

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

1. GENERAL DESCRIPTION.

1.1 Training Sites. This Appendix specifies the requirements and scheduling authority for the Navigation, Seamanship and Ship-Handling Trainer sites associated with the delivery of NSS training to fleet units and Navy military and civilian personnel. Each site has at least one NSS training system associated to one of three primary product lines.

The Kongsberg Navigation Seamanship and Ship-Handling Trainer V2, Trainer and the Navigation Seamanship and Ship-Handling Bridge Wing Simulator (BWS) V3 and Navigation Seamanship and Ship-Handling Trainer V1 are distributed at Naval Station, San Diego, CA, Naval Station, Norfolk, VA, Naval Station, Everett, WA, Naval Station, Pearl Harbor, HI, Naval Station, Mayport, FL, Commander, Fleet Activities Sasebo, Japan and Commander, Fleet Activities Yokosuka, Japan.

Conning Officer Virtual Environment (COVE) III is installed at Naval Support Activity Bahrain and Naval Station Rota, Spain. The BWS is only installed at Norfolk and San Diego locations.

The DDG1000 Full Mission Bridge (FMB) is installed at Naval Station San Diego, CA, and a DDG1000 Part Task Trainer is at SWOSCOLCOM, Newport RI.

The Commander, Naval Surface Force Command is the trainer scheduling authority for all fleet sites. The contractor will have scheduling responsibility for all sites under the supervision and guidance of COMNAVSURFOR or the Course Curriculum Model Manager (C2M2).

2. Requirements.

2.1 Training Scope. Contractor shall provide NSS Instructor/Operator services to fleet personnel and other approved users in accordance with a contractor developed schedule coordinated through government authority, using government provided curriculum, training devices and simulators, and the detailed requirements specified herein.

a. The estimated level of effort for contractor provided NSS Instructor/Operator services labor hours by site per year is contained in table B1-1 of Appendix B. Training demand is dynamic and variable per site based on variable ship schedules. For sites with multiple devices, contractor staffing shall provide the capability to support both classroom and multiple simulator training sessions simultaneously in support of fleet demand and scheduling.

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

b. Approximate class size for each convening of contractor provided NSS Instructor/Operator supported courses are contained in table B1-1 of Appendix B.

2.1.1 Trainer Operator Requirements. The training device will require an initial trainer start-up check for operating capability prior to each training session. If trainer malfunctions, software errors, or hardware failures occur during this initial start-up check or during normal operation, then the contractor shall determine if the malfunction can be resolved by the instructor on site, i.e.: re-boot, scenario reload, etc. If the malfunction cannot be resolved by the instructor, then a telephone call must be placed to the maintenance contractor for resolution. The operator will perform trainer shutdown procedures at the conclusion of scheduled training.

2.2 Course Requirements. The NSS Instructor/Operator services shall provide training in individual and team interaction skills. The Instructor/Operator services shall contain beginning, remedial, advanced, and refresher training. The training shall be designed for personnel with a moderate to high level of expertise, from Junior Officers and senior enlisted personnel to Major Command Officers (up to O-6).

2.3 NSS Instructor/Operator Primary Duties. In addition to the duties cited in paragraph 4.3 of Addendum B:

a. Provide support to SWOS, as SURFOR's Executive Agent for Navigation, Seamanship and Ship-handling, in its role as the NSS Course Curriculum Model Manager, to maintain content currency. SWOS as the NSS C2M2 will approve all changes to the NSS curriculum and its implementation.

b. Maintain highest levels of expertise in NSS subject areas, NSS TRD, NAVDORM, standard Navy conning commands, current maritime education and training best practices, U.S. Navy Surface Ship particulars and maneuvering characteristics for all ship classes, and other areas as appropriate; AND

c. Develop new and refine existing exercise scenarios based on Fleet/SWOS requirements. Standardized scenarios are desirable, but specific tailoring of scenarios in relation to ship's homeports and operation areas are permitted.

2.4 NSS Competencies. Contractor shall deliver instructor/operator services in the following NSS areas based on SWOS provided curriculum. Items below are listed as samples of NSS curriculum and requirements and are not intended to be all inclusive.

