

# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



#### **SECTION 1**

#### **EO M223.01 – DEFINE SHIP-RELATED TERMS**

Total Time:	30 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content, become familiar with the material, and photocopy Annexes A and B, prior to delivering the lesson. Cut up the list of terms located at Annex B and place them in a container for the activity in TP1.

#### PRE-LESSON ASSIGNMENT

N/A.

#### **APPROACH**

An in-class activity was chosen for this lesson as it is an interactive way to provoke thought and stimulate interest among cadets.

#### INTRODUCTION

#### **REVIEW**

Review the following terms from EO M123.01 (Define Basic Naval Terminology):

- deck,
- port, and
- starboard.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to define ship-related terms.

# **IMPORTANCE**

It is important for cadets to define ship-related terms as these terms are frequently used in a naval environment. Understanding naval terminology will enable cadets to respond to orders/direction and to adapt to a naval environment.

# **Teaching Point 1**

# Conduct an Activity to Identify Parts of a Ship's Hull

Time: 30 min Method: In-Class Activity

# **BACKGROUND KNOWLEDGE**

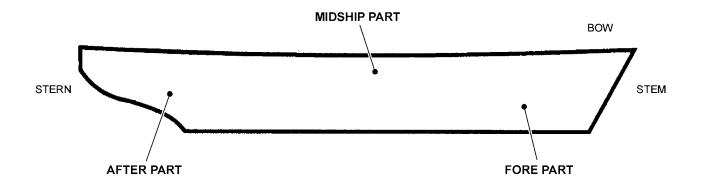


Figure 1 Parts of a Ship's Hull B-GN-181-105/FP-E00 (p. 3-3)

**After Part.** The part of the hull ending at the stern.

**Bow.** The front part of the vessel.

**Fore Part.** The part of the hull beginning at the stem.

Midship Part. The middle part of the hull.

**Stem.** The foremost steel part forming the bow of the vessel.

**Stern.** The aftermost part of the vessel.

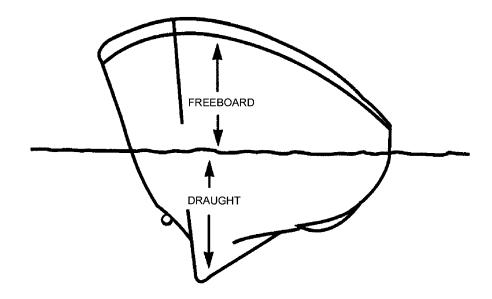


Figure 2 Freeboard and Draught B-GN-181-105/FP-E00 (p. 3-5)

**Draught.** The depth of the keel below the waterline at any point along the hull.

**Freeboard.** The height from the uppermost continuous deck/upperdeck to the waterline.

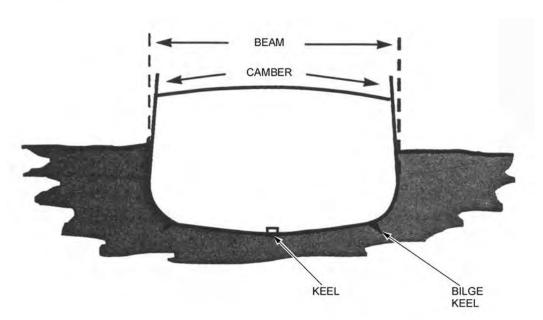


Figure 3 Beam, Camber, and Bilge B-GN-181-105/FP-E00 (p. 3-6)

Beam. The greatest width of the hull.

**Bilge.** The flat part of the hull's bottom (not shown in the figures). This term is also used to describe water, waste oil, and other liquids that collect at the bottom of a ship or in the bilge.

**Bilge Keel.** A long fin projecting on each side of the bilge, designed to decrease rolling of the ship.

Camber. The curve given to the surface of a deck so the water will drain away to the ship's sides.

**Keel.** The primary fore-and-aft part of a ship's frame. It runs along the bottom connecting the stem and the stern.

#### **ACTIVITY**

Time: 15 min

# **OBJECTIVE**

The objective of this activity is to identify the parts of a ship's hull.

#### **RESOURCES**

- Presentation aids (e.g. whiteboard/flipchart/OHP),
- Copies of Annexes A and B,
- Container with ship's terms, and
- Tape/sticky tack.

# **ACTIVITY LAYOUT**

Put the unlabelled ship's diagrams located at Annex A on the board.

#### **ACTIVITY INSTRUCTIONS**

- 1. Describe the terms listed above.
- 2. Divide the group into two teams.
- 3. Pick a term from the container for each team and have them label the ships.
- 4. Each correctly labelled part receives a point.
- 5. When a part is labelled incorrectly, the opposing team will be given the opportunity to label the part and receive the point.
- The activity ends when all terms have been drawn and the ship's diagrams have been correctly labelled.

#### **SAFETY**

N/A.

# **CONFIRMATION OF TEACHING POINT 1**

The cadets' participation in the activity will serve as the confirmation of this TP.

# **Teaching Point 2**

# Conduct an Activity to Identify Directions in a Ship

Time: 10 min Method: In-Class Activity

# **BACKGROUND KNOWLEDGE**

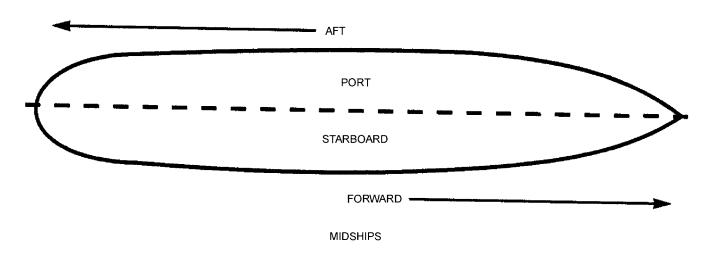


Figure 4 Fore and Aft B-GN-181-105/FP-E00 (p. 3-4)

Abaft. Further aft than an object/location (e.g. midships is abaft the bow) (not shown in figures).

Aft. In the direction of the stern of the ship.

**Centre Line.** The line joining the middle of the stem to the middle of the stern (dashed line in Figure 4).

**Forward.** In the direction of the bow of the ship.

**Midships.** At or near the middle part of the ship.

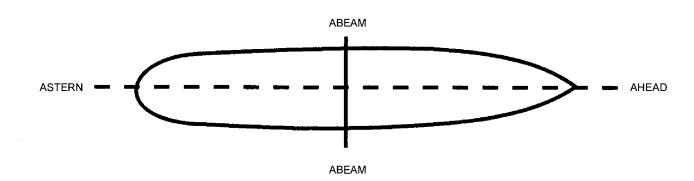


Figure 5 Ahead, Astern, and Abeam *B-GN-181-105/FP-E00 (p. 3-11)* 

Abeam. At a right angle to the ship.

Ahead. Towards the front of the ship.

Aloft. Direction above (e.g. in the rigging of a mast) (not shown in figures).

Astern. Towards the back of the ship.

**Below.** Below a deck(s) (not shown in figures).

**Up Top.** Moving to an upper deck (not shown in figures).

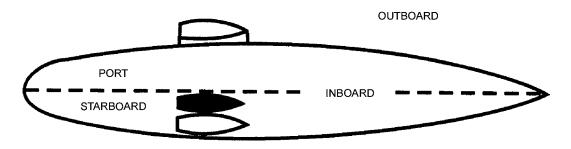


Figure 6 Position Athwartships B-GN-181-105/FP-E00 (p. 3-9)

Athwartships. Across the ship relative to either the centre line or the sides (not shown in figures).

**Inboard.** Inside the ship/toward or nearer the centre line (e.g. the black boat is inboard of the white boat in Figure 6).

**Outboard.** Outside the ship/away from the centre line (e.g. one white boat is outboard to port, and the other is outboard of the black boat in Figure 6).

#### **ACTIVITY**

Time: 10 min

#### **OBJECTIVE**

The objective of this activity is to define the terms used to identify directions in a ship.

#### **RESOURCES**

N/A.

