

TAB C-2

FIRE CONTROL TECHNICIAN OF THE WATCH QUALIFICATION CARD
(AN/BSY-1)

NAME: (b)(3)/(b)(6)
RATE: J NECs: 1313, 2735, 1175
DATE QUALIFICATION COMMENCED: 24 May 00
DATE QUALIFICATION DUE: 24 Jun 00
DATE QUALIFICATION COMPLETED: 28 May 00

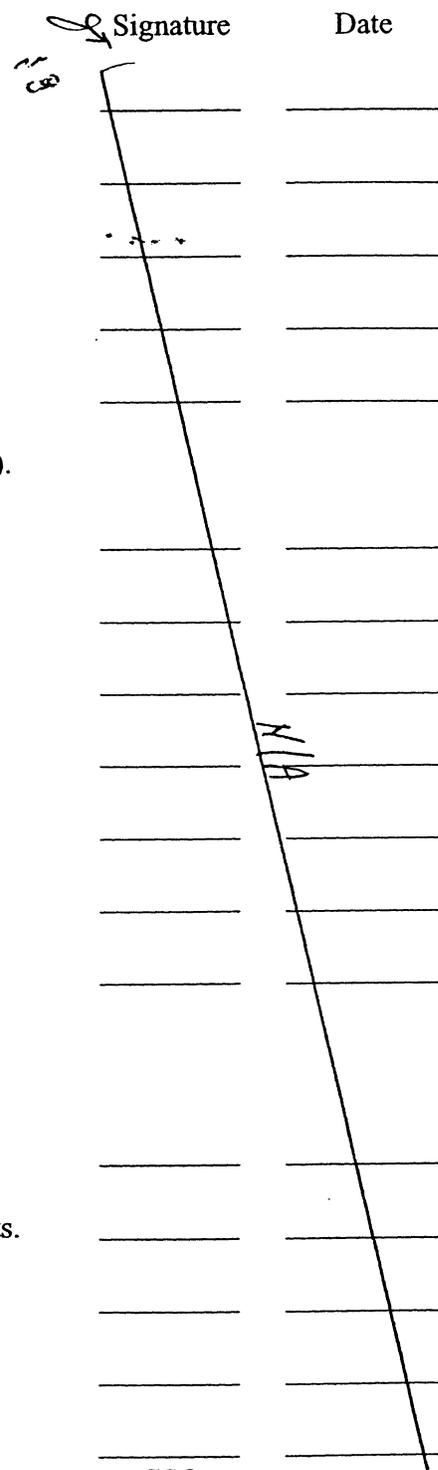
All items must be signed by a qualified FTOW unless otherwise indicated.

	Signature	Date
(12) Submarine Torpedo Reference Manual ADCAP (NWP 3-21.53.2).	CSO	_____
(13) Submarine Strike and Antiship Missile Employment Manual (3-20.49).	CSO	_____
(14) Tomahawk Land Attack Missile (TLAM-C/D) Employment Manual (NWP 3-03.1).	CSO	_____
(15) Submarine Tomahawk Land Attack Missile (TLAM) Launch Platform Weapon Systems and Tactics (NWP 3-03.2).	CSO	_____
(16) Submarine Special Operations Manual, Mining (NWP 3-15.53).	CSO	_____
(17) AN/BSY-1 CCS Operating Guidelines (TM FZ1461-6-91).	<i>John Decker</i> FT LPO	<u>26 MAY 90</u>
(18) AN/BSY-1 (FY 92) Combat Control System Operating Guidelines (TN FZ1461-3-94).	<i>John Decker</i> FT LPO	<u>26 MAY 90</u>
(19) OD 44979 Firing Craft Procedures and Checklist (as listed in the DRL of OD 44979 Volume 1).	<i>John Decker</i> FT LPO	<u>26 MAY 90</u>
(20) Submarine Tactical Weapons Employment Manual (NWP 3-21.53).	CSO	_____
(21) CSL/CSP Lessons Learned (Weapons Section).	CSO	_____
(22) System Operating Concept (SOC) for C2W/OTHT C4I Systems. (CINCPACFLT/CINCLANTFLT UT 4012-1-93).	CSO	_____
(23) Afloat Correlation Operating Procedures (ACOP for C2W/OTHT C4I Systems (CINCPACFLT/CINCLANTFLT UT 4012-2-93)).	CSO	_____
(24) COMSUBLANT/COMSUBPAC Collisions Brief.	CSO	_____