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

a. Rules of the Road: International and Inland Navigation Rules

1. Lights, flags and sound signals
2. Meeting, overtaking and crossing situations
3. Sail, power and towing vessels
4. General prudential rule
5. Buoys and channel markers

b. Ship-Handling Procedures: For each class of ship specified in 2.4.1 below.

1. Twisting using engines, mooring lines, wind and current
2. Getting underway from alongside a pier with and without tug assistance
3. Approach to a pier for mooring with and without tug assistance
4. Use and interactions of mooring lines, pier fenders and anchors
5. Tug interactions as a function of own-ship speed
6. Transit of channel with traffic during harbor egress and entry
7. Approach for underway replenishment with training for emergency situations that require breakaway
8. Maintaining position alongside ship with venturi effect
9. Approach to and positioning ship to anchor and to moor to buoy
10. Maneuvering to avoid collision and grounding
11. Use of rudder and speed adjustments to maintain station
12. Divisional tactics in formation maneuvering
13. Plane guards
14. Emergency procedures (man overboard drills, etc.)
15. Special evolutions (Towing, Mediterranean Moor, etc.)
16. High speed ship-handling and operations
17. Effects of own ship steering and propulsion system failures

c. Maneuvering Characteristics: For each class of ship specified in 2.4.1 below.

1. Effects of propeller, rudder and thruster
2. Tactical diameters
3. Effects alongside during underway replenishment
4. Bottom effects
5. Effects of wind and current
6. Hydrodynamic and fendering interactions with traffic ships and tugs

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

d. Bridge Resource Management (BRM): A five day, forty hour course of instruction, focusing on team building and effective communications within the ship control team and among bridge watch personnel.

1. Topics include situational awareness, analysis of error chains, voyage planning, ECDIS, ARPA, stress and fatigue, case studies, decision making, leadership, ship handling theory, a Rules of the Road exam, review of Commanding Officer's standing orders, and simulator exercises in the NSST V2 full mission bridge simulator, or the COVE III NSS trainer.

2. Class size is from 7 to 10. As a minimum, three watch teams (each consisting of an OOD and Conning Officer) plus a senior observer are required to attend. The senior observer position must be filled by the CO, XO or Senior Watch Officer. Up to three additional students (prospective OOD's or Conning Officers) can be included. For large-deck ships (CVN, LHA, LHD), the Navigator can act as senior observer. Often, the CO, XO and Senior Watch Officer (or Navigator for large-deck ships) share the senior observer duty. The recommended minimum participation for the CO is to conduct the lesson on standing orders (as a seminar), attend the lesson on CO-Pilot Relation, and observe one simulator unit.

3. Course completion criteria include a score of 90% on the Rules of the Road exam, attendance at a minimum of 80% of the total course hours, and attendance at 100% of the scheduled simulator hours. If a student satisfies the BRM attendance criteria, but does not achieve a score of 90% on the Rules of the Road exam, a completion certificate may be awarded once the student demonstrates a satisfactory level of knowledge during ROR remediation or successfully passes a subsequent, command-administered make-up exam.

4. Certain support materials for the course must be provided by the students receiving the training. Ships will provide three plotting kits, three sets of charts to support voyage planning exercises, pencils and erasers for chart work, and directives supporting voyage planning (Fleet Guides, Coast Pilot, Port Directory, etc.). Some of these materials may be available in the NSST facility. A complete copy of Standing Orders to the OOD shall be provided to the instructor on day one.

5. The instructor will make voyage planning and case study assignments on day one of the course. Typically, an inbound and

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

outbound transit of homeport plus a transit of another fleet-area port will be assigned for voyage planning.

