

14 Dec 94

(6) Emergency Ship Control.

SIGNATURE DATE  
[Signature] 6/15/94

(7) Emergency bills:

(a) Fire.

[Signature] 5/26/98

(b) Flooding.

[Signature] 5/26/98

(c) Collision.

[Signature] 5/26/98

(d) Toxic Gas.

[Signature] 5/26/98

(e) General Emergency.

[Signature] 6/15/94

(f) Man Overboard.

[Signature] 5/26/98

(g) Loss of Electrical Power.

[Signature]

(8) Propulsion.

[Signature] 5/26/98

(9) Standard orders to the helm  
(including conning orders).

[Signature] 1/28/98

(10) Verticle Surface.

[Signature]

(11) Verticle Dive.

[Signature]

(12) Under Ice Operations.

[Signature]

(13) Battle Stations.

[Signature]

c. Demonstrate a thorough knowledge of the following.

(1) Depth Sensing System.

[Signature] 6/15/94

(2) Ship Control Panel (SCP).

[Signature] 6/15/94

(3) Speed effects on planes and  
rudder.

[Signature]

(4) Bow planes operation.  
(All modes)

[Signature] 5/28/98

(5) Stern planes operation.  
(All modes).

[Signature] 5/28/98

(6) Rudder operation (all modes).

[Signature] 5/28/98

104

- |  | <u>SIGNATURE</u>   | <u>DATE</u>    |
|--|--------------------|----------------|
| (7) Secondary Propulsion Motor operation.                                    | <u>[Signature]</u> | <u>6/15/94</u> |
| (8) Vernier and dive stop control.   | <u>[Signature]</u> | <u>5/28/98</u> |
| (9) Stick and dive stop control.   | <u>[Signature]</u> | <u>6/15/94</u> |
| (10) Periscope depth operations.   | <u>[Signature]</u> | <u>1/29/98</u> |
| (11) Loss of control surface response.                                       | <u>[Signature]</u> |                |
| (12) Emergency Deep.   | <u>[Signature]</u> | <u>5/28/98</u> |
| (13) Submerged operating envelope.   | <u>[Signature]</u> | <u>1/29/98</u> |
| (14) Engine order telegraph.   | <u>[Signature]</u> | <u>5/28/98</u> |
| (15) Helmsman effect on the AN/BSY-1 Combat Control and Acoustic Subsystems. | <u>[Signature]</u> | <u>6/15/94</u> |

d. Know the following systems as they relate to the Helmsman/Planesman:

- |                          |                    |                |
|--------------------------|--------------------|----------------|
| (1) Repeaters.           | <u>[Signature]</u> | <u>6/15/94</u> |
| (2) Hydraulics.          | <u>[Signature]</u> | <u>6/15/94</u> |
| (3) Indicating circuits. | <u>[Signature]</u> | <u>6/15/94</u> |

3. PRACTICAL FACTORS. Satisfactorily perform and demonstrate a thorough knowledge of the following operations through actual performance:

a. Inboard Station:

- |  | <u>SIGNATURE</u>   | <u>DATE</u>    |
|--|--------------------|----------------|
| (1) Diving.  | <u>[Signature]</u> | <u>5/18/94</u> |
| (2) Surfacing.   | <u>[Signature]</u> | <u>5/18/94</u> |
| (3) Periscope Depth operation.                                   | <u>[Signature]</u> | <u>1/29/98</u> |
| (4) Operate bow planes and rudder in normal and emergency modes. | <u>[Signature]</u> | <u>5/18/94</u> |

SIGNATURE                      DATE

- (5) Operate planes and rudder in single stick control.
- (6) High speed operation.
- (7) Proceed to PD on EPM.
- (8) Operate the SPM.

N/A  
[Signature] 1/29/98  
[Signature] 1/29/98  
[Signature] 1/27/98

b. Outboard Station:

- (1) Diving.
- (2) Surfacing.
- (3) Periscope Depth operation.
- (4) Operate stern planes in normal and emergency modes.
- (5) Operate planes and rudder in single stick control.
- (6) High speed operation.
- (7) Proceed to PD on EPM.

[Signature] 5/13/98  
[Signature] 3/20/98  
[Signature] 1/29/98  
[Signature] STS/SS 5/13/98  
N/A  
[Signature] 1/29/98  
[Signature] 1/29/98  
[Signature] 5/18/98

c. Demonstrate proper watch relief techniques.

d. Stand watch as planesman under instruction (four watches with normal rotation of inboard and outboard stations), (1 watch of at least 2 hours as helm on the surface).

[Signature]  
[Signature] 3/20/98  
[Signature]  
 (Helm Surfaced)

[Signature] 3/20/98  
[Signature] 3/30/98  
[Signature] STS/SS 5/13/98

106

2154, v eddeler

4. CASUALTIES. For the following casualties, demonstrate a thorough knowledge of the actions required. Discuss actions for all indicated casualties, perform at least 2 of these during drills; indicate which were performed.

- a. Flooding.
- b. Collision.
- c. Man Overboard.
- d. Jam Dive/Rise.
- e. Jam Rudder.
- f. Loss of planes indication.
- g. Loss of 400Hz
- h. Loss of normal/emergency control to planes surfaces.