	Signature	Date
(15) TMA and Towed Array TMA Techniques.	 FT LPO	_____
(16) Periscope depth procedures and search techniques.	FT LPO	_____
(17) Methods of obtaining a Sound Velocity Profile (SVP) and SVP effects on weapon presets.	FT LPO	_____
(18) HP 9020 program software/TAC-3/SFMPL program software.	FT LPO	_____
(19) TAC-3/JOTS-II program software.	FT LPO	_____
(20) Security requirements for all Sensitive Keys and Links and Data Transport Device (control and custody).	FT LPO	_____
(21) Location and use of all DC equipment in control room, torpedo room, and CSES.	FT LPO	_____
c. Demonstrate a theoretical and operational knowledge of the following (as applicable):		_____
(1) AN/UYK-43 Computer:		N/A
(a) Start up/shutdown procedures.		_____
(b) Maintenance and operator panel controls and indicators.		_____
(c) Remote operator control unit controls and indicators.		_____
(d) Channel assignments.		_____
(e) Diagnostics and diagnostic procedures (on and off line).		_____
(f) Degraded/casualty procedures.		_____
(g) Interface with Sonar.		_____
(h) Interface with Navigation.		_____

	Signature	Date
(b) Keyboard/printer control panel controls and indicators.	_____	_____
(c) POFA's and common system test procedures.	_____	_____
(d) Degraded/casualty procedures.	_____	_____
(e) Interface with MPC.	_____	_____
(5) AN/BYH-1 Submarine Random Access Storage Set:	_____	_____
(a) Data Transport Device (DTD) loading and unloading procedures.	_____	_____
(b) Start up/Shutdown procedures.	_____	_____
(c) Primary and Secondary Control Panel controls and indicators.	_____	_____
(d) Programmable Read-Only Memory (PROM) Diagnostic and Common System Test procedures.	_____	_____
(e) Degraded/casualty procedures.	_____	_____
(f) Interface with AN/UYK-44.	_____	_____
(g) Interface with MK 81 MOD 3.	_____	_____
(h) Interface with AN/UYK-43.	_____	_____
(6) Command Launch Console (CLC):		
(a) Start up/Shutdown procedures.	<u>QOD</u>	<u>26 Aug 90</u>
(b) Firing panel controls and indicators.	<u>QOD</u>	<u>26 Aug 90</u>
(c) Display panel controls and indicators.	<u>QOD</u>	<u>26 Aug 90</u>
(d) Power control panel controls and indicators.	<u>QOD</u>	<u>26 Aug 90</u>
(e) Firing circuit for each weapon.	<u>QOD</u>	<u>26 Aug 90</u>
(f) WIM/SWIM.	<u>QOD</u>	<u>26 Aug 90</u>

	Signature	Date
(j) Interface with J-3780/UYK (SIU).	<i>[Signature]</i>	
(9) J-3780/UYK Sensor Interface Unit (SIU): (RM LPO Signatures)		
(a) Start up/Shutdown procedures.	<i>[Signature]</i>	
(b) Data multiplexing and demultiplexing.		
(c) Interface with MK 81 MOD 3.		
(d) Interface with communication systems.		
(e) Degraded/casualty procedures.		
(10) Torpedo Data Converter:		
(a) Start up/Shutdown procedures.	<i>[Signature]</i>	<u>26 MAY 00</u>
(b) Purpose and use of the maintenance panel.	<i>[Signature]</i>	<u>26 MAY 00</u>
(c) Degraded/casualty procedures.	<i>[Signature]</i>	<u>26 MAY 00</u>
(d) Diagnostics and diagnostic procedures (on/off line).	<i>[Signature]</i>	<u>26 MAY 00</u>
(e) Interface with WCC and TCP.	<i>[Signature]</i>	<u>26 MAY 00</u>
(11) Weapons Launch Console (WLC):		
(a) Start up/Shutdown procedures.	<i>[Signature]</i>	<u>26 MAY 00</u>
(b) Torpedo Tube Control Panel controls and indicators.	<i>[Signature]</i>	<u>26 MAY 00</u>
(c) 26v Torpedo Tube Rectifiers.	<i>[Signature]</i>	<u>26 MAY 00</u>
(d) Indicator Panel controls and indications.	<i>[Signature]</i>	<u>26 MAY 00</u>
(e) PORT/STBD Tube Fuse Panels.	<i>[Signature]</i>	<u>26 MAY 00</u>
(f) Degraded/casualty procedures.	<i>[Signature]</i>	<u>26 MAY 00</u>
(g) Interface with torpedo room and attack center equipment	<i>[Signature]</i>	<u>26 MAY 00</u>

	Signature	Date
<u>1</u> Presets.		
<u>2</u> Wire guide functions.		
<u>3</u> Search and reattack patterns.		
<u>4</u> Weapon and launch limits.		
<u>5</u> Milestones.		
(b) MK 48 ADCAP torpedo: (FT LPO signatures).		
<u>1</u> Presets.		
<u>2</u> Wire guide functions.		
<u>3</u> Search and reattack patterns.		
<u>4</u> Weapon and launch limits.		
<u>5</u> Special tactics.		
<u>6</u> Milestones.		
<u>7</u> Modifications.		
(c) UGM-109 Tomahawk missiles: (FT LPO signatures)		
<u>1</u> Presets.		
<u>2</u> Launch envelope, flight profile, and waypoints.		
<u>3</u> Alignment modes.		
<u>4</u> Weapon and launch limits.		
(17) Weapons Block Review.	CSO	
(18) Casualty Procedures:		