6. It is recommended that all students be Officer of the Deck (OOD) qualified or close to completing OOD qualification to derive maximum benefit from this course.

e. Basic Ship-Handling Course (BSH): A five day course of instruction patterned after STWC training courses and consisting of about 10 hours of classroom and 30 hours of ship-handling simulator exercises. This course is intended for the inexperienced Navy novice seeking qualification as Officer of the Deck and Surface Warfare Officer, but can be modified to match the experience level of any group. Class size is strictly limited to six students to ensure every student receives sufficient conning time. The course covers the very basic principles of ship-handling utilized in controlling the movement and positioning a basic Navy destroyer type ship. Potential course reference material could include Barber's Naval Shiphandler's Guide, Naval Institute Press. Instructors are encouraged to assign nightly homework assignments in preparation for each day's instruction. To successfully complete the course students shall demonstrate without instructor coaching, a series of four ship-handling evolutions; getting underway from alongside a pier, making a landing, underway replenishment and man overboard. These demonstrations are assessed by an experienced instructor and the assessment process may be observed or assessed by the ship's Commanding Officer. The BSH Course includes 10 ship-handling lessons:

1. Introduction: Classroom instruction covers course format and schedule, explanation of textbook and ship-handling fundamentals. Included are principles of physics; Archimedes, Newton, Bernoulli and Venturi. Discussion focuses on ship stability and buoyancy, laws of motion and the combination of art and science in bringing together the proficient use of forces to control position and movement of a ship. A one hour orientation provides an introduction to the ship-handling simulator.

2. Forces on the Ship: Classroom instruction covers the basic principles of controllable forces; propulsion, rudder, mooring lines, tugs and anchors and how these forces can be used to control and position the ship. Pilot status is included. Uncontrollable forces, wind and current, including tides, are discussed with explanations of determination of effects.

3. Standard Commands: Classroom instruction covers the need for and methods of using standard commands in steering, rudder position, speed control, mooring lines, tug control and

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

anchor. Students then demonstrate ship control with standard commands in ship-handling simulator exercises.

4. Getting Underway from Alongside a Pier: Classroom instruction covers methods of getting a ship underway from alongside a pier with considerations of wind and current. Instruction includes review of forces, preparations, use of mooring lines, twisting, flow past the rudder, pivot point and safe maneuvering in proximity to other ships. Each student then practices getting underway procedures by conning the ship under instruction in the ship-handling simulator.

5. Making a Landing - Pier Arrival: Classroom instruction covers methods of bringing a ship from a channel into position alongside a pier with considerations of wind and current. Instruction includes review of forces, preparations, use of tug, rudder and speed control, approach, flow past the rudder, final adjustments, pivot point, use of mooring lines and safe maneuvering in proximity to other ships. Each student then practices making a landing by conning the ship under instruction in the ship-handling simulator.

6. Basic Rules of the Road: Classroom instruction covers the three basic Rules of the Road situations; head-on, crossing and overtaking. Instruction includes determination of stand-on or give-way status, sound signals, lights, distress signals, international and inland rules, and demarcation lines. Students then demonstrate appropriate Rules of the Road procedures in ship-handling simulator exercises. Homework includes an open book Basic Rules of the Road exam with classroom critique.

7. Underway Replenishment: Classroom instruction covers the importance of and procedures employed in conducting underway replenishment. Instruction includes preparation, approach, alongside and breakaway with emphasis on safety. Each student then practices conduct of underway replenishment procedures under instruction in the ship-handling simulator.

8. Man Overboard: Classroom instruction covers ship-handling maneuvers and procedures to be taken in man overboard situations. Instruction includes initial actions, four recovery maneuvers (Anderson, Williamson, Racetrack and Y Backing), recovery and pick-up procedures. Each student then practices maneuvering the ship for a man overboard by conning the ship under instruction in the ship-handling simulator.

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

9. Tactical Maneuvering: Classroom instruction covers basic formations and maneuvering of the ship in line formations. Students then demonstrate ship maneuvering in line formations under instruction in the ship-handling simulator. A NATO-like operation order and signal book sets the scene and provides the basis of delayed execution directive communications.

10. Anchoring: Classroom instruction covers; equipment, characteristics and piloting, selection of the anchorage, plotting the anchorage, executing the anchorage, and post anchorage procedures. Instruction includes terminology and emphasizes safety in this basic seamanship evolution.

f. Special Evolutions (SE): Flexible four hour units consisting of three hours of simulator training on ship-handling during special evolutions. Class size is strictly limited to six students to ensure every student receives sufficient conning time. The course covers topics such as Pier Work, Underway Replenishment, Working with Tugs, Contact Management, Flight Operations, Conning (general, swept, and narrow channel), Tactical Maneuvering, Man Overboard, Plane Guard, Math for the OOD (I&II), and Low Visibility Navigation.