[Signature] 5/11/94

[Signature]

[Signature]

[Signature] STSC/SS 13 MAY 98

[Signature] 5/11/94

[Signature] STSC/SS 13 MAY 98

NIA

[Signature] STSC/SS 13 MAY 98

5. EXAMINATION AND CERTIFICATION.

A. Satisfactorily completed a comprehensive oral examination. Recommended for qualification as Helmsman/ Planesman.

[Signature] 6/18/98  
SHIPS DIVING OFFICER/DATE

B. Satisfactorily completed an oral examination and qualified as Helmsman/Planesman.

BSN W 6/19/98  
NAVIGATOR/DATE

C. Entered in the record of qualified watchstanders.

BSN W 6/19/98  
NAVIGATOR/DATE

D. Entry made in service record.

[Signature] 6/20/98  
PERSONNEL OFFICER/DATE

107

ORAL EXAMINATION RECORD

NAME (b)(3) / (b)(6) RANK/RATE I-1 DATE 6/17/98

PURPOSE:	QUALIFICATION <input checked="" type="checkbox"/>	WATCHSTATION/SYSTEM:	EXAMINED BY:
	REQUALIFICATION <input type="checkbox"/>	<u>HP</u>	CO <input type="checkbox"/> XO <input type="checkbox"/>
	PROFICIENCY <input type="checkbox"/>		DEPT. HD. <input type="checkbox"/>
	QPO DESIGNATION <input type="checkbox"/>		DIV. OFF. <input type="checkbox"/>
	SAFEGUARDS <input type="checkbox"/>		OOD/EOOW <input type="checkbox"/>
	OTHER <input type="checkbox"/>		LPO <input type="checkbox"/>

AREA COVERED:

<u>EMERG/CASUALTIES - FIRE, LOSS/STOP,</u>	<u>PD OPERATIONS</u> ↑
<u>FLOODING, JAM/CUS.</u>	<u>SOE</u> ↓
<u>DUTIES &amp; RESP: OOD</u> ↑	<u>SID HYDRAULICS</u> ↑
<u>DIVING</u> ↓	<u>DEPTH SENSING</u> ↑
<u>SURFACING</u> ↑	<u>RUDDER OPERATION</u> ↑
<u>HIGH SPEED</u> ↑	<u>DEEP SUBMERGENCE</u> ↑
<u>EMERGENCY BILLS:</u>	
<u>FIRE</u> ↑	
<u>FLOODING</u> ↓	
<u>GENERAL EMERG</u> ↑	
<u>MAN OVB</u> ↑	
<u>BATTLE STATIONS</u> ↑	
<u>SPM OPERATIONS</u> ↑	

WEAK AREAS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ADDITIONAL ACTION REQUIRED:

2 REAS EMER BLW FLOOD, (2nd)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RESULT: (Interviewer's Initial)

SAT  
 SAT WITH WEAK AREAS DISCUSSION REQUIRED  
 UNSAT

ADDITIONAL ACTION OR WEAK AREA DISCUSSION COMPLETE

SAT  UNSAT  N/A

RE-INTERVIEWER SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

[Signature] 6/17/98  
 INTERVIEWER SIGNATURE DATE  
[Signature] 6/18/98  
 APPROVED/CERTIFIED/NOTED DATE

ORAL EXAMINATION RECORD

NAME E (b) (3) / (b) (6) RANK/RATL 3 DATE 6/18/98

PURPOSE:	QUALIFICATION <input checked="" type="checkbox"/>	WATCHSTATION/SYSTEM:	EXAMINED BY:
	REQUALIFICATION <input type="checkbox"/>	<u>HELMS/PLANES</u>	CO <input type="checkbox"/> XO <input type="checkbox"/>
	PROFICIENCY <input type="checkbox"/>	<input type="checkbox"/>	DEPT. HD. <input checked="" type="checkbox"/>
	QPO DESIGNATION <input type="checkbox"/>	<input type="checkbox"/>	DIV. OFF. <input type="checkbox"/>
	SAFEGUARDS <input type="checkbox"/>	<input type="checkbox"/>	OOD/EOOW <input type="checkbox"/>
	OTHER <input type="checkbox"/>	<input type="checkbox"/>	LPO <input type="checkbox"/>

AREA COVERED:

HIGH SPEED OPS

JAM DIVE

EFFECTS ON PLANES <sup>DIFF</sup> SPEEDS

STICK & DIVE STOP

VFNIER & DIVE STOP

EMERGENCY & NORM. MODE

REPORTS TO OOD

IC COMMUNICATIONS

WEAK AREAS:

None

ADDITIONAL ACTION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

RESULT: (Interviewer's Initial)

N SAT

\_\_\_\_\_ SAT WITH WEAK AREAS DISCUSSION REQUIRED

\_\_\_\_\_ UNSAT

ADDITIONAL ACTION OR WEAK AREA DISCUSSION COMPLETE

\_\_\_\_\_ SAT \_\_\_\_\_ UNSAT N N/A

BSNW 6/19/98

INTERVIEWER SIGNATURE DATE

\_\_\_\_\_  
DATE-INTERVIEWER SIGNATURE DATE

BSNW 6/19/98

APPROVED/CERTIFIED/NOTED DATE

14 Dec 94

Chief of the Watch Qualification Card

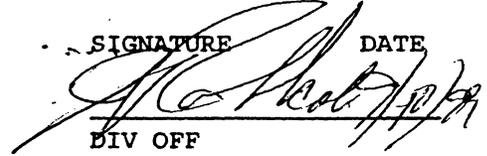
Name: [ (b) (3) / (b) (6) ]

Rate: [ ]

Note: Unless otherwise indicated, all items will be signed by a qualified Chief of the Watch (COW) or Diving Officer of the Watch (DOOW).