# **ACTIVITY LAYOUT**

N/A.

#### **ACTIVITY INSTRUCTIONS**

- 1. Describe the terms listed above.
- 2. Identify parts of the training area as those on a ship (e.g. bow, stern, port, starboard, inboard, and outboard).

- 3. Explain the following actions:
  - Abaft Run to a position abaft midships.
  - Aft Point to the aft of the ship.
  - Centre line Form a line at the centre line of the ship.
  - Forward Point to the bow of the ship.
  - Midships Stand at the position of midships.
  - Abeam Stand outboard, with arms at a right angle to the ship.
  - Ahead Move to the bow and point forward.
  - Aloft Point above/up.
  - Astern Point towards the back of the ship.
  - Below Point below/down.
  - Athwartships Stand at the centre line of the ship with their arms out athwartships.
  - Inboard Stand inboard the ship.
  - Outboard Stand outboard the ship.
- 4. Call out terms and have cadets respond with the corresponding actions.

#### **SAFETY**

This activity must be conducted in a large area that is free of obstructions.

#### **CONFIRMATION OF TEACHING POINT 2**

The cadets' participation in the activity will serve as the confirmation of this TP.

#### **END OF LESSON CONFIRMATION**

The cadets' participation in the activities in TP1 and TP2 will serve as the confirmation of this lesson.

# CONCLUSION

#### HOMEWORK/READING/PRACTICE

N/A.

#### **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Naval terminology is a fun and exciting aspect of Sea Cadet training. This set of terms is unique to the Navy and is part of naval history/tradition. Understanding naval terminology is important to be able to respond to orders/direction and to adapt to a naval environment.

# **INSTRUCTOR NOTES/REMARKS**

N/A.

# **REFERENCES**

A1-004 B-GN-181-105/FP-E00 Chief of the Maritime Staff. (1997). *CFCD 105 Fleet Seamanship Rigging and Procedures Manual*. Ottawa, ON: Department of National Defence.

# **PARTS OF A SHIP'S HULL**

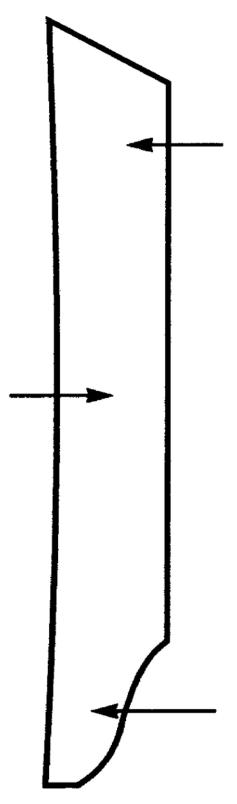


Figure A-1 Parts of a Ship's Hull *B-GN-181-105/FP-E00 (p. 3-3)* 

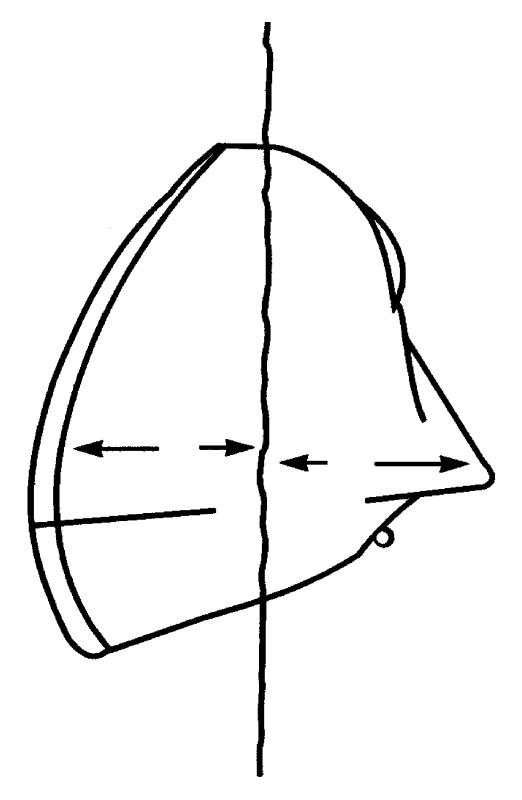


Figure A-2 Freeboard and Draught

B-GN-181-105/FP-E00 (p. 3-5)

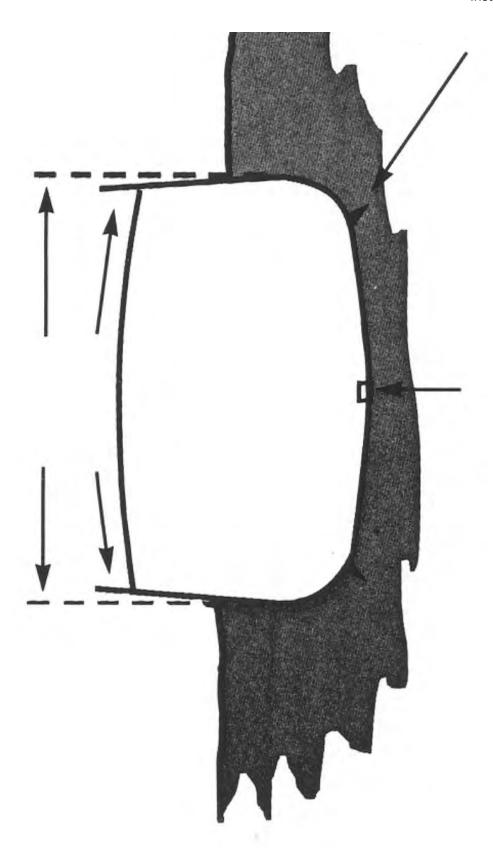


Figure A-3
B-GN-181-105/FP-E00 (p. 3-6)

M223.01A-3

A-CR-CCP-602/PF-001 Annex A to EO M223.01 Instructional Guide

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# LIST OF TERMS FOR THE ACTIVITY IN TP1

AFTER PART	BEAM
BILGE	BILGE KEEL
BOW	CAMBER
DRAUGHT	FREEBOARD
FORE PART	KEEL
MIDSHIP PART	STEM
STERN	                     

A-CR-CCP-602/PF-001 Annex B to EO M223.01 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



# **SECTION 2**

#### **EO M223.02 - IDENTIFY THE WATCH SYSTEM**

Total Time:	30 min

#### **PREPARATION**

# **PRE-LESSON INSTRUCTIONS**

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson.

#### PRE-LESSON ASSIGNMENT

N/A.

#### **APPROACH**

An interactive lecture was chosen for this lesson to present basic material and to orient the cadets to the watch system, timings, and duty personnel responsibilities.

# **INTRODUCTION**

#### **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to identify the watch system.

#### **IMPORTANCE**

It is important for cadets to identify the watch system because it is used throughout Sea Cadet training and cadets may be required to stand watch during training exercises.

# **Teaching Point 1**

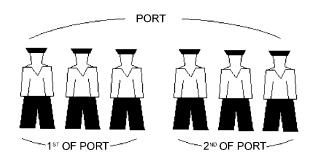
# **Describe How Watch Systems Are Organized**

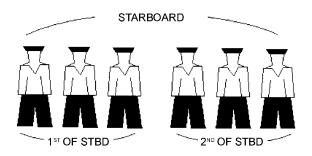
Time: 5 min Method: Interactive Lecture

To ensure maximum efficiency and 24-hour operation, personnel aboard a ship are divided into watches. Each watch has duties and responsibilities, as well as specific positions held within.

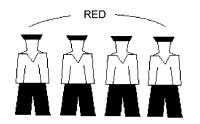
There are two systems for organizing a ship's company into watches. The first is a two-watch system, referred to as the port and starboard watch. This watch system may also be broken into four watches (first of port, second of port, first of starboard, and second of starboard). The second type is a three-watch system, called the red, white, and blue watch.