	Signature	Date
(g) Towed Array Hyperbolic Plot.	<i>[Signature]</i> FT LPO	_____
(2) Bearing Rate Computer:		
(a) Ekelund Ranges.	_____	_____
(b) Periscope/telemeter ranges.	_____	_____
(c) Relative Torpedo Course/MK 93 EPC operation.	FT LPO	_____
(d) Torpedo Doppler calculation.	FT LPO	_____
(e) Closest Point of Approach.	FT LPO	_____
(3) HP 9020 Desk Top Computer/SFMPL (if applicable):		
(a) Acoustic Environment.	_____	_____
(b) Compute weapon settings.	_____	_____
(c) Target Motion Analysis.	_____	_____
(d) Navigation/Operations.	ANAV	_____
(e) Automatic Data Entry (ADE).	_____	_____
(f) MK 48 ADCAP Acoustic Presetter Program.	FT LPO	_____
(g) SVP entry.	_____	_____
(h) MK 48 Raytrace.	_____	_____
(4) TAC-3/SFMPL (if applicable):		
(a) Map Options.	_____	_____

	Signature	Date
(h) Flit Mate (Mate).		
(i) Frequency Review.		
(j) Towed Array.		
(k) Weapons Control (all weapons).		
(l) Training/Maintenance.		
(7) Fire Control Modes Block Review.	FT LPO	
(8) Perform TMA on single/multiple zigging contacts using Flit Mate, LOS, and Towed Array TMA modes.	FT LPO	
(9) From a SSXBT/BQH trace compute and enter MK 48/ADCAP presets.	FT LPO	N/A
(10) Demonstrate use of raytrace to determine bottom bounce ranges.	SONAR SUP	
(11) Demonstrate capability to determine Ekelund ranges.	FT LPO	
(12) Demonstrate capability to determine triangulation ranges.	SONAR SUP	
(13) Demonstrate proficiency in the following OTH modes:		
(a) SODL.		
(b) STDL.		
(c) Monitor.		
(d) Retargeting.		
(e) Training and Maintenance.		
(14) OTH Modes Block Review:	FT LPO	

	Signature	Date
(23) Perform benchmark alignment on both periscopes.	FT LPO	_____
(24) Compute/enter presets for MK 48/ADCAP torpedo.	FT LPO	_____
(25) Perform LINK-11 operation, demonstrating the ability to send/receive tracks and plain text messages	FT LPO	_____
(26) Perform fire control division pre-underways.	FT LPO	_____
(27) Demonstrate the ability to support the Contact Coordinator, integrating radar range on sonar/visual contacts to determine contact course, speed, CPA etc.	Contact Coordinator	_____
4. TRAINING WATCHES:		
a. Stand two (2) U/I Watches in Sonar.	SONAR SUP	5/25/07
	SONAR SUP	5/25/07
b. Stand two (2) U/I Watches as TRW.	TRW	26 MAY 00
	TRW	N/A
c. Stand six (6) U/I Watches as FTOW during various operating conditions (i.e. surface transit, Maneuvering Watch, section tracking party, normal submerged, battle stations, torpedo snapshot, casualties) or until proficiency in all of the above areas have been demonstrated.	FTOW	26 MAY 00
	FTOW	26 MAY 00
	FTOW	26 MAY 00
	FTOW	_____
	FTOW	_____
	FTOW	_____

TAB B-1

SSN SONAR OPERATOR QUALIFICATION CARD
(All SSNs)

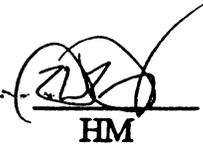
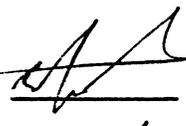
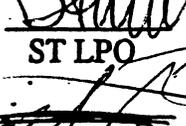
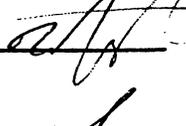
NAME: [(b) (3) / (b) (6)]
RATE: _____ J NECs: 0000
DATE QUALIFICATION COMMENCED: 1 Jul 99
DATE QUALIFICATION DUE: 31 Aug 00
DATE QUALIFICATION COMPLETED: _____

All items must be signed by a qualified Sonar Supervisor unless otherwise indicated.

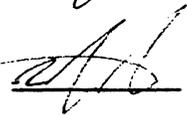
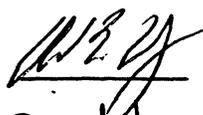
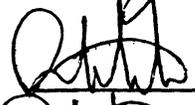
This qualification card is designed to be used in conjunction with the SSN Sonar Operator Qualification guide, Tab B-2.