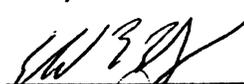
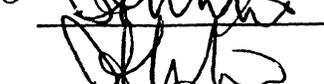
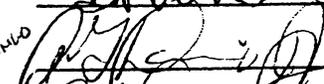
1. PREREQUISITES.

- a. Qualified in submarines.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
  
 DIV OFF

2. SYSTEMS. Demonstrate an indepth knowledge of indicated ship systems.

- a. Trim.
- b. External Hydraulics.
- c. Steering and Diving Hydraulics.
- d. Ship's Service Hydraulics.
- e. Missile Hydraulics.
- f. Drain and Auxiliary Drain.
- g. High Pressure Air.
- h. Ship's Service Air.
- i. Main Ballast Tank Vent and Low Pressure Blow.
- j. Emergency Main Ballast Tank Blow.
- k. Ventilation.
- l. Snorkel Circuits and Diesel.
- m. Depth Control System.
- n. Emergency Flood Control.
- o. Interior Communication Indication and alarm Circuits.
- p. Ship's Battery and Battery Support Systems.

SIGNATURE	DATE
	1-7-00
J. G. Darden	9-4-99
J. G. Darden	9-14-99
J. G. Darden	10-2-99
	9-3-99 A-NAV
J. G. Darden	9-8-99
J. G. Darden	10-17-99
J. G. Darden	10-20-99
J. G. Darden	11-2-99
	12-3-99
	9-7-99
	9-7-99
	1-6-00
	1-6-00
	9-7-99
	9-4-99

110

- q. Masts and Antennas.
- r. Arctic Blow.
- s. EA and EH circuits.
- t. Depth Sensing.
- u. BCP and SCP.
- v. Missile Pressurization and Vent.
- w. AN/BSY-1 OSD (Own Ship's Data) function.
- x. Missile Flood and Drain.

W E J 12-3-99  
N/A  
FTC/SS J L K 9/8/99  
J M L 1-2-00  
Curtis J. [unclear] 11-9-99  
Curtis J. [unclear] 11-11-99  
W E J 12-3-99  
Curtis J. [unclear] 11-9-99

3. THEORETICAL KNOWLEDGE. Demonstrate a thorough knowledge of the following subjects through oral examination:

- a. Duties and responsibilities of all underway watchstations forward.
- b. Operating and Casualty Procedures:
  - (1) Rig for Dive.
  - (2) Rig for Surface.
  - (3) Silent Running.
  - (4) Deep Submergence.
  - (5) Snorkel and Ventilate.
  - (6) Cold Weather.
  - (7) Diving.
  - (8) Quick Dive.
  - (9) Surfacing.
  - (10) Emergency Surface.

SIGNATURE \_\_\_\_\_ DATE 9/10/99  
 DOOW

DN 9-3-99 A-NAV  
NA  
J M L 9/4/99  
J W H 12/15/98

(11) General Emergency.

- (a) Fire.
- (b) Flooding.
- (c) Collision.
- (d) Toxic Gas.

EBIS  
100008  
667  
10608  
7/9/99 3m  
9/9/99

(12) Loss of Propulsion.

1-6-00  
9/9/99 3m

(13) Loss of Electrical Power.

(14) Weapons Emergency.

9-3-99 ANA

(15) Reduced Visibility.

9-3-99 ANA

(16) Man Overboard.

9-3-99 ANA

(17) Emergency Deep.

9-3-99 ANA

(18) Battery Charging.

9-3-99 ANA

(19) Propulsion.

1-6-00

(20) Maneuvering.

1-6-00

(21) High speed operations.

1-6-00

(22) Emergency Ship Control.

2/7/00

(23) VLS Missile Tube Emergency.

9-3-99 ANA

(24) Major Propulsion Plant Casualty.

2/7/00

(25) Vertical Surfacing.

1-5-00

(26) Vertical Diving.

1-5-00

(27) Depth Charge.

1-5-00

c. Operating Instructions:

- (1) Mast Operation (637-8).
- (2) Reelable Towed Array Handling System Operation (637-10).

12-3-99  
99SEP01

112

14 Dec 94

- (3) Ship's Service Hydraulic System operation (633-4).
- (4) Steering and Stern Diving Hydraulic System Power Plant Operation (633-5).
- (5) External Hydraulic System Operation (633-6).
- (6) Trim System Lineups and Local Operation (632-4).
- (7) Trim System Operation from the BCP (632-15).
- (8) Low Pressure Main Ballast Blow System Operation (632-1).
- (9) Trash Disposal Unit Operation (636-3)
  
- d. Location of local overrides and/or manual operation of all BCP controlled equipment.
- e. Normal readings and alarm setpoints for equipment operated from the BCP.
- f. Normal operation of all equipment operated from the BCP.
- g. Detailed knowledge of ship control circuits and hydraulics (modes of planes, rudder operations, power supplies, etc.).
- h. Knowledge of SVP and how it affects ship's operations.
- i. COMSUBLANTINST 5101.2. (Tagout Procedures)
- j. Commanding Officer's Standing Orders.
- k. NAVSEA 0962-073-4010, NSTM CH 233, COMSUBLANT/COMSUBPACINST 4790.4 Volume 4 Appendix 3E (Battery Procedures)