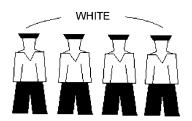
# TWO WATCH SYSTEM





# THREE WATCH SYSTEM





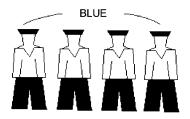


Figure 1 Watch Systems

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

#### **CONFIRMATION OF TEACHING POINT 1**

#### **QUESTIONS**

- Q1. What is the purpose of watch systems?
- Q2. What is the three-watch system called?
- Q3. Which watch system can be divided into four watches?

#### **ANTICIPATED ANSWERS**

- A1. To ensure maximum efficiency and 24-hour operation.
- A2. The red, white, and blue watch.
- A3. The two-watch system (port and starboard).

# **Teaching Point 2**

**Describe the Division of Time for the Watch System** 

Time: 10 min Method: Interactive Lecture

#### **TIMINGS FOR WATCHES**

Each watch will be assigned a time that they will be on duty (e.g. port assigned the middle watch/blue assigned the morning watch), depending on the watch system being used. The timings for the watches are outlined in the table below.

Watch	Timings
Middle watch	0000hrs to 0400hrs
Morning watch	0400hrs to 0800hrs
Forenoon watch	0800hrs to 1200hrs
Afternoon watch	1200hrs to 1600hrs
First dog watch	1600hrs to 1800hrs
Last dog watch	1800hrs to 2000hrs
First watch	2000hrs to 0000hrs



The dog watches are only half the time of the others to create a seventh watch, ensuring that personnel do not stand the same watch every day.

#### **BELLS AND WATCHES**

Each watch begins and ends with eight bells being rung, with the exception of the first dog watch, which ends with four bells, and the last dog watch, which begins with four bells. The bell is rung every half hour increasing the number of rings consecutively from the start of the watch resulting with eight bells at the end of the watch (with the exception of the dog watches). For example the bells rung during the forenoon watch would be as follows:

- eight bells at 0800hrs,
- one bell at 0830hrs.
- two bells at 0900hrs,
- three bells at 0930hrs.
- four bells at 1000hrs,

- five bells at 1030hrs.
- six bells at 1100hrs.
- seven bells at 1130hrs, and
- eight bells at 1200hrs.



It is not common practice for bells to be used to indicate time aboard a ship today, as it was in the past. Currently the bell is only struck at colours, at anchor in fog/bad visibility, or to sound the general alarm in the event of an emergency.

#### **CONFIRMATION OF TEACHING POINT 2**

#### **QUESTIONS**

- Q1. What are the timings for the first watch?
- Q2. Why are dog watches half the time of the other watches?
- Q3. How many bells are rung at the end of the first dog/beginning of the last dog watch?

# **ANTICIPATED ANSWERS**

- A1. 2000hrs to 0000hrs.
- A2. To ensure that personnel are not standing the same watch every day.
- A3. Four.

#### **Teaching Point 3**

**Describe the Responsibilities of Duty Personnel** 

Time: 10 min Method: Interactive Lecture

# OFFICER OF THE WATCH (OOW)

The OOW has responsibility of the ship and reports to the Commanding Officer (CO) for the movements and safety of the ship. When on duty, the OOW has command over all ship's personnel with the exception of the CO and Executive Officer (XO). Responsibilities of this position may include:

- safety of the ship and its personnel;
- navigation;
- anti-collision;
- damage-control (DC) state; and
- routine administration.

#### SECOND OFFICER OF THE WATCH

The second officer of the watch reports to the OOW and has the same responsibilities as the OOW. The majority of second officers of the watch do not have a Bridge Watchkeeping ticket and are therefore closely monitored by the OOW. Responsibilities of this position may include:

- navigation;
- helicopter operations; and
- administration of the watch.

# PETTY OFFICER OF THE WATCH (POOW)

The POOW is responsible to the OOW for the control of the watch. The POOW must report to the OOW hourly on completion of rounds, at any significant occurrence, and when the watch closes up. Responsibilities of the POOW include:

- mustering the watch prior to turnover;
- assigning personnel to positions and arranging the rotation;
- ensuring the ship's boats are ready for immediate use;
- ensuring all lifesaving equipment is serviceable and ready for immediate use;
- taking charge of any seamanship evolution during the watch;
- conducting hourly rounds of the ship; and
- supervising cleaning stations assigned to the watch.

#### **QUARTERMASTER**

The quartermaster is responsible to the OOW and must ensure that all steering activities are properly carried out. Responsibilities of the quartermaster include:

- remaining closed up at the steering position for the duration of the watch;
- ensuring the helmsman is rotated every thirty minutes;
- taking the first twenty minutes on the helm at the beginning of each watch; and
- supervising those on watch.

#### **HELMSMAN**

The helmsman is under the supervision of the quartermaster and is responsible for steering the ordered course.

# LOOKOUT

The lookout is responsible for watching for and reporting any objects, vessels, or aircraft to the OOW. The lookout also raises the alarm and marks the position if they see a man overboard.

#### **LIFEBUOY SENTRY**

The lifebuoy sentry is responsible to the POOW, and raises the alarm and throws lifesaving devices should a person fall overboard. This watch is kept near the stern of the ship and are stationed whenever the ship is underway. The lifebuoy sentry also performs the duty of the after lookout.



Duty personnel and their responsibilities will vary depending if the ship is at sea, anchored or alongside.

#### **CONFIRMATION OF TEACHING POINT 3**

#### **QUESTIONS**

- Q1. Who does the OOW report to?
- Q2. Who is responsible for any seamanship evolutions during the watch?
- Q3. What must the lookout watch for?

#### **ANTICIPATED ANSWERS**

- A1. The CO.
- A2. The POOW.
- A3. Any objects, vessels, or aircraft.

#### **END OF LESSON CONFIRMATION**

#### **QUESTIONS**

- Q1. What are the two watch systems called?
- Q2. With the exception of the last dog watch, how many bells does each watch start and end with?
- Q3. What is the OOW responsible for overall?

# **ANTICIPATED ANSWERS**

- A1. Port and starboard, and red, white and blue.
- A2. Each watch begins and ends with eight bells.
- A3. The ship.

# **CONCLUSION**

#### HOMEWORK/READING/PRACTICE

N/A.

#### **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

The watch system is used during many Sea Cadet activities (e.g. Sea Cadet Training Vessel activities [SCTV]). Cadets are responsible for numerous positions within the watch. This ensures the safety and 24-hour operation of cadet training activities. The watch system is an aspect of serving within a naval environment.

# **INSTRUCTOR NOTES/REMARKS**

N/A.

# **REFERENCES**

A1-024 Venture Naval Officer Training Centre. (2005). *Naval Environmental Training Programme – Officers Handbook*. Esquimalt, BC: Venture Naval Officer Training Centre.

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



# SECTION 3

#### EO M223.03 – EXECUTE NOTES USING THE BOATSWAIN'S CALL

Total Time: 60 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Ensure boatswain's calls and cleaning solution are available prior to the start of this lesson.

Photocopy the handout located at Annex A of this instructional guide for each cadet.

#### PRE-LESSON ASSIGNMENT

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to orient the cadets to the boatswain's call.

Demonstration and performance was chosen for TP2 and TP3 as it allows the instructor to explain and demonstrate holding the boatswain's call as well as executing high and low notes while providing an opportunity for the cadets to practice these skills under supervision.

#### INTRODUCTION

# **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to execute notes using the boatswain's call.

#### **IMPORTANCE**

The boatswain's call is used as a naval form of communication. It is important for cadets to know how to respond to the various pipes and to execute notes using the boatswain's call in order to perform the various pipes. These pipes will be used by the duty quartermaster, which will be a duty for Phase Three cadets.

# **Teaching Point 1**

# Describe the Parts of a Boatswain's Call

Time: 10 min Method: Interactive Lecture



A blank diagram of the boatswain's call, located at Annex B, should be placed in the front of the classroom and the parts should be labelled as they are described. This image should be enlarged or drawn on a whiteboard/flipchart if possible.



Pass a boatswain's call around the classroom.