SSN SONAR OPERATOR QUALIFICATION CARD

PASSIVE BROADBAND (PBB) OPERATOR

	Signature	Date
1. <u>PREREQUISITES:</u>		
a. Satisfactorily completed an audiogram within the past twelve months	 HM	<u>17 JAN 00</u>
2. <u>KNOWLEDGE REQUIREMENTS:</u>		
a. Working understanding of Sonar Division and Sonar Watch Section organization and regulations.	 ST LPO	<u>1/6/00</u>
b. Working understanding of responsibilities of each member of the sonar Watch Section.	 ST LPO	<u>1/6/00</u>
c. Working understanding of Sonar Control Room and Control Room sonar equipment to be manned, positions to be occupied for various ship's missions and evolutions.		<u>1/7/00</u>
d. Working understanding of relief procedures for PBB operators		<u>8 JUL 99</u>
e. Working understanding of the ship's sonar search, localization, tracking, and classification objectives.		<u>15 JUL 99</u>
f. Working understanding of sonar watch section routines.		<u>8 JUL 99</u>
g. Working understanding of electrical and electronic equipment safety precautions.	 ST LPO	<u>1/2/00</u>
h. Complete understanding of location and electrical isolation of all sonar equipment, special equipment, and the location of the nearest fire extinguishers and damage control equipment.	 ST LPO	<u>8 JUL 99</u> <u>8/2/99</u>
i. Working understanding of the format for passive sonar reporting procedures and to whom these reports are made.		<u>8 JUL 99</u>
j. Basic concepts and units of sound.		<u>8 JUL 99</u>
k. Working understanding of types, formation, and behavior of sound paths in the ocean.		<u>8 JUL 99</u>

20

- 1. Working understanding of spreading, attenuation, and boundary sound propagation losses in the ocean.  7-14-99
- m. Working understanding of natural and man-made ambient noise and the types of self-noise as a composite of sonar background noise.  7-14-99
- n. Working understanding of the types, causes, and characteristics of target radiated noise.  7-14-99
- o. Working understanding of relative motion from a sonar operator's point of view.  7-14-99
- p. Working understanding of search, localization, track and classification methods (as applicable to the ship's installed sonar suite and the equipment to be manned by the PBB operator).  8/18/99
- q. Working understanding of operating PBB sonar consoles with reduced sonar suite capabilities (degraded mode operations) incident to a loss of an electrical bus, computer failure, loss of display, loss of mode, etc.  8/18/99
- r. Working knowledge of the use of the Parameter Select Matrix for all applicable operational functions or tasks.  8/18/99
- s. Working knowledge of passive broadband sonar performance prediction.  1/5/00
- t. Discuss in detail all methods for towed array ranging techniques associated with the PBB function.  8/24/99
- u. Discuss in detail all methods used to obtain bottom bounce, D/E, and ping steal ranges.  8/24/99
- v. Working knowledge of passive systems fundamentals.  8/18/99
- w. Detailed knowledge of PBB operations.  8/18/99
- x. Knowledge of COMSUBLANT/COMSUBPAC Collisions Brief.  8/18/99
ST LPO
- y. Knowledge of COMSUBLANT/COMSUBPAC Lessons Learned (Sonar and Sound Silencing Section).  8/18/99
ST LPO

3. PRACTICAL FACTORS:

a. Listen to and work through the latest of the "B" series of Sonar Operator Training tapes (NSTAP 2-79 Tapes 1-6)

[Signature] 8/18/99
ST LPO

b. Demonstrate ability to distinguish among surface ships, submerged submarines, torpedoes, and biological sounds.

[Signature] 8/18/99

c. Demonstrate ability to detect, identify, report, and track contacts which pose an immediate threat to own ship (submerged submarines, close aboard contacts, torpedoes) by means of taped, synthetic, trainer, or actual signals.

[Signature] 1/5/00

d. Demonstrate ability to determine propeller RPM and the number of running propellers by taking aural turn counts.

[Signature] 8/24/99

e. Demonstrate ability to correctly and completely annotate applicable logs, records, and displays.

[Signature] 1/7/00
ST LPO

f. Demonstrate ability to change tape and annotate tape headings on installed tape recorders.

[Signature] 1/5/00

g. Demonstrate ability to properly employ/operate all display enhancements associated with the Passive Broadband function with proficiency to search for, detect, report, track, and classify contacts.

[Signature] 8/24/99

h. Demonstrate ability to man the passive broadband console to search for and track contacts under multi-contact situations.

[Signature] 8/24/99

i. Demonstrate ability to utilize the tracker and audio filters to enhance detection and track quality.

[Signature] 8/18/99

j. Demonstrate the ability to electrically isolate all installed sonar equipment.

[Signature] 8/24/99

k. Demonstrate ability to line up the PBB Console for Firing Point Procedures.

[Signature] 1/5/00

l. Demonstrate ability to monitor own ship weapons after launch.

[Signature] 8/24/99

m. Demonstrate ability to accurately and completely record data in all logs/records/reports peculiar to the sonar watchstander.

[Signature] 1/6/00
ST LPO

n. Demonstrate proficiency as a PBB operator.

[Signature] 8/21/99

4. TRAINING WATCHES:

a. Stand a minimum of four PBB operator watches under instruction.

[Signature] 8/21/99

[Signature] 8/24/99

[Signature] 1/10/00

[Signature] 1/11/00

5. EXAMINATION AND CERTIFICATION:

a. Successfully completed a comprehensive written exam prepared by the ST LPO and approved by the Combat Systems Officer. Grade 3.17

[Signature] 1/17/00
ST LPO

b. Examined and recommended for qualification as a PBB operator.