(b3/b6) 2/7/00

b3/b6 J 2/7/00

(b3/b6) 2/7/00

(b)(3) 9/6/99

(b)(6) 9/8/99

12-1-99

7-3-99

9/8/99

1-7-00

1-7-00

3/27/00

995EP01

3/22/00

4/12/00

See attached page

E DIVOFF/E LPO

(12)

- (3) ...'s Service Hydraulic System Operation (633-4).
- (4) Steering and Stern Diving Hydraulic System Power Plant Operation (633-5).
- (5) External Hydraulic System Operation (633-6).
- (6) Trim System Lineups and Local Operation (632-4).
- (7) Trim System Operation from the BCP (632-15).
- (8) Low Pressure Main Ballast Blow System Operation (632-1).
- (9) Trash Disposal Unit Operation (636-3)

- d. Location of local overrides and/or manual operation of all BCP controlled equipment.
- e. Normal readings and alarm setpoints for equipment operated from the BCP.
- f. Normal operation of all equipment operated from the BCP.
- g. Detailed knowledge of ship control circuits and hydraulics (modes of planes, rudder operations, power supplies, etc.)
- h. Knowledge of SVP and how it effects ship's operations
- i. OPNAVINST 3120.32C (Article 630.17)/ GREENEVILLEINST 1544.1/ GREENEVILLEINST 5101.1B (Tagout Procedures)
- j. Commanding Officer's Standing Orders
- k. Discuss submarine storage batteries including the following references: NAVSEA S9223-AF-MMO-010/88219-Submarine Main Storage Battery Technical Manual, CINCLANTFLT/CINCPACFLTINST 4790.3, Vol. IV, Part III, Chapter 4-Joint Fleet Maintenance Manual, NAVSEA S9086-G1-STM-010 - NSTM Chapter 223, Volume 1-Submarine Storage Batteries-Lead Acid Battery.

OKI PREVIEW QUAL CARED APPROV

See previous page

*[Signature]* 4/12/00  
*[Signature]* SIMMAG  
 ELPO/EO

14 Dec 94

MUSICAL  9/19/99  
EOOW/EWS

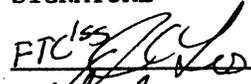
1. Provisions to ensure remote operability of key Reactor plant valves.

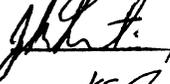
4. PRACTICAL FACTORS. Signed all following actual performance by the on-watch OOD, DOOW, or COW.

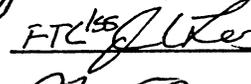
a. Demonstrate proficiency in operating the BCP during the following evolutions/casualties:

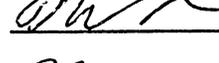
- (1) Diving (Normal).
- (2) Surfacing (Normal).
- (3) Ventilating.
- (4) Snorkeling.
- (5) TDU operations.
- (6) Periscope Depth Operations.
- (7) Fire.
- (8) Flooding.
- (9) Loss of Propulsion.
- (10) Loss of Electrical Power.
- (11) General Emergency.
- (12) Collision.

SIGNATURE DATE (b3/b6)

FTC<sup>155</sup>  8/30/99

 99 SEP 01

FTC<sup>155</sup>  9/1/99

 9/3/99 AM

 9/3/99 AM

 99 SEP 01

 24 MAR 00

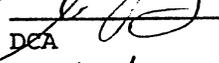
 24 MAR 00

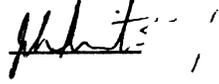
 24 MAR 00

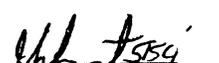
 24 MAR 00

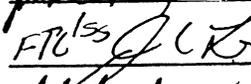
 15 APR 00

FTC<sup>155</sup>  3/29/00

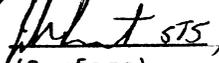
 3/22/00  
DEA

 99 SEP 04

 99 SEP 01

FTC<sup>155</sup>  8/31/99

 99 SEP 04

 99 SEP 01  
(Surface)

b. Conduct Watch to Watch Compensation (Ship's Diving Log).

c. Compute and enter compensation for pumping and blowing a sanitary tank.

d. Stand four watches as COW under instruction (at least one on the surface).

115

14 Dec 94

5. EXAMINATION AND QUALIFICATION.

a. Satisfactorily complete a comprehensive written examination on the above areas administered by the Ship's Diving Officer.

3.8

GRADE

[Signature] 5/19/01

SHIP'S DIVING OFFICER/DATE

b. Satisfactorily complete a comprehensive oral examination on the above areas administered by the Ship's Diving Officer. Recommended for qualification as Chief of the Watch.

[Signature] 5/19/01

SHIP'S DIVING OFFICER/DATE

c. Satisfactorily complete a comprehensive oral examination and is Qualified as Chief of the Watch.

[Signature] 1/13/01

EXECUTIVE OFFICER/DATE

d. Entered in record of qualified watchstanders.

[Signature] 1/13/01

EXECUTIVE OFFICER/DATE

e. Entry made in service record.