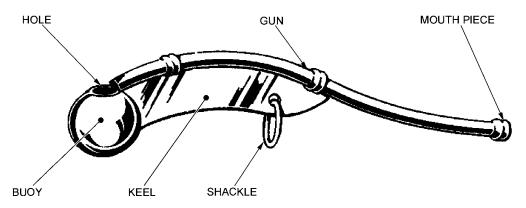


Figure 1 The Boatswain's Call

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 338)

**Gun.** The long portion that runs along the top of the boatswain's call through which air is blown. The mouth of the gun is the ridged portion that is placed in the mouth.

**Shackle.** The ring attached to the bottom of the call to which the chain can be attached.

**Keel.** The bottom portion of the boatswain's call that is held in the hand and runs along the gun.

**Buoy.** The round portion of the boatswain's call into which air is blown from the gun.

**Hole.** The end of the gun at the top of the buoy. It is the hole through which air comes to produce the different notes.

# **CONFIRMATION OF TEACHING POINT 1**

#### **QUESTIONS**

- Q1. What part of the boatswain's call is air blown through?
- Q2. What is the chain attached to?
- Q3. Where is the hole?

#### **ANTICIPATED ANSWERS**

A1. The gun.

A2. The shackle.

A3. At the end of the gun, at the top of the buoy.

# **Teaching Point 2**

Demonstrate and Have the Cadets Practice Holding the Boatswain's Call

Time: 10 min Method: Demonstration and Performance

# **HOLDING THE BOATSWAIN'S CALL**

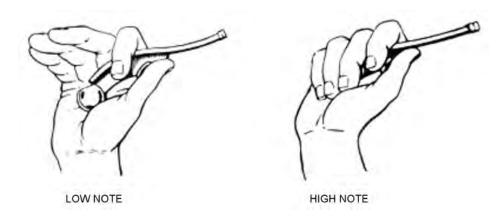


Figure 2 Holding the Boatswain's Call

The Boatswain's Call, by Ready Aye Ready. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm

The boatswain's call is held as follows:

- In the right hand, hold the call between the index finger and the thumb with the thumb on or near the shackle.
- The side of the buoy should rest against the palm of the hand and the fingers should close over the gun.
- The hole in the buoy should be positioned to control the flow of air from the buoy.
- The hole in the buoy should be unobstructed by the fingers to avoid choking the sound.



Demonstrate and have each cadet hold the boatswain's call.

# **CONFIRMATION OF TEACHING POINT 2**

#### **QUESTIONS**

- Q1. Which hand is the boatswain's call held in?
- Q2. Where should the thumb rest on the boatswain's call?
- Q3. Where should the buoy be?

# **ANTICIPATED ANSWERS**

- A1. The right hand.
- A2. The thumb should rest on or near the shackle.
- A3. The side of the buoy should rest against the palm of the hand and the fingers should close over the gun. The hole should be unobstructed by the fingers.

# **Teaching Point 3**

Demonstrate and Have the Cadets Practice Executing Notes on the Boatswain's Call

Time: 30 min Method: Demonstration and Performance



Placing the teeth on the ridges at the mouth of the boatswain's call will assist in controlling the pipes as the tongue can be used to stop the air flow, keeping the notes sharp.

#### **LOW NOTE**

The low note is produced by blowing steadily into the mouth of the gun with the hole in the buoy unobstructed by the fingers.

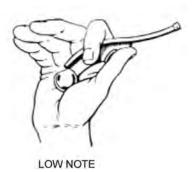


Figure 3 The Low Note

The Boatswain's Call, by Ready Aye Ready. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm



Demonstrate and have each cadet practice executing the low note.

#### **HIGH NOTE**

The high note is produced by closing the fingers around the buoy, taking care not to touch the edge of the hole or the end of the gun. This will control the flow of air from the hole in the buoy.



Figure 4 The High Note

The Boatswain's Call, by Ready Aye Ready. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm



Demonstrate and have each cadet practice executing the high note.

#### **CONFIRMATION OF TEACHING POINT 3**

# **QUESTIONS**

- Q1. How is the low note produced?
- Q2. How is the high note produced?

#### **ANTICIPATED ANSWERS**

- A1. The low note is produced by blowing steadily into the mouth of the gun with the hole in the buoy unobstructed by the fingers.
- A2. The high note is produced by closing the fingers around the buoy, taking care not to touch the edge of the hole or the end of the gun. This will control the flow of air from the hole in the buoy.

#### **END OF LESSON CONFIRMATION**

The cadets' participation in TP3 will serve as the confirmation of this lesson.

# **CONCLUSION**

#### HOMEWORK/READING/PRACTICE

N/A.

#### **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Sounding pipes on the boatswain's call is a tradition that has been maintained for hundreds of years. Using pipes to deliver orders is a large part of what makes naval institutions unique. Using pipes to get the attention of the ship's company or to get everyone to come to attention is a common and practical use of the boatswain's call. Generating low and high notes on the boatswain's call will affect your ability to produce various pipes.

#### **INSTRUCTOR NOTES/REMARKS**

Ensure the boatswain's calls are cleaned with a cleaning solution in between uses.

#### **REFERENCES**

C1-003 (ISBN II 770973 5) Royal Navy. (1972). *Admiralty Manual of Seamanship 1964* (Vol. 1). London, England: Her Majesty's Stationery Office.

C1-043 Ready Aye Ready. (ND). *The Boatswain's Call.* Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm.

#### THE BOATSWAIN'S CALL

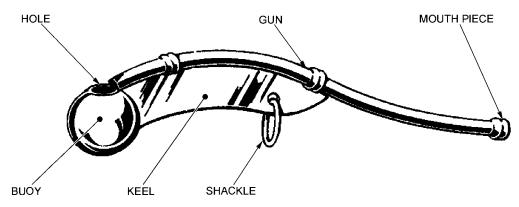


Figure A-1 Parts of the Boatswain's Call

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 338)

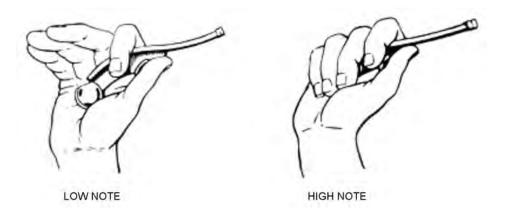


Figure A-2 Holding the Boatswain's Call

The Boatswain's Call, by Ready Aye Ready. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm

A-CR-CCP-602/PF-001 Annex A to EO M223.03 Instructional Guide

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# **BLANK DIAGRAM OF THE BOATSWAIN'S CALL**

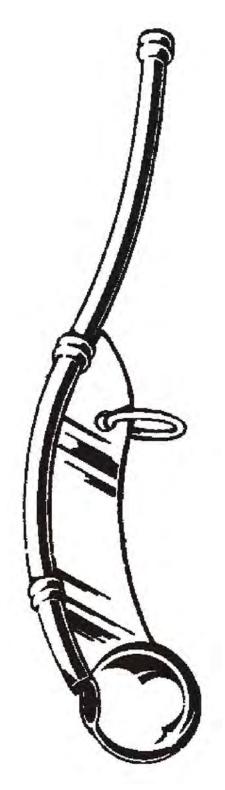


Figure B-1 Blank Diagram of the Boatswain's Call Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 338)

A-CR-CCP-602/PF-001 Annex B to EO M223.03 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



#### **SECTION 4**

#### **EO M223.04 - PIPE THE GENERAL CALL**

Total Time:	30 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Ensure boatswain's calls and cleaning solution are available prior to the start of this lesson.

Photocopy the handout located at Annex A for each cadet.

#### **PRE-LESSON ASSIGNMENT**

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to introduce the General Call and provide an overview of its purpose.

Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate piping the General Call while providing an opportunity for the cadets to practice the call under supervision.

# INTRODUCTION

#### **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to pipe the General Call.

# **IMPORTANCE**

The boatswain's call is used as a naval form of communication. It is important for cadets to know how to respond to the various pipes and to execute notes using the boatswain's call in order to perform the various pipes. These pipes will be used by the duty quartermaster, which will be a duty for Phase Three cadets.