Ships are provided the opportunity to request specific training on ship-handling evolutions that they desire, but must complete a minimum of 28 hours (7 units) per year or as modified by Commander, Naval Surface Forces (COMNAVSURFOR).

g. NSST Shipboard V1 Operations Refresher Course: Flexible on demand course for Navy ships outfitted with the NSST shipboard V1 ship-handling simulator. Length of the course can be tailored to command requirements, experience and familiarity with Windows applications. This course highlights the operations and features of the NSST V1 device. Class size is limited to four students (training officer or designated representative, STT member, etc.) to maximize hands on time with the system and it is highly recommended that the command bring their own system laptop in order to construct exercises that would benefit the command's own onboard training. Topics of instruction include:

1. Introduction to the NSST V1 equipment
2. Initializations and shutdown procedures for the system
3. E-coach exercises and local scenarios
4. Software menus and system functionality
5. Basic exercise construction and instructor driven scenarios
6. Polaris system maintenance

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

h. Command Qualification Practice, Commanding Officer/Executive Officer shiphandling familiarization, Junior Officer Shiphandling Competitions and other miscellaneous NSS specific training authorized by COMNAVSURFOR.

2.4.1 Own-Ship Classes. The delivered Instructor/Operator services shall provide students with training and practice with own ship hydrodynamics for the following ship types/classes. Refer to Table B1-3.

2.4.2 Traffic Ships. The delivered Instructor/Operator services shall provide students with training and practice with up to 25 simultaneous traffic ships operational during a single scenario in conjunction with own ship as follows:

1. Own ships indicated in table B1-3
2. Tugs, Military Sealift Command (MSC) Vessels, Commercial Vessels, Yachts
3. Helicopters

2.4.3 Ports. The delivered Instructor/Operator services shall provide trainees with training and practice in the geographic/port areas. Refer to Table B1-2.

APPENDIX B01
Fleet Navigation Seamanship and Shiphandling Trainer(s)

TABLE B1-1 Contractor provided Instructor supported courses are:

Course Title	FISCAL YEAR					Class Size	Course Length (Hours)*	Notes
	2017	2018	2019	2020	2021			
BRIDGE RESOURCE MANAGEMENT (BRM)	Classes	Classes	Classes	Classes	Classes			
Naval Station, San Diego, CA	29	29	29	29	29	9-12	40	1,2,8,9
Naval Station, Everett, WA	4	3	4	3	4	9-12	40	9
Naval Station, Pearl Harbor, HI	6	5	6	5	6	9-12	40	
US Naval Base, Sasebo, Japan	4	4	4	4	4	9-12	40	
US Naval Base, Yokosuka, Japan	5	6	5	6	5	9-12	40	
Naval Station, Norfolk, VA	33	32	33	32	33	9-12	40	1,2,9
Naval Station, Mayport, FL	10	10	10	10	10	9-12	40	
No Homeport (Pre-commissioned units)	7	8	7	8	7	9-12	40	2
Naval Support Activity, Bahrain	-	-	-	-	6	9-12	40	7
Naval Station, Rota, Spain	-	-	-	-	2	9-12	40	7
Total	98	97	98	97	106			
BASIC SHIP-HANDLING (BSH)								
Naval Station, San Diego, CA	29	29	29	29	29	6	40	1,2
Naval Station, Everett, WA	3	4	3	4	3	6	40	
Naval Station, Pearl Harbor, HI	5	6	5	6	5	6	40	
US Naval Base, Sasebo, Japan	4	4	4	4	4	6	40	
US Naval Base, Yokosuka, Japan	6	5	6	5	6	6	40	
Naval Station, Norfolk, VA	32	33	32	33	32	6	40	1,2
Naval Station, Mayport, FL	10	10	10	10	10	6	40	
No Homeport (Pre-commissioned units)	8	7	8	7	8	6	40	2
Naval Support Activity, Bahrain	-	-	-	-	6	6	40	7
Naval Station, Rota, Spain	-	-	-	-	2	6	40	7
Total	97	98	97	98	106			
BRM/BSH COURSES/YR								
All Sites Combined	195	195	195	195	212			3
SHIP-HANDLING SPECIAL EVOLUTIONS (SE)	Hours	Hours	Hours	Hours	Hours			
Naval Station, San Diego, CA	406/ 870	406/ 870	406/ 870	406/ 870	406/ 870	6	4	4
Naval Station, Everett, WA	49/ 105	49/ 105	49/ 105	49/ 105	49/ 105	6	4	4,5
Naval Station, Pearl Harbor, HI	77/ 165	77/ 165	77/ 165	77/ 165	77/ 165	6	4	4
US Naval Base, Sasebo, Japan	56/ 120	56/ 120	56/ 120	56/ 120	56/ 120	6	4	4,5
US Naval Base, Yokosuka, Japan	77/ 165	77/ 165	77/ 165	77/ 165	77/ 165	6	4	4,5
Naval Station, Norfolk, VA	455/ 975	455/ 975	455/ 975	455/ 975	455/ 975	6	4	4
Naval Station, Mayport, FL	140/ 300	140/ 300	140/ 300	140/ 300	140/ 300	6	4	4