[Signature] 002AN18
ST LPO

c. Examined and recommended for qualification as a PBB operator.

[Signature] 1/12/00
SONAR OFF

d. Examined and certified as a qualified Passive Broadband Operator, capable of standing watches unassisted on the PBB sonar consoles.

[Signature] 1/19/00
CSO

6. ADMINISTRATION.

a. Entry made in the Ship's Qualification Notebook.

[Signature] 1/19/00
CSO

b. Entry made in member's Service Record (page 4).

LYN

Tab I-1

BOTTOM SOUNDER OPERATOR QUALIFICATION CARD

NAME: L(b)(3)/(b)(6) _____
RATE: I _____ NEC: _____
DATE QUALIFICATION COMMENCED: _____
DATE QUALIFICATION DUE: _____
DATE QUALIFICATION COMPLETE: _____

All items must be signed by a Sonar Supervisor unless otherwise designated

BOTTOM SOUNDER OPERATOR QUALIFICATION CARD

DATE

SIGNATURE

I. PREREQUISITES.

- a. Qualified phone talker.

1-30-97

[Signature]

LPO

II. KNOWLEDGE REQUIREMENTS.

- a. Demonstrate an in depth knowledge of the following:

- (1) Operating instructions for MPC bottom sounding AN/BSY-1 NAVSEA SE331-AA-MMA-100/ (C)BSY-1(V) PT 1, VOL 2, SECT 15.

27 AUG 97

[Signature]

- (2) AN/BSY-1 operating guide for MPC bottom sounding mode.

21 OCT 97

[Signature]

- (3) Use of indication/displays in the following modes:

(a) Shallow

25 AUG 97

[Signature]

(b) Deep

25 AUG 97

[Signature]

(c) Secure Deep

8 AUG 97

[Signature]

(d) Secure Shallow

25 AUG 97

[Signature]

(e) Simple

27 AUG 97

[Signature]

(f) Contour

8 AUG 97

[Signature]

(g) Stand Alone

25 AUG 97

[Signature]

- (4) Basic understanding of transmit/ receive frequency, beam width and detectability in each of the following modes:

(a) Shallow

27 AUG 97

[Signature]

(b) Deep

27 AUG 97

[Signature]

(c) Secure Deep

8 AUG 97

[Signature]

(d) Secure Shallow

27 AUG 97

[Signature]

(e) Simple

21 OCT 97

[Signature]

(f) Contour

21 OCT 97

[Signature]

(g) Stand Alone

27 AUG 97

[Signature]

- (5) Location and description of all

27 AUG 97

[Signature]

bottom sounding equipment,
power supplies, and transducers.

- (6) Procedures when CAEP is locked out (to include DRO lockout). 8 AUG 97 [Signature]
- (7) Complete knowledge of Standalone/ Integrate capability. 27 AUG 97 [Signature]
- (8) The purpose and normal position of all switches on the MPC. 27 AUG 97 [Signature]
- (9) The CO's standing orders with regard to fathometer operation. 11/14/97 [Signature]
NAV
- (10) Fathometer log entries and how to compare them to charted soundings. 11/14/97 [Signature]
ANAV
- (11) RED and YELLOW soundings and the proper procedures/immediate actions required. 11/14/97 [Signature]
NAV
- (12) Procedures when no sounding is obtained or on loss of sounding. 11/14/97 [Signature]
NAV ANAV
- (13) All duties required on the Maneuvering Watch. 11/14/97 [Signature]
NAV
- (14) Familiarity with the Navigation and Piloting Bill. 11/16/97 [Signature]
NAV ANAV
- (15) Thorough understanding of all displays and indications on the MPC. 27 AUG 97 [Signature]

III. PRACTICAL FACTORS.

a. Demonstrate the ability to operate the ship's bottom sounder in the following modes:

- (a) Shallow 25 AUG 97 [Signature]
- (b) Deep 25 AUG 97 [Signature]
- (c) Secure Deep 8 AUG 97 [Signature]
- (d) Secure Shallow 25 AUG 97 [Signature]
- (e) Simple 27 AUG 97 [Signature]
- (f) Contour 8 AUG 97 [Signature]
- (g) Stand Alone 25 AUG 97 [Signature]

b. Demonstrate the actions required for a yellow sounding. 9 AUG 97 [Signature]

c. Demonstrate the actions required for a red sounding. 9 AUG 97 [Signature]

d. Demonstrate the actions required in no sounding and loss of sounding conditions.

25 AUG 97 [Signature]

V. TRAINING WATCHES.

a. Stand a minimum of four (4) bottom sounder operator watches under instruction.

8-8-97 [Signature]

8-23-97 [Signature]

8-23-97 [Signature]

25 AUG 97 [Signature]

b. Stand two (2) under instruction maneuvering watches as the Bottom Sounder Operator.