# **Teaching Point 1**

# **Identify the Purpose of the General Call**

Time: 5 min Method: Interactive Lecture

The General Call is used to precede any broadcast order; to draw attention to the order. It is used when passing out-of-routine orders or information of general interest. On a ship, it may also be used to precede the calling away of any boat's crew (except that of a barge).

#### **CONFIRMATION OF TEACHING POINT 1**

#### **QUESTIONS**

- Q1. What is the purpose of the General Call?
- Q2. What is another use for the General Call onboard a ship?
- Q3. What types of orders are passed using the General Call?

#### **ANTICIPATED ANSWERS**

- A1. The General Call is used to precede any broadcast order; to draw attention to the order.
- A2. To precede the calling away of any boat's crew.
- A3. It is used when passing out-of-routine orders or information of general interest.

# **Teaching Point 2**

Demonstrate, Explain, and Have the Cadets Practice Piping the General Call

Time: 20 min Method: Demonstration and Performance



Audio samples of the General Call can be found at http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500

The General Call is produced by blowing the pipe for one second with a short blast of a low to high note, followed by a short pause. A low note is then piped for a half-second with a sharp ascent to a high note, lasting for 2 seconds, followed by a sharp descent to a low note for a half-second. The pipe lasts a total of four seconds.



Placing the teeth on the ridges at the mouth of the boatswain's call will assist in controlling the pipes as the tongue can be used to stop the air flow, keeping the notes sharp.



Distribute handout located at Annex A.

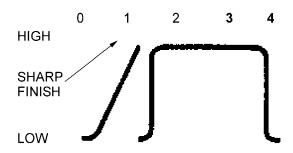


Figure 1 The General Call

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)



Demonstrate and have each cadet practice piping the General Call.

#### **CONFIRMATION OF TEACHING POINT 2**

#### **QUESTIONS**

- Q1. How is the General Call sounded?
- Q2. How long is the General Call?

#### **ANTICIPATED ANSWERS**

- A1. By blowing the pipe for one second with a short blast of a low to high note, followed by a short pause. A low note is then piped for a half-second with a sharp ascent to a high note, lasting for 2 seconds, followed by a sharp descent to a low note for a half-second.
- A2. Four seconds.

# **END OF LESSON CONFIRMATION**

The cadets' participation in TP2 will serve as the confirmation of this lesson.

# **CONCLUSION**

# HOMEWORK/READING/PRACTICE

N/A.

#### **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Sounding pipes on the boatswain's call is a tradition that has been maintained for hundreds of years. Using pipes to deliver orders is a large part of what makes naval institutions unique. Using pipes to get the attention of the ship's company or to get everyone to come to attention is a common and practical use of the boatswain's call.

#### **INSTRUCTOR NOTES/REMARKS**

Ensure the boatswain's calls are cleaned with a cleaning solution between uses.

#### **REFERENCES**

A1-022 Canadian Navy. (2006). *Youth Section – Pipe Sounds*. Retrieved 29 February 2007, from http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500.

C1-003 (ISBN II 770973 5) Royal Navy. (1972). Admiralty Manual of Seamanship 1964 (Vol. 1). London, England: Her Majesty's Stationery Office.

C1-043 Ready Aye Ready. (ND). *The Boatswain's Call*. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm.

# THE GENERAL CALL

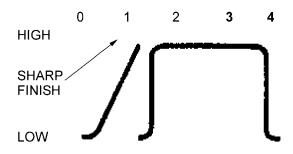


Figure A-1 The General Call

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)

A-CR-CCP-602/PF-001 Annex A to EO M223.04 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



## **SECTION 5**

#### **EO M223.05 – PIPE THE STILL**

Total Time:	30 min
<u>'</u>	

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Ensure boatswain's calls and cleaning solution are available prior to the start of this lesson.

Photocopy the handout located at Annex A for each cadet.

## **PRE-LESSON ASSIGNMENT**

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to introduce the Still and provide an overview of its purpose.

Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate piping the Still while providing an opportunity for the cadets to practice the call under supervision.

#### INTRODUCTION

## **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to pipe the Still.

## **IMPORTANCE**

The boatswain's call is used as a naval form of communication. It is important for cadets to know how to respond to the various pipes and to execute notes using the boatswain's call in order to perform the various pipes. These pipes will be used by the duty quartermaster, which will be a duty for Phase Three cadets.

# **Teaching Point 1**

# Identify the Purpose of the Still

Time: 5 min Method: Interactive Lecture

The Still is used to call all hands to attention as a mark of respect, or to order silence on any occasion. It is also used to announce the arrival onboard of a senior officer. The Still does not require any further orders or verbal announcements as the pipe itself is an order.

## **CONFIRMATION OF TEACHING POINT 1**

#### **QUESTIONS**

- Q1. What is the Still used for?
- Q2. For whom may the Still be used to announce the arrival?
- Q3. Does the Still require any further verbal announcements? Why?

## **ANTICIPATED ANSWERS**

- A1. To call all hands to attention as a mark of respect, or to order silence on any occasion.
- A2. A senior officer onboard a ship.
- A3. No, because the pipe itself is an order.

## **Teaching Point 2**

Demonstrate, Explain, and Have the Cadets Practice Piping

Time: 20 min Method: Demonstration and Performance



Audio samples of the Still can be found at http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500

The Still is produced by holding the high note for eight seconds with a sharp finish.



Placing the teeth on the ridges at the mouth of the boatswain's call will assist in controlling the pipes as the tongue can be used to stop the air flow, keeping the notes sharp.



Distribute handout located at Annex A.

0 1 2 3 4 5 6 7 8 HIGH

LOW

Figure 1 The Still

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)



Demonstrate and have each cadet practice piping the Still.

## **CONFIRMATION OF TEACHING POINT 2**

## **QUESTIONS**

- Q1. What note is used to produce the still?
- Q2. How long is the Still?

## **ANTICIPATED ANSWERS**

- A1. The high note.
- A2. Eight seconds.

## **END OF LESSON CONFIRMATION**

The cadets' participation in TP2 will serve as the confirmation of this lesson.

#### CONCLUSION

## HOMEWORK/READING/PRACTICE

N/A.

# **METHOD OF EVALUATION**

N/A.

# **CLOSING STATEMENT**

Sounding pipes on the boatswain's call is a tradition that has been maintained for hundreds of years. Using pipes to deliver orders is a large part of what makes naval institutions unique. Using pipes to get the attention of the ship's company or to get everyone to come to attention is a common and practical use of the boatswain's call.

## **INSTRUCTOR NOTES/REMARKS**

Instructors can find audio samples of the Still at reference A1-022 that may be played for the cadets during this lesson.

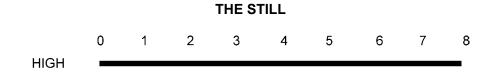
Ensure the boatswain's calls are cleaned with a cleaning solution between uses.

## **REFERENCES**

A1-022 Canadian Navy. (2006). *Youth Section – Pipe Sounds*. Retrieved 29 February 2007, from http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500.

C1-003 (ISBN II 770973 5) Royal Navy. (1972). *Admiralty Manual of Seamanship 1964* (Vol. 1). London, England: Her Majesty's Stationery Office.

C1-043 Ready Aye Ready. (ND). *The Boatswain's Call*. Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm.



LOW

Figure A-1 The Still

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)

A-CR-CCP-602/PF-001 Annex A to EO M223.05 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



## **SECTION 6**

#### **EO M223.06 – PIPE THE CARRY ON**

Total Time:	30 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Ensure boatswain's calls and cleaning solution are available prior to the start of this lesson.

Photocopy the handout located at Annex A for each cadet.

## **PRE-LESSON ASSIGNMENT**

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to introduce the Carry On and provide an overview of its purpose.

Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate piping the Carry On while providing an opportunity for the cadets to practice the call under supervision.

#### INTRODUCTION

## **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to pipe the Carry On.

## **IMPORTANCE**

The boatswain's call is used as a naval form of communication. It is important for cadets to know how to respond to the various pipes and to execute notes using the boatswain's call in order to perform the various pipes. These pipes will be used by the duty quartermaster, which will be a duty for Phase Three cadets.