APPENDIX B01
Fleet Navigation Seamanship and Shiphandling Trainer(s)

No Homeport (Pre-commissioned units)	105/225	105/225	105/225	105/225	105/225	6	4	4
Naval Support Activity, Bahrain	N/A	N/A	N/A	N/A	105/240	6	4	4
Naval Station, Rota, Spain	N/A	N/A	N/A	N/A	28/60	6	4	4
SE COURSES/YR								
All Sites Combined Minimum/Maximum	1365/2925	1365/2925	1365/2925	1365/2925	1498/3225			6

- Notes:**
- (1) Two NSST v2.0, 1 NSST BWS, 1 NSST v1.0 systems installed.
 - (2) New construction crew and pre-commissioning ships predominantly train at Norfolk, VA and San Diego, CA.
 - (3) Notional through-put based on static number of ships per homeport and mandated training requirements.
 - (4) Special Evolutions are 4 hour units. 28 hours (7 units) are mandatory per ship, per year. Each ship is allocated a quota of up to an additional 32 hours (8 units) per year.
 - (5) ATGNORWEST and ATGWESTPAC currently provide portion of Special Evolutions training as schedule permits.
 - (6) Combined estimates based on static number of ships and hours required by CNSFINST 3505.1(series).
 - (7) COVE III installed.
 - (8) Transas DDG1000 installed.
 - (9) Civil Mariners from Military Sealift Command, and Harbor Pilots may request Additional Instruction simulator time from the government.

Because these courses are delivered to shipboard crews in the immediate area of the training sites, they may be canceled on short notice due to short-fused operational requirements of the ship.

APPENDIX B01
Fleet Navigation Seamanship and Shiphandler Trainer(s)

TABLE B1-2 Cove III and NSST Ports

COVE III GEOGRAPHIC AREA DATABASES (PORTS)	COVE III GEOGRAPHIC AREA DATABASES (PORTS)	NSST GEOGRAPHIC AREA DATABASES (PORTS)
Abot-Kaaot	La Maddalena	Boston
Annapolis	Mayport	Diego Garcia
Aqaba	Mogadishu	Djibouti
Bahrain	Mombasa	English Channel
Boston	Morehead City	Guam
Brisbane	Muscat	Gulf of Suez
Buzzards Bay	Nanoose Bay	Halifax
Cape Disappointment	New London	Hong Kong
Channel Islands	New York	Ingleside
Charleston	Open Ocean	Kuwait
Chinhae	Panama Canal	Mayport
Clyde	Pascagoula	Middle East (Abu Dhabi, Bahrain, Jebel Ali, Suez Canal, Strait of Hormuz)
Diego Garcia	Pearl Harbor	Morehead City
Djibouti	Plymouth	Naples
Dover	Poole Portland	New York
England South Coast	Port Canaveral	New York
Falmouth	Port Everglades	Norfolk (includes Little Creek, Newport News, Yorktown, Norfolk Naval Shipyard, Craney Island)
Flagship Cylinder	Portsmouth	Okinawa
Gibraltar	Puget Sound	Open Sea
Guam	Pusan	Pacific Northwest (Puget Sound, Vancouver, Victoria, San Juan Islands, Georgia Straits)
Gulf of Aden	Saipan	Palma
Hampton Roads	San Diego	Pascagoula
Hong Kong	San Francisco	Pearl Harbor (Lualualei)
Hormuz	Sasebo	Pensacola
Ingleside	Singapore	Pusan
Jebel Ali	Souda Bay	Rota
Ketchikan	Subic Bay	San Diego
Key West	Suez Canal	San Francisco
Kings Bay	Umm Qasr	Sasebo
Kuwait City	Yokosuka	Seal Beach (LA/LB harbor)
		Singapore
		Strait of Malacca
		Tokyo Bay (Yokosuka)