25 AUG 97 [Signature]

25 AUG 97 [Signature]

VI. EXAMINATION AND QUALIFICATION.

a. Satisfactorily complete a comprehensive written exam prepared by the ST LPO and approved by the Navigator.

17 NOV 97 [Signature]
ST LPO

GRADE 3.89

b. Examined and recommended for qualification as a Bottom Sounder Operator.

11/19/97 [Signature]
ST LPO

c. Examined and recommended for qualification as a Bottom Sounder Operator.

11/19/97 [Signature]
ANAV

d. Examined and certified as a Bottom Sounder Operator.

11/26/97 [Signature]
NAV

V. ADMINISTRATION.

a. Entry made in Ship's Qualification Notebook.

11/26/97 [Signature]
NAV

b. Entry made in service record (page 4).

PERSONNEL OFFICER

03 MAR 1997

USS _____ NAVOPSDEPTINST 5400. _____

4307 AN/WLR-8 OPERATOR QUALIFICATION CARDNAME (b) (3) / (b) (6) RATE 1

DATE STARTED _____ DATE DUE _____

1. Prerequisites

a. Completed Basic Navigation/Operations Department Qualification.

DATE

SIGNATURE

5/1/00[Signature]
LPO

b. Completed AN/BRD-7 Operator Qualification.

5/1/00[Signature]
LPO2. Knowledge Requirements

a. Commanding Officer's Standing Orders and requirements contained therein.

01/20/00[Signature]
NOTE 1

b. MC and phone circuits used in Radio/ESM.

NOTE 1

c. Purpose of the AN/WLR-8 (V).

d. Demonstrate a detailed knowledge of all equipment locations and power sources.

03/26/00[Signature]
NOTE 1

e. Draw a one-line diagram of RF distribution from antennas associated with the AN/WLR-6.

03/26/00

NOTE 1

f. Draw a sketch of all ESM antennas. Show location and frequency coverage.

g. Describe the frequency capabilities of all antennas associated with the AN/WLR-8.

NOTE 1

h. Describe the purpose and use of all switches and indicators located on the periscope E/E adapter, radio room box and ESM Room box that affect the operation of the AN/WLR-8.

03/26/00[Signature]
NOTE 1

i. Describe the purpose and function of all circuit breakers, switches, display scopes and indicators associated with Units 1, 2, and printer of the AN/WLR-8 system.

j. Discuss the three modes of operation, their function when each is used and the capabilities.

03/26/00[Signature]
NOTE 1

k. Describe the indications displayed on the Control Indicator (C-10209) and list the purpose of each.

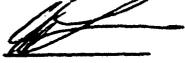
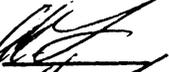
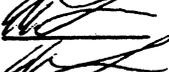
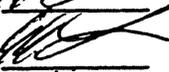
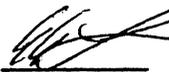
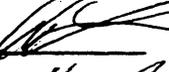
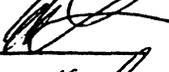
l. Discuss casualty modes of operation.

NOTE 1

08 MAR 1997

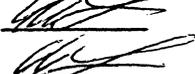
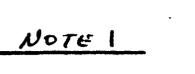
USS _____ NAVOPSDEPTINST 5400. _____

3. Practical Factors

	<u>DATE</u>	<u>SIGNATURE</u>
* a. Electrically isolate the AN/WLR-8.	03/26/00	
b. Demonstrate the ability to:		
(1) Perform system turn-on. Identify the proper auto fault indication.	03/26/00	
(2) Load the operational program from magnetic tape, configure, and start the program	03/26/00	
(3) Perform System Self-Test and interpret the indication	03/26/00	
(4) Perform the Self-Test for all units so equipped.	03/26/00	
c. Demonstrate the ability to operate the system in the Scan Lock Mode ensuring proper entries of parameters for full analysis and classification.	03/26/00	
d. Demonstrate the ability to operate the system in the Direct Operator Controlled (DOC) Mode, including use of all three sub-modes for full analysis and classification.	03/26/00	
e. Demonstrate the ability to operate the system in the system in the Manual Back-up Mode including performance of full analysis and classification. Explain what units this mode bypasses.	03/26/00	
f. Demonstrate the ability to operate the system using the library storage capability, including entering, and utilizing stored data.	_____	NOTE 1
g. Demonstrate the ability to output information to the printer.	_____	NOTE 1
h. Demonstrate the ability to secure the system under normal and emergency conditions.	03/26/00	
i. Demonstrate the ability to perform the AN/WLR-8 pre-underway checks.	_____	NOTE 1
j. Demonstrate the ability to complete all PMS requirements on the AN/WLR-8 system.	03/26/00	
* k. Demonstrate the ability to perform audio patching and operate the audio recorder/reproducer.	03/26/00	
l. Prepare a Radar Target Signals List per 2-13.10.1.	03/26/00	

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USS _____ NAVOPSDEPTINST 5400. _____