## **Teaching Point 1**

# **Identify the Purpose of the Carry On**

Time: 5 min Method: Interactive Lecture

The Carry On is used to negate the Still. The Carry On does not require any further orders or verbal announcements as the pipe itself is an order. After the Still is given, personnel are to maintain the position of attention until the Carry On is piped.

#### **CONFIRMATION OF TEACHING POINT 1**

## **QUESTIONS**

- Q1. What is the purpose of the Carry On?
- Q2. Are any verbal commands required when the Carry On is used?
- Q3. What position should personnel be in until the Carry On is piped?

#### **ANTICIPATED ANSWERS**

- A1. It is used to negate the Still.
- A2. No, because the pipe itself is an order.
- A3. Attention.

## **Teaching Point 2**

Demonstrate, Explain, and Have the Cadets Practice Piping the Carry On

Time: 20 min Method: Demonstration and Performance



Audio samples of the Carry On can be found at http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500

The Carry On is produced by blowing a high note for one second, followed by a sharp descent to a one second low note with a sharp finish. The Carry On lasts a total of two seconds.



Placing the teeth on the ridges at the mouth of the boatswain's call will assist in controlling the pipes as the tongue can be used to stop the air flow, keeping the notes sharp.



Distribute handout located at Annex A.

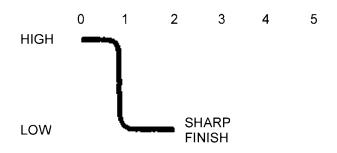


Figure 1 The Carry On

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)



Demonstrate and have each cadet practice piping the Carry On.

# **CONFIRMATION OF TEACHING POINT 2**

## **QUESTIONS**

- Q1. How is the Carry On sounded?
- Q2. How long is the Carry On?

# **ANTICIPATED ANSWERS**

- A1. The Carry On is produced by blowing a high note for one second, followed by a sharp descent to a one second low note.
- A2. Two seconds.

## **END OF LESSON CONFIRMATION**

The cadets' participation in TP2 will serve as the confirmation of this lesson.

# **CONCLUSION**

# HOMEWORK/READING/PRACTICE

N/A.

## **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Sounding pipes on the boatswain's call is a tradition that has been maintained for hundreds of years. Using pipes to deliver orders is a large part of what makes naval institutions unique. Using pipes to get the attention of the ship's company or to get everyone to come to attention is a common and practical use of the boatswain's call.

## **INSTRUCTOR NOTES/REMARKS**

Ensure the boatswain's calls are cleaned with a cleaning solution between uses.

#### **REFERENCES**

A1-022 Canadian Navy. (2006). *Youth Section – Pipe Sounds*. Retrieved 29 February 2007, from http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500.

C1-003 (ISBN II 770973 5) Royal Navy. (1972). Admiralty Manual of Seamanship 1964 (Vol. 1). London, England: Her Majesty's Stationery Office.

C1-043 Ready Aye Ready. (ND). *The Boatswain's Call.* Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm.

# THE CARRY ON

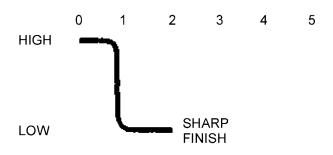


Figure A-1 The Carry On

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)

A-CR-CCP-602/PF-001 Annex A to EO M223.06 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



# **SECTION 7**

## EO M223.07 - IDENTIFY THE PROCEDURE FOR BERTHING A SHIP

Total Time:	60 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson.

## **PRE-LESSON ASSIGNMENT**

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1, TP2, and TP4 to introduce the cadets to berthing lines and to give an overview of the procedure for berthing and slipping a ship.

Demonstration and performance was chosen for TP3 as it allows the instructor to explain and demonstrate line handling while providing an opportunity for the cadets to practice this skill under supervision.

A practical activity was chosen for TP5 as it is an interactive way to allow cadets to experience the procedure for berthing a ship in a safe and controlled environment. This activity contributes to the development of berthing skills and knowledge in a fun and challenging setting.

## INTRODUCTION

#### **REVIEW**

Review EO M121.03 (Coil and Heave a Line), to include:

- coiling the line into the hand in bights about three to four feet in circumference;
- separating the group of coils in half, keeping the half with the heaving knot in the heaving hand, and allowing approximately five feet of line to hang in the space between the hands;
- turning the body sideways towards the target, and holding the other hand palm open facing the target;
- heaving the weighted end, including the coiled rope, towards the target and allowing as much of the rest
  of the line to go out as necessary; and
- retaining the end of the line in the other hand, or securing it.

## **OBJECTIVES**

By the end of this lesson the cadet shall be expected to identify the procedure for berthing a ship.

# **IMPORTANCE**

It is important for cadets to identify the procedure for berthing a ship because it will be used when training aboard Sea Cadet Training Vessels (SCTVs). A ship can slip easier from a berth when this procedure is followed and berthing lines are secured properly.

Teaching Point 1 Identify Berthing Lines

Time: 10 min Method: Interactive Lecture



A ship is said to berth when it comes alongside a pier or jetty.

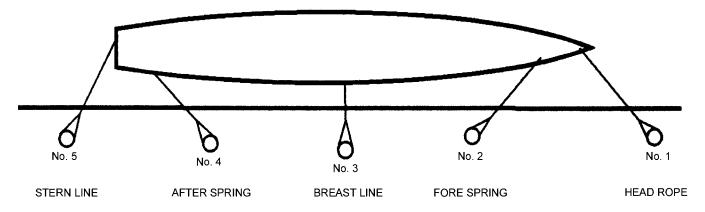


Figure 1 Berthing Lines B-GN-181-105/FP-E00 (p. 6-11)

A ship's berthing arrangement depends on the size and characteristics of the ship. Each berthing line has a special name and purpose, which are as follows:

**Breast Line.** Line extending from midships that controls the lateral movement/distance that the ship lies from the jetty.

**Head Rope.** Line extending from the bow of the ship that is used to adjust the ship's position alongside a jetty.

**Spring Line.** Controls the fore and aft position of the ship. Any spring line that leads aft and prevents the ship from moving forward is called a head/fore spring. Any spring line that leads forward and prevents the ship from moving aft is called a back/after spring.

**Stern Line.** Line extending from the stern of the ship that is used to adjust the ship's position alongside a jetty.



Berthing lines are numbered consecutively, with number one being the head rope (as illustrated in Figure 1).

## **CONFIRMATION OF TEACHING POINT 1**

## **QUESTIONS**

- Q1. What does berthing mean?
- Q2. What is the purpose of the head rope?
- Q3. Which line controls the distance that the ship lies from the jetty?

#### **ANTICIPATED ANSWERS**

- A1. When a ship comes alongside a pier or jetty.
- A2. It is used to adjust the ship's position alongside a jetty.
- A3. The breast line.

## **Teaching Point 2**

Demonstrate, Explain, and Have the Cadets Practice Line Handing

Time: 10 min Method: Demonstration and Performance



Review and allow the cadets to practice heaving lines. Demonstrate and have the cadets practice faking down a line and securing a line to a twin bollard. A mock bollard may be constructed using the method outlined at Annex A.

## **FAKING DOWN A LINE**

To fake down a line, place it on the deck in large fakes/bights so that it is free for running (as illustrated in Figure 2).

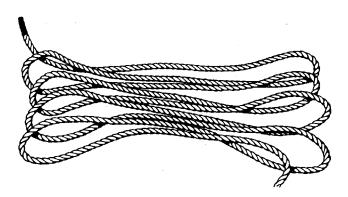


Figure 2 Faking Down a Line

Commander of the Defence Council, BR 67 Admiralty Manual of Seamanship, HMSO Publications (p. 3-31)

## **SECURING A LINE TO A TWIN BOLLARD**

To secure a line to a twin bollard, first turn the line around the bollard farthest from the source of strain, from outboard to inboard. Belay the line by making figure-of-eight turns (as illustrated in Figure 3) to the top of the bollard.