**APPENDIX B01
Fleet Navigation Seamanship and Shiphandling Trainer(s)**

TABLE B1-3 Cove III and NSST Ships

COVE III SHIPS	COVE III SHIPS	NSST SHIPS
Aircraft Carrier CV63	Littoral Combat Ship LCS-1	110-foot Patrol Boat (WPB) - Island Class
Aircraft Carrier CVN68	Littoral Combat Ship LCS-2	210-foot Medium Endurance Cutter (WMEC) - Reliance Class
Aircraft Carrier CVN75	MarkV	225-foot Seagoing Buoy Tender (WLB)
Amphib LCAC	Mine Hunter MCM3	240-foot Seagoing Buoy Tender/ Icebreaker (WLBB-30)
Amphib LHA	Mine Hunter MCM4	270-foot Medium Endurance Cutter (WMEC) - Famous Cutter Class
Amphib LHD1	Mine Hunter MCM5	378-foot High Endurance Cutter (WHEC) (Diesel and Gas turbine models)
Amphib LHD8	Mine Hunter MCM7	ARS 50 Rescue and Salvage
Amphib LPD17	Mine Hunter MCM1	CG 47 Ticonderoga Class Cruiser
Amphib LPD4	Mine Hunter MHC51	CVN 68 Supercarrier
Amphib LSD41	Patrol Boat Navy 11 Meter RHIB	CVN 76 Supercarrier
Amphib LSD42	Patrol Boat PC1	DDG 51 Guided Missile Destroyer
Amphib LSD43	Patrol Boat RB-S	DDG 72 Guided Missile Destroyer
Amphib LSD47	Patrol Boat RHIB38	DDG 79 Guided Missile Destroyer
Amphib LSD52	Patrol Boat Riverine 33	FFG 7 Guided Missile Frigate
Aux AOE6	Patrol Boat YP683	JHSV Joint High Speed Vessel
CG Cutter WHEC	PC1-4p	LCAC 1 Landing Craft Air Cushion
CG Cutter WMSL		LCC 19 Amphibious Command Ship
Command Ship LCC		LCS 1 Littoral Combat Ship
Cruiser CG47		LCS 2 Littoral Combat Ship
Cutter WPB110		LHA 1 Amphibious Assault Ship General Purpose
Cutter WPB87		LHD 1 Amphibious Assault Ship Multi Purpose
Destroyer DD963		LHD 8 Amphibious Assault Ship Multi Purpose
Destroyer DD973		LPD 17 Amphibious Transport Dock
Destroyer DD979		LPD 4 Amphibious Transport Dock
Destroyer DD997		LSD 49 Landing Ship Dock
Destroyer DDG1000		MCM 1 Mine Countermeasures Ship
Destroyer DDG51		PC 1 Coastal Patrol Boat
Destroyer DDG79		RHIB 11 Meter
Frigate FFG7		RHIB 7 Meter
Landing Craft LCU1600		TAO 187 USNS Oiler (Ballasted and Full Load models)

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

2.4.4 Training Scenario Composition. In support of a comprehensive NSS mission area training program, C2M2 will provide curriculum guidelines and training system scenario guidelines that will provide students with training and practice in the following NSS competencies:

1. Training and practice with Helm, Lee helm, Navigator, and Engine displays training and practice utilizing BRM concepts, ECDIS-N display, and RADAR/ARPA display representations
2. Training and practice as a conning officer issuing standard ship control commands
3. Training and practice viewing 240 degrees around own-ship from various locations under normal and binocular views and visually determining angles on the bow
4. Training and practice using a programmable, instructor monitored, voice communication system (radio communications)
5. Training and practice with a range of simulated environmental conditions including wind, sea state, storms, fog, ocean current, height of tide, channel banks, shallow water, and day/night conditions
6. Training and practice with lights, shapes, and flags on traffic ships and aids to navigation
7. Training and practice with navigational aids, signal and spotlight effects and sounds
8. Training and practice with own-ship and traffic ship sound signals, own-ship engine sounds, and environmental sounds
9. Training and practice with up to date harbor specific databases
10. Training and practice of Mission Rehearsal scenarios
11. Training and practice with maneuvering board
12. Training and practice reinforcement through demonstrations, and recording and playback of training scenarios

3. Contractor Instructional Services (CIS) Schedule and Technical/Training Data.

3.1 CIS Schedule. CIS will schedule training Monday through Friday between the hours of 0800-2100 local. Normal working hours shall be defined as 0800-1700 with the option to expand to 2100 based on training load. Scheduling will be on an hourly basis. Scheduled hours may be grouped as units for scheduling purposes and for setting start and stop times for briefs and debriefs. Units will normally be four (4.0) hours in length and be inclusive of one introduction brief and unit debrief.

APPENDIX B01

Fleet Navigation Seamanship and Shiphandling Trainer(s)

3.1.1 Contractor provided Web-Based Scheduling Tool. The contractor shall provide a web-based tool that encompasses the following capability and content based on the current tool located at:

<http://nsstraining.net/mainpage.html>

- a. Scheduling website shall be administered per section 5 of Addendum B. It will be the sole record of trainer scheduling and utilization. Government Users who also use the NSS devices must contact the CIS scheduler. Priority is given to the delivery of curriculum outlined in paragraph 4.4, or as amended by the COR.
- b. Scheduling website shall also provide email and telephone contact information for scheduling training.
- c. Scheduling website shall be restricted access to protect information from unauthorized access and manipulation with users administered by command acronym (applicable to staff or training commands) or ship's hull number/job title and individual passwords, i.e. Username: ddg68/navigator, secure password. User accounts shall be restricted to only personnel with a verifiable .mil email address.
- d. Scheduling website shall provide users with instructions on how to request and verify scheduled training.
- e. Scheduling website shall provide users with a catalog of available training and a basic description of the training provided. Course descriptions shall clearly identify required materials necessary for the student to provide to support the curriculum.
- f. Scheduling website shall provide a calendar tool to enable users to identify open training opportunities up to one year in advance by date, time, location and device as well as an archive of completed training events for 3 years. The calendar shall normally exclude federal holidays from availability. Exceptions shall be authorized by the COR.
- g. Scheduling website shall contain records of specific training completed by ship's hull number to provide a means to track mandatory training completion intervals. Training records should be exportable to Microsoft Office 2007 or later.

3.2 Technical/Training Data. CIs shall have knowledge of technical data required to fulfill their CI requirements. The documents/data listed below are (not limited to) the primary documents applicable.

APPENDIX B01
Fleet Navigation Seamanship and Shiphhandling Trainer(s)

Table B1-4

Manual/Publication No.	Title
SO-0608-E/08-Apr-05	Polaris, Technical Manual Section 1 -Introduction
SO-0609-E1/08-Apr-05	Polaris, Technical Manual Section 2 – Technical Data
SO-0612-M/2-Dec-05	Polaris, Technical Manual Section 5a – Instructor’s Manual
SO-0613-J/29-Nov-05	Polaris, Technical Manual Section 5b – Instrumentation
SO-0614-M/24Jun-02	Polaris, Technical Manual Section 6 - Maintenance
SO-0681-D/14-Mar-05	Polaris, Technical Manual Section 5c – Polaris Radar/ARPA
SO-0918-A2/08-Apr-05	Polaris, Technical Manual Section 9 – Simulator Performance Description

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