	<u>DATE</u>	<u>SIGNATURE</u>
m. Demonstrate the ability to detect live signals and determine the following parameters:	_____	NOTE 1
(1) Frequency	_____	NOTE 1
(2) PRF	_____	NOTE 1
(3) PW	_____	NOTE 1
(4) Scan time	_____	NOTE 1
(5) Scan type (Video/Audio)	_____	NOTE 1
(6) Type of emission (Visual)	_____	NOTE 1
(7) Bearing (as applicable, using ADF)	_____	NOTE 1
(8) Signal strength	_____	NOTE 1
(9) Modulation types	_____	NOTE 1
(10) Radar function	_____	NOTE 1
(11) ELINT notation	_____	NOTE 1
n. Demonstrate proficiency in making the proper reports to the CONN within specified times.	03/29/00	
o. Demonstrate proficiency in the use of and data contained in the following manuals:	03/28/00	
(1) NWP 3-13.10.1 Submarine Electronic/Optic Sensor Employment Manual	03/28/00	
(2) NWP 10-1-40 Electronic Warfare Coordination	03/29/00	
(3) MCM 3-1 VOL II		
(4) Defense Intelligence "Electronic Order of Battle (EOB)" for the projected mission area.	03/23/00	
(5) NSA EPL Non-Communist Bloc	03/28/00	
(6) NSA EPL Communist Bloc	03/29/00	
(7) PER 1	03/29/00	
(8) PER 2	03/29/00	
(9) NWP 3.13.10.1 (VOL 1) AN/WLR-8(V)2 or NWP 3.13.10.1 (VOL 4) AN/WLR-8(V)5 Operational Guidelines.	03/29/00	
(10) FIGSOP	03/28/00	
* p. Demonstrate the ability to determine "Satellite Safe Time" using the HP 9020 SFMPL, Satellite Vulnerability Program.	_____	NOTE 1
4. <u>Training Watches</u>		
Stand three watches under instruction and demonstrated acceptable proficiency as an ESM watch.	(1) 03/24/00 (2) 03/27/00 (3) 03/28/00	
5. <u>Examination and Certification</u>		
a. Successfully complete a comprehensive written examination prepared by the COMM LPO and approved by the Navigator. Grade: _____	_____	NOTE 1 LPO

03 MAR 1997

USS _____ NAVOPSDEPTINST 5400. _____

	<u>DATE</u>	<u>SIGNATURE</u>
b. Examined and recommended for AN/WLR-8 Operator Qualification.	<u>5/10/00</u>	<u></u> LCPO
c. Examined and recommended for AN/WLR-8 Operator Qualification.	<u>5/10/00</u>	<u></u> DIVISION OFFICER
d. Examined and certified as qualified AN/WLR-8 Operator.	<u>5/17/00</u>	<u></u> NAVIGATOR
6. <u>Administration</u>		
a. Entry made in the Ship's Qualification Notebook.	<u>5/17/00</u>	<u></u> NAVIGATOR
b. Entry made in service record (page 4).	_____	_____ PERSONNEL OFFICER

NOTE 1 - PREVIOUSLY QUALIFIED 



58 MAR 1997

USS _____ NAVOPSDEPTINST 5400. _____

4310 AN/BRD-7 OPERATOR QUALIFICATION CARDNAME [(b)(3) / (b)(6)]RATE

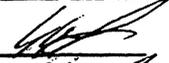
DATE STARTED _____

DATE DUE _____

- | <u>1. Prerequisites</u> | <u>DATE</u> | <u>SIGNATURE</u> |
|---|-----------------|--------------------|
| a. Completed Basic NAVOPS Department Qualification. | <u>5/1/00</u> | <u>[Signature]</u> |
| <u>2. Knowledge Requirements</u> | | |
| a. Commanding Officer's Standing Orders and requirements contained therein. | <u>02/26/00</u> | <u>[Signature]</u> |
| b. MC and phone circuits associated with radar operations. | _____ | <u>NOTE 1</u> |
| c. Purpose of the AN/BRD-7. | _____ | <u>NOTE 1</u> |
| d. Describe the purpose and use of all front panel switches, indicators, and displays. | <u>03/26/00</u> | <u>[Signature]</u> |
| e. Draw a one line diagram of RF distribution from antennas to receiver. | <u>03/26/00</u> | <u>[Signature]</u> |
| f. Discuss various casualty modes of operation. | <u>03/26/00</u> | <u>[Signature]</u> |
| g. Have a detailed knowledge of the following operations and features of the AN/BRD-7 system including: | _____ | <u>NOTE 1</u> |
| (1) Frequency range of the following: | | |
| (a) LF/MF | _____ | <u>NOTE 1</u> |
| (b) HF | _____ | <u>NOTE 1</u> |
| (c) VHF-1 | _____ | <u>NOTE 1</u> |
| (d) VHF-2 | _____ | <u>NOTE 1</u> |
| (e) VHF-3 | _____ | <u>NOTE 1</u> |
| (f) Low Band DF | _____ | <u>NOTE 1</u> |
| (g) High Band DF | _____ | <u>NOTE 1</u> |
| (2) Operating Controls and Indicators: | | |
| (a) Local Unit 2A1 | _____ | <u>NOTE 1</u> |
| (b) Printer Assembly 2A2 | _____ | <u>NOTE 1</u> |
| (c) Assembly 2A4 | _____ | <u>NOTE 1</u> |
| (d) Remote unit 3A2 | _____ | <u>NOTE 1</u> |
| (e) Assembly 3A6 | _____ | <u>NOTE 1</u> |
| h. Demonstrate a knowledge of the Mast/Scope indicator and the mast override switch. | _____ | <u>NOTE 1</u> |