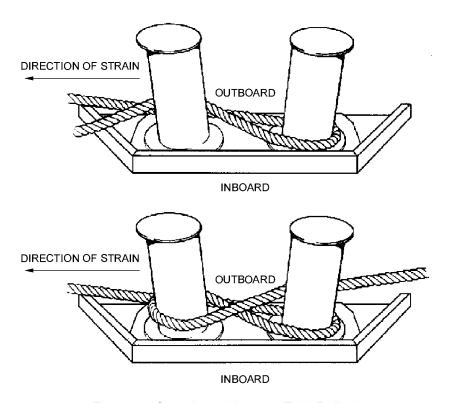


Figure 3 Securing a Line to a Twin Bollard

Commander of the Defence Council, BR 67 Admiralty Manual of Seamanship, HMSO Publications (p. 3-51)



If the line is to be belayed for a length of time, the two upper turns will be racked. This is done using a smaller piece of line (see Figure 4).

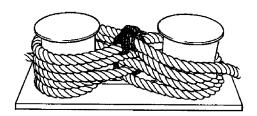


Figure 4 Racking a Line on a Twin Bollard

Commander of the Defence Council, BR 67 Admiralty Manual of Seamanship, HMSO Publications (p. 3-52)

# **CONFIRMATION OF TEACHING POINT 2**

# **QUESTIONS**

- Q1. Why would a line be faked down?
- Q2. When securing a line to a twin bollard, the line must be turned around which bollard first?
- Q3. What type of turns must be used to secure a line to a twin bollard?

#### **ANTICIPATED ANSWERS**

- A1. To ensure that it is free for running.
- A2. The bollard farthest from the source of strain.
- A3. Figure-of-eight turns.

## **Teaching Point 3**

# Describe the Procedure for Berthing a Ship

Time: 5 min Method: Interactive Lecture

The normal procedure for approaching a jetty and the securing order of berthing lines are as follows:

- 1. To prepare for berthing the following must be completed:
  - a. fake out all lines;
  - b. position fenders along the jetty side of the ship;
  - c. prepare the brow and gangway (platform placed between the ship and the jetty) by bringing it to its approximate location; and
  - d. provide rat guards.



Rat guards are used to prevent rats, mice or any other rodents from climbing up the lines onto the ship. They are used on all lines that lead to the jetty and are placed approximately 1.5 metres from the jetty end of a line (see Figure 5).



Figure 5 Rat Guard B-GN-181-105/FP-E00 (p. 6-16)

2. A ship, under normal circumstances, will approach a jetty bow first, at an angle of approximately 15 degrees.



All berthing lines are adjusted and controlled from the ship. They are heaved ashore, passed through the fairlead, and returned back to the ship (see Figure 6).



Figure 6 Fairlead B-GN-181-105/FP-E00 (p. 6-21)

- 3. The fore spring is the first line heaved ashore. It is used to check the ship's forward movement and assist in moving the ship's stern towards the jetty.
- 4. The head rope is heaved ashore and is taken to the capstan in order to control the ship's head. A capstan is a revolving drum, mounted on a vertical shaft, used for working lines. Capstans are found fore and aft on a ship.

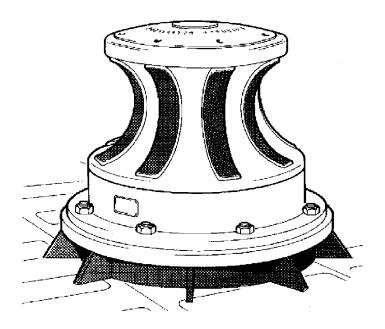


Figure 7 Capstan

Commander of the Defence Council, BR 67 Admiralty Manual of Seamanship, HMSO Publications (p. 2-21)

- 5. From aft, the stern rope is heaved ashore, which is taken to the capstan and hauled in to bring the stern into the jetty.
- 6. The after spring is then heaved ashore from the aft, and is used to prevent any backwards movement while manoeuvring alongside.

7. The breast line is taken ashore in no particular order and is down-slacked by hand as the head and stern lines are worked to bring the ship alongside.



Fenders are also used as part of the equipment for berthing a ship. Fenders are like bumpers that, when positioned properly, protect the ship from scraping and hitting the pier/jetty. There are many different types/sizes of fenders. The most common type of fender used in the Cadet Program is a grey rubber inflated tube with loops that allow line to be tied to each end (see Figure 8).



Figure 8 Fenders B-GN-181-105/FP-E00 (p. 6-19)

8. Secure all berthing lines to the corresponding twin bollards on the ship.

## **CONFIRMATION OF TEACHING POINT 3**

## **QUESTIONS**

- Q1. A ship will normally approach a jetty at what angle?
- Q2. Which line is heaved ashore first?
- Q3. What is a capstan?

## **ANTICIPATED ANSWERS**

- A1. Approximately 15 degrees.
- A2. The fore spring.
- A3. A revolving drum, mounted on a vertical shaft, used for working lines.

## **Teaching Point 4**

# **Describe the Procedure for Slipping a Ship**

Time: 5 min Method: Interactive Lecture

A ship will slip from a jetty in reverse order from the arrival. The breast line, after spring and stern rope are simultaneously taken in first. The fore spring is held while the head rope is heaved in on the capstan, and engines are used to move the ship's head in towards the jetty. The head rope and fore spring are then taken in, and the ship makes a sternboard (reverse) departure.



Slipping procedures may differ depending on the area/circumstances.

## **CONFIRMATION OF TEACHING POINT 4**

#### **QUESTIONS**

- Q1. In what order does a ship slip from a jetty?
- Q2. Which lines are simultaneously taken in first?
- Q3. What type of departure does the ship make from a jetty?

#### **ANTICIPATED ANSWERS**

- A1. In reverse order from the arrival.
- A2. The breast line(s), after spring and stern rope.
- A3. A sternboard (reverse) departure.

# **Teaching Point 5**

Supervise While the Cadets Participate in a Simulated Berthing and Slipping Activity

Time: 20 min Method: Practical Activity

# **ACTIVITY**

#### **OBJECTIVE**

The objective of this activity is to allow the cadets to practice the procedure for berthing and slipping a ship.

## **RESOURCES**

- Five berthing lines measuring approximately 20 feet each, and
- Five twin bollards (mock bollards may be used [See Annex A]).

## **ACTIVITY LAYOUT**

Designate an area that is to simulate a jetty with five twin bollards (see Annex A), and a ship.

## **ACTIVITY INSTRUCTIONS**

1. Assign a cadet to each of the following positions:

- a. head rope,
- b. fore spring,
- c. breast,
- d. after spring,
- e. stern rope,
- f. fenders, and
- g. receivers on the jetty.
- 2. Simulate berthing and slipping a ship using the procedures outlined in TP3 and TP4.



The simulation may be repeated with cadets assuming different positions.

## **SAFETY**

N/A.

#### **CONFIRMATION OF TEACHING POINT 5**

The cadets' participation in the activity will serve as the confirmation of this TP.

## **END OF LESSON CONFIRMATION**

The cadets' participation in the activity in TP5 will serve as the confirmation of this lesson.

## **CONCLUSION**

## HOMEWORK/READING/PRACTICE

N/A.

#### METHOD OF EVALUATION

N/A.

## **CLOSING STATEMENT**

Berthing and slipping procedures used on a ship require teamwork among the crew. These procedures will be used when training aboard Sea Cadet Training Vessels (SCTVs).

## **INSTRUCTOR NOTES/REMARKS**

N/A.

## **REFERENCES**

A1-004 B-GN-181-105/FP-E00 Chief of the Maritime Staff. (1997). *CFCD 105 Fleet Seamanship Rigging and Procedures Manual*. Ottawa, ON: Department of National Defence.

C1-047 (ISBN 0 11 772695 8/B-ON-050-002/PT-004) Command of the Defence Council. (1995). *BR* 76 *Admiralty Manual of Seamanship*. London, England: HMSO Publications Centre.

