APPENDIX L

MIDSHIPMAN SECOND/THIRD CLASS SURFACE CRUISE GUIDE

This booklet provides general guidelines for Midshipmen Second Class Surface Warfare Cruises. The goal of this program is to enhance the cruise experience by focusing on task completion. Second class midshipmen have already been, or will soon be, exposed to the underlying fundamentals and theory of each of these tasks. Also, prior to accomplishing each task, trainers and trainees are expected to discuss applicable underlying fundamentals and theory. This program is designed to provide midshipmen broad-based exposure to surface warfare in accordance with midshipmen summer training objectives. This is not a watchstation qualification program.

Normally, the Command Master Chief shall oversee the implementation of this program. These line items reflect the minimum that each midshipman should accomplish on cruise. All USNA and NROTC second class midshipmen will endeavor to complete this program.

This program consists of specific line items from the ESWS PQS (NAVEDTRA 43390-C) and a listing of Supplemental Line Items. Like the ESWS PQS, this program contains both 100-Level Fundamentals, which are basic items necessary for a rudimentary knowledge of the ship’s mission and functions, and 300-Level Watchstations, which are watches required to be stood to take the 100-level items a step further. To reinforce the goal of this program, which is to focus on tasks, ships should make every attempt to motivate midshipman trainees to “do” the 100-Level items which the ESWS PQS only requires trainees to “discuss”. Additionally, this program may be tailored to individual ships. Each ship may delete systems and equipment not installed on the ship, and add items unique to the ship.

The Trainer is designated in writing by the ship to sign off individual line items. Trainers will normally be E-5 or senior. The names of designated Trainers can be found on the ship’s PQS Progress Chart. The most current Fleet references should be used in conjunction with this program.

Due to the time constraints of the four-week second class midshipman cruise, the ESWS Line Items and the Supplemental Line Items may be completed simultaneously.

ESWS LINE ITEMS

100 Level
101.3 Discuss the procedures/personnel to be notified prior to the following:

   a. Going aloft __________________________

   b. Working over the side __________________

   c. Diving operations __________________________
101.11 Explain how a shorting probe is used to discharge capacitors.

101.19 Draw a power tool from your ship’s tool issue room.

101.20 Discuss your ship’s Safety Programs and the relationship between Safety Petty Officers and the Safety Officer.

101.21 Describe the Electrical Safety Program.

101.22 Describe the Heat Stress Program.

101.23 Describe the Hearing Conservation Program.

105.3 Describe the donning procedures and the methods of water entry for each of the following:
   a. CO2 inflatable life jacket
   b. Inherently buoyant life preservers
      (1) Vest type with collar
      (2) Vest type, auto-inflatable
      (3) Yoke type

106.3 Discuss Abandon Ship procedures, including the following:
   a. Who decides to abandon ship
   b. Word to be passed
   c. Actions of crew
   d. Emergency destruction
   e. Life boats

119.3 Discuss the duties and responsibilities of the following officer watchstations in CIC:
   a. Tactical Action Officer (TAO)
   b. Weapons Liaison Officer/Ship’s Weapons Coordinator (SWC)
119.4 Discuss the duties and responsibilities of the following enlisted watchstations in CIC:

a. CIC Watch Supervisor
b. Surface Supervisor
c. Digital dead reckoning tracer (DDRT) plotter
d. Detection and Tracking Supervisor
e. Air Intercept Controller (AIC)
f. DRT/DDRT (North and South)
g. Antisubmarine Tactical Air Controller (ASTAC)
h. Electronic Warfare (EW) Supervisor
i. TIC/ID Operator
j. JOTC/NTCS-A Operator
k. Track Supervisor (Track Sup)

119.17 Explain the purpose of the following:

a. JMCIS
b. NTCS-A
c. LINK-4
d. LINK-11
e. LINK-14
f. LINK-16
124.1 Briefly describe the general duties and responsibilities of each of the following watchstanders:

a. Engineering Officer of the Watch (EOOW)

b. Engineering Duty Officer (EDO)

c. DC Control Watch

d. Cold Iron Watch/In port Equipment Monitor

e. Sounding and Security Watch

h. Oil King

i. Engine room Operator

j. Ship’s Service Generator (SSG)/Emergency Generator Watch

k. Interior Communications (IC) Shop/Gyro Watch

l. Propulsion and Auxiliary Control Console (PACC) Operator

m. Electric Plant Control Console (EPCC) Operator

n. Auxiliary systems monitor (ASM)

