li>Board</li> </ul>		
NT01	<ul> <li>Properly installed battery-operated lights</li> <li>Witness dye penetrant NDT in accordance with applicable standards.</li> <li>Approve NDT method for specific applications.</li> </ul>		
	<ul> <li>Determine acceptability of technician's qualification.</li> <li>Evaluate results.</li> </ul>		
NT02	<ul> <li>Witness magnetic particle NDT in accordance with applicable standards.</li> <li>Approve NDT method for specific applications.</li> <li>Determine acceptability of technician's qualification.</li> <li>Evaluate results.</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
NT03	<ul> <li>Witness radiography NDT in accordance with applicable standards.</li> <li>Approve NDT method for specific applications.</li> <li>Determine acceptability of technician's qualification.</li> </ul>		
NT04	<ul> <li>Evaluate results.</li> <li>Witness ultrasonic NDT in accordance with applicable standards.</li> <li>Approve NDT method for specific applications.</li> <li>Determine acceptability of technician's qualification.</li> <li>Evaluate results.</li> </ul>		
PP04	<ul> <li>Inspect pollution prevention equipment and documentation on a barge.</li> <li>Discharge containment in place and of the proper type and size for cargo, fuel, or lube oil, as needed</li> <li>Oil discharge prohibition placard</li> <li>No fuel or dirty oil is carried in a prohibited oil space</li> <li>Proper documentation for the person(s) assigned to vessel who deal directly with oil transfer to and from vessel</li> <li>Required transfer procedures are correct, complete, and available to assigned personnel as required</li> <li>Emergency shutdown system(s) function properly</li> <li>Adequate communication between participants in transfer operations and sufficient lighting at critical work stations provided where specified by regulation</li> <li>Required records for tests and inspections of oil transfer hoses and equipment and declarations of inspection available, current, and correct, where required</li> </ul>		
PP08	• Scupper plugs available for use during oil transfer operations Assist in Conducting an IOPP boarding and survey, and verify that required equipment is on board and in proper working order on a barge.		
PP10	<ul> <li>Shipboard oil/marine pollution emergency plan Verify MARPOL V compliance on a small passenger vessel and/or barge.</li> <li>Check waste management plan</li> <li>Plastics retained or incinerated</li> <li>Placards posted</li> </ul>		
SD01	Verify that the Vessel Security Plan (VSP) is approved (onboard		
SD02	manned vessels). Verify that a Marine Safety Center (MSC) letter accompanies the		
SD03	approved security plan. Verify that an acknowledgment letter from the Marine Safety Center (MSC) accompanies a security plan that is under review, if applicable.		
SD04	Verify that a copy of an approved Alternate Security Program (ASP) is available for inspection, if applicable.		
SD05	Verify that the ASP includes a letter from the owner or operator certifying which ASP is in use and that the vessel is in compliance with that plan.		