[Signature] (b)(3)/(b)(6) 1/13/01

PERSONNEL OFFICER/DATE

(11)

**Tab 21.** [ b3 ] training records (17 pgs) are  
classified and not releasable under Exemption b-1.

ORAL EXAMINATION RECORD

NAME L(b)(3) / (b)(6) RANK/RATE J DATE 29 MAR 00

PURPOSE:	QUALIFICATION	<input checked="" type="checkbox"/>	WATCHSTATION/SYSTEM:	EXAMINED BY:
	REQUALIFICATION	<input type="checkbox"/>	<u>HELM/PLANES</u>	CO <input type="checkbox"/> XO <input type="checkbox"/>
	PROFICIENCY	<input type="checkbox"/>		DEPT. HD. <input type="checkbox"/>
	QPO DESIGNATION	<input type="checkbox"/>		DIV. OFF. <input checked="" type="checkbox"/>
	SAFEGUARDS	<input type="checkbox"/>		OOD/EOOW <input type="checkbox"/>
	OTHER	<input type="checkbox"/>		LPO <input type="checkbox"/>

AREA COVERED:

Vernier & Dive Step

Stick & Dive Step

DOT & Bells

Orders to Helm

JAM DIVE / JAM RISE

Course Indicators

JPL SONAR

WEAK AREAS:

Vernier & Dive vs Stick & Dive step, Course indicator inputs, JPL Sonar

ADDITIONAL ACTION REQUIRED:

DISCUS Weak areas

RESULT: (Interviewer's Initial)

SAT

SAT WITH WEAK AREAS DISCUSSION REQUIRED

UNSAT

ADDITIONAL ACTION OR WEAK AREA DISCUSSION COMPLETE

SAT  UNSAT  N/A

[Signature] 5/29/00

RE-INTERVIEWER SIGNATURE DATE

[Signature] 3/29/00

INTERVIEWER SIGNATURE DATE

APPROVED/CERTIFIED/NOTED DATE

ORAL EXAMINATION RECORD

NAME [ (b) (3) / (b) (6) ] RANK/RATI J DATE 21 MAR 00

PURPOSE:	QUALIFICATION	<u>X</u>	WATCHSTATION/SYSTEM:	EXAMINED BY:
	REQUALIFICATION	<u>   </u>	<u>HELM/PIANES</u>	CO <u>   </u> XO <u>   </u>
	PROFICIENCY	<u>   </u>	<u>   </u>	DEPT. HD. <u>16</u>
	OPO DESIGNATION	<u>   </u>	<u>   </u>	DIV. OFF. <u>   </u>
	SAFEGUARDS	<u>   </u>	<u>   </u>	OOD/EOOW <u>   </u>
	OTHER	<u>   </u>	<u>   </u>	LPO <u>   </u>

AREA COVERED:

Flooding

Diving

Surviving

Hydraulic supplies to planes

Helm orders

Flood

Master's Critical Listing

Sea Dive/Rise

WEAK AREAS:

Flooding

Hydraulic supplies to planes

Outboard (how far can turn it)

ADDITIONAL ACTION REQUIRED:

Lost WPJ

RESULT: (Interviewer's Initial)

    SAT

16 SAT WITH WEAK AREAS DISCUSSION REQUIRED

    UNSAT

ADDITIONAL ACTION OR WEAK AREA DISCUSSION COMPLETE

16 SAT     UNSAT     N/A

    5/29/00

    INTERVIEWER SIGNATURE     DATE

    5/29/00

    INTERVIEWER SIGNATURE     DATE

    APPROVED/CERTIFIED/NOTED     DATE

Helmsman/Planesman Qualification Card

Name: Σ (b) (3) / (b) (6) Rate: J

NOTE: Unless otherwise indicated, all items will be signed by a qualified Diving Officer of the Watch, Chief of the Watch or Officer of the Deck.

1. PREREQUISITES.

- a. Qualified Phonetalker.
- b. Qualified Lookout.

SIGNATURE	DATE
<u>[Signature]</u> LPO	<u>11/1/00</u> *
<u>[Signature]</u> LPO	

2. THEORETICAL KNOWLEDGE: Demonstrate a thorough knowledge of the following subjects through oral examination:

a. Duties and responsibilities of the following watchstations:

- (1) Officer of the Deck.
- (2) Conning Officer.
- (3) Diving Officer of the Watch.
- (4) Chief of the Watch.
- (5) Helmsman.
- (6) Bow Planesman.
- (7) Stern Planesman.
- (8) Control Room Supervisor.

[Signature] 3/8/00  
[Signature] 3/8/00

b. Know the Helmsman/Planesman duties and responsibilities for the following instructions and operating procedures:

- (1) Diving.
- (2) Surfacing.
- (3) Deep Submergence.
- (4) High Speed Operations.
- (5) Loss of Propulsion.

[Signature] 3/8/00  
[Signature] 3/8/00  
[Signature] 3/9/00  
[Signature] 3/8/00  
[Signature] 3/9/00

\* Temporarily waived  
Kih

		<u>SIGNATURE</u>	<u>DATE</u>
(7)	Secondary Propulsion Motor operation.	<i>Tony Duro</i>	5/20/00
(8)	Vernier and dive stop control. <i>3mc</i>	<i>[Signature]</i>	3/11/00
(9)	Stick and dive stop control. <i>3mc</i>	<i>[Signature]</i>	3/11/00
(10)	Periscope depth operations.	<i>[Signature]</i>	3/12/00
(11)	Loss of control surface response.	<i>[Signature]</i>	3/12/00
(12)	Emergency Deep.	<i>[Signature]</i>	3/11/00
(13)	Submerged operating envelope. <i>3mc</i>	<i>[Signature]</i>	8/15/00
(14)	Engine order telegraph. <i>3mc</i>	<i>[Signature]</i>	3/11/00
(15)	Helmsman effect on the AN/BSY-1 Combat Control and Acoustic Subsystems.	<i>John T STSC/55</i>	5/17/00

d. Know the following systems as they relate to the Helmsman/Planesman:

(1)	Repeaters.	<i>[Signature]</i>	5/15/00
(2)	Hydraulics.	<i>[Signature]</i>	8/13/00
(3)	Indicating circuits.	<i>[Signature]</i>	5/10/00

3. PRACTICAL FACTORS. Satisfactorily perform and demonstrate a thorough knowledge of the following operations through actual performance:

a. Inboard Station:

		<u>SIGNATURE</u>	<u>DATE</u>
(1)	Diving.	<i>JWH/aw</i>	3/14/00
(2)	Surfacing.	<i>JWH/aw</i>	3/16/00
(3)	Periscope Depth operation.	<i>[Signature]</i>	3/15/00
(4)	Operate bow planes and rudder in normal and emergency modes.	<i>[Signature]</i>	3/15/00

4. CASUALTIES. For the following casualties, demonstrate a thorough knowledge of the actions required. Discuss actions for all indicated casualties, perform at least 2 of these during drills; indicate which were performed.

- a. Flooding.
- b. Collision.
- c. Man Overboard.
- d. Jam Dive/Rise.
- e. Jam Rudder.
- f. Loss of planes indication.
- g. Loss of 400Hz
- h. Loss of normal/emergency control to planes surfaces.

Taylor/Blund 5/26/00  
Stiller 5/27/00  
Stiller 5/27/00  
Curtis <sup>TM/SS</sup> 5/25/00  
John T. STS/SS 5/27/00  
John T STS/SS 5/27/00  
N/A  
John T STS/SS 5/27/00

5. EXAMINATION AND CERTIFICATION.

A. Satisfactorily completed a comprehensive oral examination. Recommended for qualification as Helmsman/ Planesman.

[Signature] 5/29/00  
SHIPS DIVING OFFICER/DATE

B. Satisfactorily completed an oral examination and qualified as Helmsman/Planesman.

[Signature] 5/29/00  
NAVIGATOR/DATE

C. Entered in the record of qualified watchstanders.

[Signature] 5/29/00  
NAVIGATOR/DATE

D. Entry made in service record.

[Signature] 19 May 00  
PERSONNEL OFFICER/DATE

28 JUL 1998

USS \_\_\_\_\_ NAVOPSDEPTINST 5400. \_\_\_\_\_

**4303 QUARTERMASTER OF THE WATCH QUALIFICATION CARD**

NAME [ (b) (3) / (b) (6) ] RATE [ ]

DATE STARTED SEP 1979 DATE DUE APR 2000  
 NAV LPO

**1. Prerequisites**

- a. Complete Duty Nav ET qualification. [Signature] 3-23-00
- b. Be a qualified helmsman. [Signature] 3-23-00
- c. Complete the following sections of the ship's qualification card. Battery and D.C. Distribution, Lighting, and 60 Hz Distribution, IC Distribution, and Ventilation System. [Signature] 7-23-00
- d. Be a qualified fathometer operator. [Signature] 3-23-00
- e. Be a qualified lookout. [Signature] 3-23-00

**2. Knowledge Requirement.** Demonstrate to the satisfaction of the Department Leading Petty Officer a sufficient level of knowledge of the following:

	<u>DATE</u>	<u>NAV LPO</u>
a. Demonstrate knowledge of the Electronic Navigation Equipment including the following:	<u>3-23-00</u>	<u>[Signature]</u>
(1) Power supplies	<u>3-23-00</u>	<u>[Signature]</u>
(2) Normal and emergency ventilation	<u>3-23-00</u>	<u>[Signature]</u>
(3) Functions of major components	<u>3-23-00</u>	<u>[Signature]</u>
(4) Inter-relations of components	<u>3-23-00</u>	<u>[Signature]</u>
(5) Information sent to other systems	<u>3-23-00</u>	<u>[Signature]</u>
b. Demonstrate a knowledge of basic theory, operating procedures, capabilities, and limitations of the following equipment:		
(1) Inertial navigation systems	<u>15DEC99</u>	<u>[Signature]</u>
(2) Digital and syncro data transmission	<u>15DEC99</u>	<u>[Signature]</u>
(3) Navigation system degradation under various computer casualty conditions	<u>15DEC99</u>	<u>[Signature]</u>
(4) LORAN	<u>NA</u>	<u>[Signature]</u>
(5) Radar	<u>25DEC99</u>	<u>[Signature]</u>
(6) GPS	<u>25DEC99</u>	<u>[Signature]</u>
c. Man overboard procedures	<u>15DEC99</u>	<u>[Signature]</u>
d. Information contained in Sailing Directions, Coast Pilots, and Fleet Guides	<u>25DEC99</u>	<u>[Signature]</u>
e. The content of the OOD Notebook, operations folder, and operating schedules	<u>25DEC99</u>	<u>[Signature]</u>

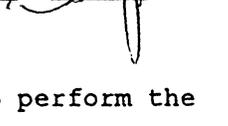
D) |

(6)

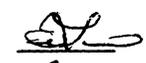
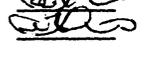
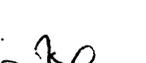
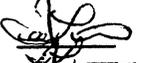
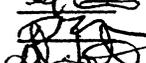
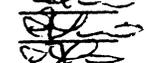
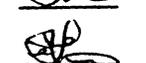
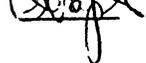