03 MAR 1971

USS _____ NAVOPSDEPTINST 5400. _____

	<u>DATE</u>	<u>SIGNATURE</u>
i. Demonstrate working knowledge of the CRT PAN displays.	_____	<u>NOTE 1</u>
j. Demonstrate a working knowledge of the following modes of operation:		
(1) Operation	_____	<u>NOTE 1</u>
(2) Quick Look	_____	<u>NOTE 1</u>
(3) Internal Test	_____	<u>NOTE 1</u>
(4) External Test	_____	<u>NOTE 1</u>
(5) Situation	_____	<u>NOTE 1</u>
k. Describe the DF print out.	_____	<u>NOTE 1</u>
3. <u>Practical Factors</u>		
a. Complete an operations intercept log using information from the AN/BRD-7.	<u>03/26/00</u>	<u></u>
b. Raise and lower the AN/BRD-7 mast.	_____	<u>NOTE 1</u>
c. Perform system turn-on procedure.	<u>03/26/00</u>	<u></u>
d. Demonstrate the ability to insert all instructions.	<u>03/26/00</u>	<u></u>
e. Demonstrate the ability to program for automatic DF operation.	<u>03/26/00</u>	<u></u>
f. Demonstrate the ability to manually assign a receiver and obtain a DF on signals in LF/MF, HF, VHF-1, VHF-2 and VHF-3.	<u>03/26/00</u>	<u></u>
g. Demonstrate the ability to eliminate interfering signals.	<u>03/26/00</u>	<u></u>
h. Demonstrate a working knowledge of a threat signal.	<u>03/26/00</u>	<u></u>
i. Demonstrate the ability to search for and analyze signals in all frequency bands and report the results to the CONN in the specified times.	<u>03/26/00</u>	<u></u>
j. Using a bearing correction chart; DF and correct a signal of interest.	<u>03/26/00</u>	<u></u>
k. Prepare a Communications Target Signal List per NWP 3-13.10.1.	<u>03/26/00</u>	<u></u>
l. Demonstrate proficiency in the use of and data contained in the following manuals:	<u>03/26/00</u>	<u></u>
(1) NWP 3-13.10.1 Submarine Electronic/Optic Sensor Employment Manual.	<u>03/26/00</u>	<u></u>

(5)

- | | <u>DATE</u> | <u>SIGNATURE</u> |
|---|-------------|------------------|
| (2) NWP 10-1-40 Electronic Warfare Coordination | 03/27/00 | |
| (3) NWP 3-55.412 (REV A) AN/BRD-7 Operating Guidelines. | 03/27/00 | |
| (4) MCM 3-1 VOL 11 | 02/27/00 | |
| (5) Defense Intelligence "Electronic Order of Battle" (EOB) for the projected mission area. | 13/27/00 | |
| (6) NSA EPL Non-Communist Bloc | 02/27/00 | |
| (7) NSA EPL Communist Bloc | 03/17/00 | |
| (8) FIGSOP | 03/27/00 | |
| m. Demonstrate a working knowledge of the SFMPL "Cactus" Program. | 03/27/00 | |

4. Training Watches

- Stand three watches under instruction and demonstrate (1) _____ NOTE 1
 acceptable proficiency as an AN/BRD-7 Operator. (2) _____ NOTE 1
 (3) 03/28/00

5. Examination and Certification

- a. Successfully complete a comprehensive written examination prepared by the COMM LPO and approved by the Navigator. Grade: _____ NOTE 1
 LPO
- b. Examined and recommended for AN/BRD-7 Operator Qualification. 5/10/00
 LCPO
- c. Examined and recommended for AN/BRD-7 Operator Qualification. 5/10/00
 DIVISION OFFICER
- d. Examined and certified as a qualified AN/BRD-7 Operator. 5/17/00
 NAVIGATOR

6. Administration

- a. Entry made in the Ship's Qualification Notebook. 5/17/00
 NAVIGATOR
- b. Entry made in service record (page 4). _____ PERSONNEL OFFICER

NOTE 1 - PREVIOUSLY QUALIFIED XJR

Helmsman/Planesman Qualification Card

Name: L(b)(3) / (b)(6) Rate: I

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
<i>[Signature]</i>	1/27/98
LEP	
<i>[Signature]</i>	6-19-98
LEP	

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.

<i>[Signature]</i>	1/27/98

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.

<i>[Signature]</i>	5/24/98
<i>[Signature]</i>	5/26/98
<i>[Signature]</i>	5/26/98
<i>[Signature]</i>	1/29/98
<i>[Signature]</i>	1/29/98