<u>Task</u> Number	<u>AUX-EC</u> Task	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
SD08	Coordinate with the owner or operator to ensure the availability of the VSP/ASP for unmanned vessels.		
SD09	Verify that the approved VSP or ASP for unmanned vessels is maintained in a secure location, not onboard.		
SD11	Examine waiver letter and verify that any conditions expressed in the letter are implemented, if applicable.		
SD12	Examine the waiver approval letter from G-MP for any equivalencies that may exist.		
SD13	Identify whether equivalencies are noted in the amendments to the security plan.		
SD15	Determine validity and accuracy of crew documents.		
SD16	Determine validity and accuracy of compliance documentation.		
SD18	Identify the Company Security Officer (CSO).		
SD19	Identify designated alternate security officers, if applicable.		
SD19 SD20	Determine the effectiveness of communications arrangements		
SD20	between the CSO and designated alternates. Identify what MARSEC directive has been issued for the port.		
SD20 SD27			··
SD27	Determine whether the vessel has received a copy of the current directive.		
SD28	Verify that the vessel has effective and adequate security measures for each MARSEC level and directive that is issued and has implemented such measures in accordance with time requirements for:		
	Access Control		
	Restricted Areas		
	Cargo Handling		
	<ul> <li>Delivery of Vessel Stores and Bunkers</li> </ul>		
	Recurring and Non-recurring deliveries		
SD29	Select a drill at random.		
	Selection and location as directed by Master/VSO		
SD30	Develop a scenario for the drill selected, if appropriate.		
SD31	Review the procedures contained in the vessel's security plan for handling scenario.		
SD32	Discuss the details of the drill with the VSO prior to beginning the drill.		
	• Drill tests individual elements of security plan		
	• Drill tests response to security incident in accordance with plan		
SD33	Review the drill log for the best practices and lessons learned from previous drills conducted.		
	• Ensure drills are conducted every 3 months		
SD34	Critique the drill upon completion with the VSO.		
SD35	Determine whether security deficiencies exist with the approved VSP after the drill.		
SD36	Submit VSP deficiencies in writing to owner/operator.		
SD37	Verify vessel has conducted exercises and identify whether the vessel has proof of participation in the Area Maritime Security Exercise if applicable.		
	<ul> <li>Must be conducted at least once each calendar year, with no</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> Task	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
	more than 18 months between exercises		
SD38	Review security records for training, drills, exercises, security		
	threats, and equipment maintenance.		
	• For training, date of each session, duration of session, a		
	description of the training, and a list of attendees		
	• For each drill or exercise, date held, description of drill or exercise, list of participants; and any best practices or		
	lessons learned		
	<ul> <li>For changes in MARSEC levels, date and time of</li> </ul>		
	notification received, and time of compliance with additional		
	requirements		
	• For security threats, date and time of occurrence, how the		
	threat was communicated, who received or		
	identified the threat, description of threat, to whom it was		
SD39	reported, and description of the response		
3D39	Determine whether security records are protected against unauthorized access and disclosure.		
SD40	Review internal and external communication records relating to		
	ship security.		
SD43	Review internal audits.		
	Annual audit of VSP		
	• Letter certified by the CSO or VSO stating the date the audit		
SD44	was completed		
SD44	Review auditor's qualifications.		
SD45	Review security incident procedures.		
	• For security incidents, the date and time of occurrence, location within the port, location within the vessel,		
	description of incident or breaches, to whom it was reported,		
	and description of the response		
SD49	Determine whether the security sweep was in accordance with		
	the company's security plan.		
SD50	Determine whether the sweep adhered to the locally issued		
SD51	MARSEC directives. Determine whether the vessel had implemented any alternatives		
5051	documented in the security plan.		
SD52	Determine whether these alternatives are allowable by the		
	regulations and provide an equivalent amount of security for the		
	vessel.		
SD53	Determine whether the vessel is in noncompliance with their		
SD54	security plan.		
SD54	Advise the Captain of the Port of findings, if applicable.		
SD55	Describe how a CG-835 is issued to suspend, restrict, or continue operations, if applicable.		
SD56	Witness the receipt enforcement decision from COTP.		
SD53	Describe how to Advise master of enforcement actions.		
SD57 SD58	Complete MISLE case documentation.	<u> </u>	
SD38 WI01	-		
W101	<ul><li>Inspect watertight doors.</li><li>Knife edges intact and in good repair; no excessive paint</li></ul>		
	buildup		
	····· <b>r</b>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> Completed	<u>Verifying</u> Officer's Initials
	<ul> <li>Gasket material installed in channel is in good condition and not painted</li> <li>Knife edges and channel meet as designed when door closed</li> <li>Hinges and hinge bolts in good condition; no sagging of door due to rounded out hinges or worn hinge bolts</li> <li>Dogs are all operable; grease fittings still usable</li> <li>Dogging wedges not excessively worn and fit up satisfactory</li> <li>Quick-closing gear operable and adequate closure achieved</li> <li>Any port lights installed in watertight doors use wire mesh reinforced glass</li> </ul>		
WI04	<ul> <li>Dogging wrench provided in vicinity of watertight door(s) Inspect watertight bulkhead penetrations.</li> <li>Penetrations properly sealed to maintain watertight integrity through use of devices such as stuffing tubes</li> <li>Sealant used, if stuffing tubes are employed, is non- flammable product designed for such use and is approved</li> </ul>		
WI08	<ul> <li>flammable product designed for such use and is approved</li> <li>Inspect port light covers.</li> <li>Port lights at the main deck level have a cover installed</li> <li>Dogs free on each shutter</li> <li>Shutters restricted in their movement from stowed-to-closed position</li> </ul>		
WR01	<ul> <li>Evaluate welding repair proposal.</li> <li>Plan or sketch submitted with bill of materials</li> <li>Configuration of repair acceptable</li> <li>Material specification same as existing or equivalent</li> <li>Method of joining acceptable</li> </ul>		
WR02	<ul> <li>Complete initial visual inspection of weld repair.</li> <li>Examine fit up in accordance with approved weld procedures</li> <li>Examine joint preparation in accordance with approved weld procedures</li> <li>Verify materials (base, filler, gas) in accordance with approved weld procedures</li> <li>Verify proper preheat temperature/time</li> <li>in accordance with approved weld procedures</li> <li>Evaluate weather conditions</li> <li>Check welding equipment in accordance with approved weld</li> </ul>		
WR03	<ul> <li>procedures</li> <li>Complete intermediate visual inspection of weld repair.</li> <li>Check back gouging for full penetration weld</li> <li>Check proper cleaning between weld passes</li> <li>Check interpass temperatures in accordance with approved procedures</li> <li>Verify that proper weld sequencing is followed</li> </ul>		
WR04	<ul> <li>Evaluate weather conditions</li> <li>Complete final visual inspection of weld repair.</li> <li>Perform dry search to ensure welding complete and followed weld details</li> <li>Perform surface inspection of welds for defects</li> </ul>		