o. Engine room monitor

300 Level

301.2.1 Review and discuss a Watch, Quarter, and Station Bill for your work center/division

301.2.3 Maintain and update PQS progress records

301.2.4 Verify the EDVR for your division

301.2.5 Observe anchoring from the bridge
301.2.6 Observe anchoring from the forecastle

301.2.7 Observe underway replenishment (UNREP) from bridge

301.2.8 Observe UNREP from UNREP station

301.2.9 Observe lowering/raising small boat with davit

301.2.10 Don an inherently buoyant life preserver

301.2.12 Locate ship’s whistle, bell and gong

301.2.13 Observe breaking out ammunition

301.2.14 Observe loading gun-loading system with ammunition

301.2.15 Observe unloading and strikedown of drill ammunition from magazine and loader/gun mount

301.2.16 Observe operation of gun system in normal mode of operation

301.2.17 Observe a gun shoot from the mount Captain’s control panel

301.2.18 Observe missile launcher loading and offloading (if applicable)

301.2.19 Observe loading of a missile onto a launcher

301.2.20 Observe unloading of a missile from launcher

301.2.21 Observe target engagement with gun/missile fire control system from CIC

301.2.22 Observe target plotting during NGFS in CIC

301.2.23 Observe Harpoon/Tomahawk engagement planning and simulated launch

301.2.24 Observe CIWS tracking and engagement in CIC
<table>
<thead>
<tr>
<th>Task Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>301.2.25</td>
<td>Observe firing an air-slug from surface vessel torpedo tubes</td>
</tr>
<tr>
<td>301.2.26</td>
<td>Observe loading/unloading of torpedo tubes</td>
</tr>
<tr>
<td>301.2.27</td>
<td>Observe tracking and weapons engagement against actual or training target from ASWFC System</td>
</tr>
<tr>
<td>301.2.28</td>
<td>Observe communications with another vessel using underwater communications equipment</td>
</tr>
<tr>
<td>301.2.29</td>
<td>Observe an XBT deployment and environmental prediction products prepared</td>
</tr>
<tr>
<td>301.2.30</td>
<td>Observe a passive sonar contact and determine contact’s true and relative bearing</td>
</tr>
<tr>
<td>301.2.31</td>
<td>Observe an actual or simulated contact on active sonar and determine the contact’s range and bearing</td>
</tr>
<tr>
<td>301.2.32</td>
<td>Detect and track a surface contact on a radar repeater</td>
</tr>
<tr>
<td>301.2.33</td>
<td>Determine scopehead CPA on a radar repeater</td>
</tr>
<tr>
<td>301.2.34</td>
<td>Observe Overall Combat Systems Operability Test (OCSOT) from CIC</td>
</tr>
<tr>
<td>301.2.35</td>
<td>Solve for contact course on a maneuvering board</td>
</tr>
<tr>
<td>301.2.36</td>
<td>Solve for contact speed on a maneuvering board</td>
</tr>
<tr>
<td>301.2.37</td>
<td>Solve for contact CPA on a maneuvering board</td>
</tr>
<tr>
<td>301.2.38</td>
<td>Solve for contact time of CPA on a maneuvering board</td>
</tr>
<tr>
<td>301.2.39</td>
<td>Solve for contact target angle on a maneuvering board</td>
</tr>
<tr>
<td>301.2.40</td>
<td>Plot a surface contact on DRT/NC-2 plotter</td>
</tr>
<tr>
<td>301.2.41</td>
<td>Observe operation of electronic surveillance equipment to isolate a signal of opportunity and determine its parameters</td>
</tr>
</tbody>
</table>
301.2.42 Observe SRBOC loading or downloading

301.2.43 Participate in routine and emergency destruction of classified material

301.2.44 Participate in radio transmission (R/T) drill

301.2.45 Assist the Signalman during a flag hoist drill

301.2.48 Observe flight operations from flight deck/helo control

301.2.51 Accompany watch to ensure physical security of engineering spaces

301.2.52 Observe lighting-off boiler and placing on line

301.2.53 Observe start and idle checks of a main engine from CCS/main control room

301.2.56 Observe from main space the stopping, locking, unlocking and trailing shaft during underway period

301.2.57 Observe from main space the splitting out of engineering plant

301.2.58 Observe from main space the cross-connecting of engineering plant (steam only)

301.2.59 Observe the balancing of electrical load distribution

301.2.60 Observe alignment, starting and securing of SSTGs/SSDG/GTG/EDG

301.2.61 Observe loading and unloading of generator

301.2.62 Observe alignment and starting of air compressors

301.2.63 Observe the lining up, starting and securing of steering unit
301.2.64 Assist damage control central watch/sounding and security watch in performance of tasks

301.2.65 Stand one watch as Helmsman under instruction

301.2.66 Stand one watch as Lee Helmsman/Ship Control Console Operator under instruction

301.2.68 Stand one watch as Quartermaster of the Watch (QMOW) under instruction

301.2.69 Observe one Special Sea and Anchor Detail from the bridge while entering or leaving port

301.2.70 Observe the navigation detail from the bridge while entering or leaving port

301.2.71 Determine relative bearing, target angle and bearing drift of a surface contact

301.2.72 Determine whether a meeting, crossing or overtaking situation exists

301.2.77 Observe an hourly weather observation

301.2.78 Energize and check navigation lights underway

301.2.79 Convert compass course to true course and vice-versa

301.3.1 Observe a shipboard recovery of Oscar during a man overboard drill from bridge

SUPPLEMENTAL ITEMS
1. Conduct a ship orientation tour with the Midshipman Training Officer