03 MAR 1997

USS \_\_\_\_\_ NAVOPSDEPTINST 5400. \_\_\_\_\_

- |   | <u>DATE</u> | <u>NAV LPO</u>  |
|---|-------------|---|
| u. Commanding Officer's Standing Orders   | 04/26/99    |  |
| v. Concepts and use of fix expansion as required by the Commanding Officer's Standing Orders, the Navigation Bill, and Article 5105 of this instruction     | 16/02/99    |  |
| w. Proper plotting and evaluation of ship's movement within a moving haven (MHN) including evaluation of submerged interference                             | 15/12/99    |  |
| x. Concepts and utilization of bottom contour plotting per U.S. Navy Oceanographic Officer Manual of Procedures for General Bathymetric Navigation (SP 198) | 02/22/99    |  |
| y. COMSUBLANT/COMSUBPAC Lessons Learned (Navigation and Submarine Driving Sections) and COMSUBLANT/COMSUBPAC Collision and Grounding Brief                  | 08/10/99    |  |

3. Practical Factors. Satisfactorily demonstrate the ability to perform the following evolution's:

- |   |          |   |
|---|----------|---|
| a. Bearing Recorder   | 02/22/99 |    |
| (1) Log bearings and soundings.   | 15/02/99 |   |
| (2) Make corrections.   | 12/10/99 |  |
| (3) Convert relative bearings to true bearings.   | 02/22/99 |  |
| b. Navigation Plotter   |          |   |
| (1) Use of proper scale chart   | 14/02/99 |  |
| (2) Lay out a track and annotate with required data.                                    | 14/02/99 |  |
| (3) Lay out an anchorage plot.  | 15/02/99 |  |
| (4) Plot turning bearings and ranges.   | 15/02/99 |  |
| (5) Plot danger bearings and ranges.  | 13/02/99 |  |
| (6) Conduct minimum cycle routine and make required reports while in restricted waters. | 13/02/99 |  |
| (7) Plot visual fix using relative bearing and three arm protractor.                    | 14/02/99 |  |
| c. DDRT/MK 19 Plotter   |          |   |
| (1) Energize and secure.  | 13/02/99 |  |
| (2) Select and use the proper scale.  | 13/02/99 |  |
| (3) Setup scale to conform to scale of chart (picked at random), and for man overboard. | 13/02/99 |  |
| (4) Maintain a plot involving own ship and at least one target.                         | 13/02/99 |  |
| d. Compute sunrise, sunset, moonrise, and moonset.                                      | 13/02/99 |  |
| e. Compute and graph tides and currents.  | 13/02/99 |  |

USS \_\_\_\_\_ NAVOPSDEPTINST 5400. \_\_\_\_\_

	DATE	NAV LPO
f. Plot a position using the following information:		
(1) Visual	<u>13 JUL 98</u>	<u>[Signature]</u>
(2) Radar	<u>13 JUL 98</u>	<u>[Signature]</u>
(3) RDF	<u>13 JUL 98</u>	<u>[Signature]</u>
(4) Bathymetric	<u>13 JUL 98</u>	<u>[Signature]</u>
g. Take and plot LORAN/GPS (All applicable) fixes.	<u>12 JUL 98</u>	<u>[Signature]</u>   (R)
h. Using light lists, compute geographic and luminous ranges for selected lights.	<u>12 JUL 98</u>	<u>[Signature]</u>
i. Obtain and compute an azimuth of the sun or Polaris to determine gyro error.	<u>12 JUL 98</u>	<u>[Signature]</u>
j. Prepare position reports and make 0800 and 2000 reports to the Commanding Officer.	<u>12 JUL 98</u>	<u>[Signature]</u>   (R)
k. Demonstrate knowledge, the location, and use of:		
(1) Navigation lighting panels	<u>12 JUL 98</u>	<u>[Signature]</u>
(2) Sextant	<u>12 JUL 98</u>	<u>[Signature]</u>
(3) Anchor balls	<u>12 JUL 98</u>	<u>[Signature]</u>
(4) Chart portfolios	<u>12 JUL 98</u>	<u>[Signature]</u>
(5) Flare pistol	<u>12 JUL 98</u>	<u>[Signature]</u>
l. Demonstrate how to compute set and drift, using the manual method, SINS/DMINS/ESGN/RLGN/ESGM velocities, and the fire control system analyzer.	<u>12 JUL 98</u>	<u>[Signature]</u>   (R)
m. Rig the bridge for surface.	<u>12 JUL 98</u>	<u>[Signature]</u>
n. Demonstrate use of the periscopes for telemeter and stadimeter ranging.	<u>100 JUL 98</u>	<u>[Signature]</u>
o. Demonstrate familiarity with use of a periscope.	<u>100 JUL 98</u>	<u>[Signature]</u>
p. Rig the control room for all evolutions in the Compartment Bill Holder.	<u>12 JUL 98</u>	<u>[Signature]</u>
q. Complete Navigation Department Pre-Underway Checkoff	<u>12 JUL 98</u>	<u>[Signature]</u>
r. Conduct a communications check using the underwater telephone and remote radio.	<u>12 JUL 98</u>	<u>[Signature]</u>
s. Use of searchlight and Aldis Lamp, including rigging and stowing.	<u>12 JUL 98</u>	<u>[Signature]</u>
t. Bottom contour navigate using following methods:		
(1) Sounding strip	<u>12 JUL 98</u>	<u>[Signature]</u>
(2) Advancing sounding lines of position	<u>12 JUL 98</u>	<u>[Signature]</u>

USS \_\_\_\_\_ NAVOPSDEPTINST 5400. \_\_\_\_\_

DATE NAV LPO

u. Plot a running fix; determine an EP.