<u>Task</u> <u>Number</u>	<u>AUX-EC</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> Officer's Initials
WR05	<ul> <li>Verify proper postheat temperature/time in accordance with approved weld procedures</li> <li>Witness pressure testing of welded repairs.</li> <li>Witness hose testing</li> </ul>		
WR06	<ul> <li>Witness hose testing</li> <li>Witness air testing</li> <li>Witness hydrostatic testing</li> <li>Assist in Completing steps to approve Weld Procedure Specification (WPS) for engineering and cargo system</li> </ul>		
	<ul> <li>construction or repair IAW Subchapter F of the Code of Federal Regulations.</li> <li>Witness WPS test coupon fit for welding</li> <li>Review coupon test results</li> <li>Draft WDS corrected</li> </ul>		
WR07	• Draft WPS approval Assist in Completing steps to approve Welder Performance Qualification (WPQ) for engineering and cargo system construction or repair IAW Subchapter F of the Code of Federal Regulations.		
WR08	<ul> <li>Witness WPS test coupon fit for welding</li> <li>Review coupon test results</li> <li>Draft WPS approval</li> <li>Review approved Weld Procedure Specification (WPS) for</li> </ul>		
WR09	<ul> <li>engineering and cargo system construction or repair.</li> <li>Determine suitability of WPS for application</li> <li>Determine suitability of third party WPS acceptance Review approved Welder Performance Qualification (WPQ) for engineering and cargo system construction or repair.</li> </ul>		
WR10	<ul> <li>Determine suitability of WPS for application</li> <li>Determine suitability of third party WPS acceptance</li> <li>Assist in Determining suitability of hull construction and repair welding procedures.</li> </ul>		
WR11	<ul> <li>Review class approvals for classed vessels</li> <li>Determine acceptability of hull welders for unclassed vessels</li> <li>Assist in Determining suitability of hull construction and repair welders.</li> </ul>		
	<ul> <li>Review class welder approvals for classed vessels</li> <li>Determine acceptability of hull welders for unclassed vessels</li> </ul>		

DATE	LOCATION	VESSEL NAME	VESSEL CLASS	INSPECTION TYPE	LEAD INSPECTOR

NOTES

NOTES

### SAMPLE LETTER OF DESIGNATION

U.S. Department of **Homeland Security United States Coast Guard** 



Command's Name

Street Address City, State Zip Code Staff Symbol: Phone: Email:

1601 DATE

### **MEMORANDUM**

From:	I. M. Frank, CAPT
	Unit's Name

Reply to Attn of:

To: M. O. Ore, USCG Auxiliary

Subj: DESIGNATION AS AUXILIARY ASSISTANT BARGE INSPECTOR

Ref: Auxiliary Assistant Barge Inspector Performance Qualification Standard Workbook

1. Congratulations! You have completed all requirements necessary to perform the duties of an Auxiliary Assistant Barge Inspector. You are authorized to carry out the responsibilities of an Auxiliary Assistant Barge Inspector within the scope of your qualifications. This is a significant milestone in your professional development and I commend your accomplishments.

2. This Letter of Designation should be retained as part of your personal Training Record and you will be assigned the Auxiliary Assistant Barge Inspector Qualification Code "AUX-BI".

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