Operations

2. Discuss basic line handling safety

3. Act as a line handler during a mooring evolution

4. Act as a line handler during an UNREP evolution

5. Locate and discuss the use of all major ground tackle equipment

6. Act as a member of a boat crew

7. Observe well deck operations from well deck control during an amphibious vehicle launch / recovery

8. Participate in aircraft washdown (If applicable)

9. Stand LSE under instruction

10. Don a safety harness

11. Complete qualification for Sound-Powered Phone Talker

12. Make the 12 O’clock report to the Commanding Officer

13. Stand two watches as a lookout under instruction

14. Locate all ship’s compasses and discuss differences

15. Shoot a visual bearing and discuss visual fix techniques

16. Stand one watch as Boatswain Mate of the Watch (BMOW) under instruction

17. Stand one watch as Signalman under instruction

18. Stand one watch in CIC rotating through applicable watch stations

Combat Systems

19. Accompany a sonar tech on a tour of the sonar spaces
20. Observe the deployment / retrieval of the Tactical Towed Array Sonar (TACTAS)

21. Locate and operate ship’s fathometer

22. Accompany a gunner’s mate for the daily gun pre-fire checks

23. Accompany a gunner’s mate on a tour of the armory

24. Accompany a gunner’s mate or fire controlman on a tour of the missile magazine

25. Accompany a fire controlman on a tour of the fire control illuminators

26. Stand one watch in Combat Systems Maintenance Center (CSMC)

27. Stand one watch in a missile launcher and/or gun mount during GQ

Engineering

28. Perform the following damage control tasks:
   a. Don an Emergency Escape Breathing Device (EEBD)
   b. Don an Oxygen Breathing Apparatus (OBA)
   c. Don a Fire Fighter’s Ensemble (FFE)
   d. Operate a Naval Fire Fighter’s Thermal Imager (NFTI)
   e. Start, run, and draw a suction on a P-250
   f. Start, run, and draw a suction on an installed eductor
   g. Observe how a SEEDS is operated
   h. Act as the nozzleman for a live hose handling exercise
   i. Locate all installed AFFF stations
   j. Locate and inspect all HALON protected spaces
k. Locate and inspect all CO2 protected spaces

l. Locate and inspect all Range Guard stations

m. Locate all Repair Lockers and discuss areas of responsibility

29. Discuss tagout procedures. Walk through hanging a tagout

30. Discuss safety precautions for working on energized gear/deranged equipment

31. Observe a Main Space Fire Drill from CCS and main space

32. Locate and discuss ship’s Damage Control diagrams

33. Participate in Engine Room startup and shutdown in the engineering spaces

34. Locate where and how the ship makes water

35. Act as a member of the at-sea fire party during a drill

36. Act as a member of the repair locker party during a GQ drill

37. Stand two different Engine Room Operator watches under instruction

38. Stand one EPCC operator watch under instruction

39. Stand one Generator/Auxiliary Watch under instruction

Divisional

40. Act as compartment cleaner for one day

41. Act as a recorder during an XO's messing and berthing inspection

42. Act as a recorder during a ship's zone inspection
43. Accompany division maintenance man performing scheduled PMS maintenance for each division assigned

44. Accompany division maintenance man performing a PMS spot check for division officer for each division assigned

45. Inspect divisional spaces for improperly stowed HAZMAT

46. Inspect divisional HAZMAT locker for compliance with OPNAV 5100.19C

47. Walk through the parts ordering process with the Division Supply Petty Officer to include identifying stock number (NSN), placing order, obtaining Division Officer approval.

48. Assist the ship’s Storekeeper (SK) in processing approved part request, drawing part from the applicable store room, and delivering part to customer.

49. Accompany Division Supply Petty Officer on a Servmart run

In port Duty

50. Observe the general duties and responsibilities of each of the following in port watchstanders:
   a. Command Duty Officer (CDO)
   b. Officer of the Deck (OOD)
   c. Petty Officer of the Watch (EDO)

51. Observe the general duties and responsibilities of each of the duty section leaders

52. Stand one watch as Petty Officer of the Watch (POOW) under instruction

53. Stand one in port anchor watch under instruction

54. Act as a member of the SAT, BAF, or Reserve Force during a Security Alert Drill

55. Act as a member of the duty section fire party during a drill

56. Act as a food service attendant for a day to include one meal on the mess decks and one meal in the wardroom. Participate in breaking out food with food service leading petty officer,
preparation, serving, and clean-up