18 Nov 1999 [Signature]

v. Serve as QMOW (under instruction) and perform assigned tasks during the following evolution's:

- (1) Diving
- (2) Surfacing
- (3) General Emergency
- (4) Man Overboard

18 Nov 1999 [Signature]  
18 Nov 1999 [Signature]  
18 Nov 1999 [Signature]  
18 Nov 1999 [Signature]

w. Complete flashing light requirement for QM3.

3-23-00 [Signature]

4. Stand watch under instruction until proficiency is demonstrated. (Number of watches to be specified by the Assistant Navigator.)

DATE

18 NOV 1999

QMOW

[Signature]

19 NOV 1999

[Signature]

19 DEC 1999

[Signature]

[Signature] 3-23-00  
ASSISTANT NAVIGATOR

5. Examination

a. Pass a written examination approved by the Commanding Officer.

DATE: 3-15-2000 GRADE: 2.89

[Signature]  
ASSISTANT NAVIGATOR

b. Pass an oral examination administered by the Leading Petty Officer. NOTE: Brief comments on oral examination will be attached)

DATE: 3-22-2000

[Signature]  
LEADING PETTY OFFICER

c. Pass a Rules of the Road examination.

DATE: 3-15-2000 3.44

[Signature]  
LEADING PETTY OFFICER

6. Recommended for qualification as Quartermaster of the Watch.

DATE: 3-27-00

[Signature]  
ASSISTANT NAVIGATOR

DATE: 3-27-00

[Signature]  
LEADING PETTY OFFICER

7. Examined and recommended for qualification as QMOW.

DATE: \_\_\_\_\_

\_\_\_\_\_  
NAVIGATOR

(12)

03 MAR 1997

USS \_\_\_\_\_ NAVOPSDEPTINST 5400. \_\_\_\_\_

8. Certified as OMOW

*[Signature]* 3/28/00  
COMMANDING OFFICER

9. Administration

- a. Entry made in the Ship's Qualification Notebook:
- b. Entry made in service record (page 4).

3/28/00 *[Signature]*  
 3/29/00 *[Signature]*  
 PERSONNEL OFFICER  
 Forwarded to PSD for S/R entry

(123)

**ORAL EXAMINATION RECORD**

NAME L(6)(3)/(6)(6) RANK/RATE J

DATE 23 MAR 2000

PURPOSE: QUALIFICATION   
 REQUALIFICATION \_\_\_\_\_  
 PROFICIENCY \_\_\_\_\_  
 QPO DESIGNATION \_\_\_\_\_  
 SAFEGUARDS \_\_\_\_\_  
 OTHER \_\_\_\_\_

WATCHSTATION/SYSTEM:  
QMOU

EXAMINED BY:  
 CO \_\_\_\_\_ XO \_\_\_\_\_  
 DEPT. HD. \_\_\_\_\_  
 DIV. OFF. \_\_\_\_\_  
 OOD/EOOW \_\_\_\_\_  
 LPO \_\_\_\_\_  
AMDU

AREA COVERED:

→ RULES OF ROAD EXAM (REVIEW)	RED/YELLOW SOUNDING	↑	BUOYS
↑ VESSEL NOT UNDER COMMAND	LOSS OF SOUNDING PROCEDURES	↑	
→ LIGHTS ON TOWING VESSEL	DETERMINING OFFSETS	↑	
QMOU EXAM REVIEW	DETERMINING TURNS AND THE USE OF	↑	
↓ SURPRISE-SET / MODIFIED SET	A SLIDE RAN		
↓ AZIMUTH DETERMINATION	OUT OF AREA ACTIONS	↑	
→ MANEUVERING BOARD	OPAREA GRID SYSTEM	↑	
↑ DETERMINING SET/DRIFT MAX. BURST	GYRO ERROR	↑	
↑ ANCHORING TERMS	USE OF A RANGE	↑	
↑ SOUNDING INTERVALS	FIX EXPANSION	↑	
↑ "SHEAL WATER"	REMAINING FIX	↑	
↑ MOVING HAVEN PIM	FIX INTERVALS	↑	
↑ OPAREA DOWNSIDES	MAN OVERBOARD	↑	
<del>WEAK</del>	B/C FIX'S	↑	

WEAK AREAS:

AZIMUTH

SURPRISE / SURVEY

**ADDITIONAL ACTION REQUIRED:**

RESULT: (Interviewer's Initial)  
LOOKING BS SAT  
BS SAT WITH WEAK AREAS DISCUSSION REQUIRED  
 \_\_\_\_\_ UNSAT

**ADDITIONAL ACTION OR WEAK AREA DISCUSSION COMPLETE**

BS SAT \_\_\_\_\_ UNSAT \_\_\_\_\_ N/A  
 INTERVIEWER SIGNATURE \_\_\_\_\_ DATE 3-27-00  
AMDU 3-27-00 RE-INTERVIEWER SIGNATURE \_\_\_\_\_ DATE  
 APPROVED/CERTIFIED/NOTED \_\_\_\_\_ DATE 3/28/00