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## **CONSTRUCTING A TRAINING BOLLARD**

# **Resources Required**

- Two small coffee cans,
- Piece of wood (approximate dimensions 20 inches long, 8 inches wide, 2 inches high), and
- Nails or screws.

## Instructions

- 1. Nail or screw the cans to the largest surface on the piece of wood, spacing one towards each end.
- 2. Place the lids back on the cans.



Figure A-1 Mock Twin Bollard

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

A-CR-CCP-602/PF-001 Annex A to EO M223.07 Instructional Guide

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# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



## **SECTION 8**

## **EO C223.01 – DEFINE NAVAL TERMINOLOGY**

Total Time:	30 min

## **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Photocopy Annex A, and cut them out as outlined on the pages.

## **PRE-LESSON ASSIGNMENT**

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to TP3 to introduce and provide an overview of naval positions/ appointments, terminology and orders.

An in-class activity was chosen for TP4, as it is an interactive was to provoke thought and stimulate interest among the cadets, while confirming the cadets' comprehension of naval terminology.

## INTRODUCTION

# **REVIEW**

N/A.

## **OBJECTIVES**

By the end of this lesson the cadet shall be expected to define naval terminology.

## **IMPORTANCE**

It is important for cadets to define naval terminology as these terms are frequently used in a naval environment.

# **Teaching Point 1**

# **Define Naval Positions/Appointments**

Time: 5 min Method: Interactive Lecture

**Boatswain.** Comes from the old English "batswegen", meaning the boat's swain, or husband. Boatswains are the seamanship specialists.

Buffer. The chief boatswain's mate.

**Helmsman.** The person steering the ship.

**Jimmy.** The Executive Officer (XO).

Killick. Leading seaman; derived from the Gaelic word meaning anchor.

Sin Boatswain. Chaplain or padre.

**Tiffy.** The medical person onboard a ship.

**Yeoman.** The senior signalman onboard a ship.

## **CONFIRMATION OF TEACHING POINT 1**

## **QUESTIONS**

- Q1. What are boatswains specialists in?
- Q2. What is the term for the person who is steering the ship?
- Q3. What is the medical person onboard a ship called?

## **ANTICIPATED ANSWERS**

- A1. Seamanship.
- A2. The helmsman.
- A3. The tiffy.

## **Teaching Point 2**

**Define Naval Terminology** 

Time: 5 min Method: Interactive Lecture

**Binnacle.** The stand or housing for the ship's compass.

Bravo Zulu. Signifies 'good job' or 'well done'.

**Dhobey.** Laundry.

Foul. To entangle or obstruct.

**Irish Pennants.** Rope yarns or stray rope ends. This term is currently used to refer to stray threads on a person's uniform.

**Make and Mend.** Traditionally this was time set aside to repair and replace kit, but is currently used as recreational time.

**Pusser.** Anything that is service issued.

**Silent Hours.** Hours between pipe down and calling the hands. Only emergency pipes are made during this time.

Tiddley. Neat/smart/clean.

## **CONFIRMATION OF TEACHING POINT 2**

# **QUESTIONS**

- Q1. What is the naval term for 'good job' or 'well done'?
- Q2. What does the term dhobey mean?
- Q3. What is the term for anything that is service issued?

#### **ANTICIPATED ANSWERS**

- A1. Bravo zulu.
- A2. Laundry.
- A3. Pusser.

Teaching Point 3 Define Naval Orders

Time: 5 min Method: Interactive Lecture

**Ahoy.** A way of attracting attention.

Avast. Stop what you are doing.

Batten Down. To secure closed/shut.

Cast Off. To let go.

**Check Away.** To ease out a line or wire.

**Haul Taut.** To pull tight.

Walk Back. To pay out by walking, keeping the line in hand.

## **CONFIRMATION OF TEACHING POINT 3**

# **QUESTIONS**

- Q1. What would you say to attract attention?
- Q2. What does it mean to cast off?
- Q3. What is the action for hauling taut?

## **ANTICIPATED ANSWERS**

A1. Ahov.

A2. To let go.

A3. Pulling tight.

# **Teaching Point 4**

Conduct an Activity Allowing the Cadets to Define Naval Positions/Appointments, Terminology, and Orders

Time: 10 min Method: In-Class Activity



Choose one of the following activities.

## **ACTIVITY 1**

#### **OBJECTIVE**

The objective of this activity is to define naval terminology.

# **RESOURCES**

N/A.

## **ACTIVITY LAYOUT**

N/A.

# **ACTIVITY INSTRUCTIONS**

- 1. Divide cadets into groups of two or three.
- 2. Have each group create a song/rhyme that includes a minimum of five terms and their definitions, introduced in this lesson.
- 3. Have each group present their song/rhyme to the class.

## **SAFETY**

N/A.

## **ACTIVITY 2**

## **OBJECTIVE**

The objective of this activity is to define naval terminology.

## **RESOURCES**

Photocopies of Annex A.

#### **ACTIVITY LAYOUT**

N/A.

## **ACTIVITY INSTRUCTIONS**

- Divide cadets into groups of two or three.
- 2. Give each group a set of cards (Annex A).
- 3. Have cadets match the terms to the definitions on the cards.
- The goal of this activity is to define all of the terms correctly.

## **SAFETY**

N/A.

# **CONFIRMATION OF TEACHING POINT 4**

The cadets' participation in the activity will serve as the confirmation of this TP.

#### **END OF LESSON CONFIRMATION**

The cadets' participation in the activity in TP4 will serve as the confirmation of this lesson.

## **CONCLUSION**

## HOMEWORK/READING/PRACTICE

N/A.

## **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Naval terminology is a fun and exciting aspect of Sea Cadet training. This set of terms is unique to the Navy and a part of naval history/tradition. It is important to know these terms because this language is used throughout Sea Cadet training.

## **INSTRUCTOR NOTES/REMARKS**

N/A.

## **REFERENCES**

C1-043 Ready Aye Ready. *JackSpeak*. Retrieved 16 February 2007, from http://www.readyayeready.com/jackspeak/index.htm.

C1-053 (ISBN 0-88879-027-9) Russell, E.C. (1980). *Customs and Traditions of the Canadian Armed Forces*. Ottawa, ON: Deneau and Greenberg.

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# **NAVAL TERMINOLOGY**

BOATSWAIN	COMES FROM THE OLD ENGLISH "BATSWEGEN" MEANING THE BOAT'S SWAIN, OR HUSBAND. BOATSWAINS ARE THE SEAMANSHIP SPECIALISTS.
BUFFER	THE CHIEF BOATSWAIN'S MATE.
HELMSMAN	THE PERSON STEERING THE SHIP.

JIMMY	THE EXECUTIVE OFFICER.
KILLICK	LEADING SEAMAN; DERIVED FROM THE GAELIC WORD MEANING ANCHOR.
SIN BOATSWAIN	CHAPLAIN OR PADRE

TIFFY	THE MEDICAL PERSON ONBOARD A SHIP.
YEOMAN	THE SENIOR SIGNALMAN ONBOARD A SHIP.
BINNACLE	THE STAND OR HOUSING FOR THE SHIP'S COMPASS.

BRAVO ZULU	SIGNIFIES 'GOOD JOB' OR 'WELL DONE'.
DHOBEY	LAUNDRY.
FOUL	TO ENTANGLE OR OBSTRUCT.

IRISH PENNANTS	ROPE YARNS OR STRAY ROPE ENDS. THIS TERM IS CURRENTLY USED TO REFER TO STRAY THREADS ON A PERSON'S UNIFORM.
MAKE AND MEND	TRADITIONALLY THIS WAS TIME SET ASIDE TO REPAIR AND REPLACE KIT, BUT IS CURRENTLY USED AS RECREATIONAL TIME.
PUSSER	ANYTHING THAT IS SERVICE ISSUED.

SILENT HOURS	HOURS BETWEEN PIPE DOWN AND CALLING THE HANDS. ONLY EMERGENCY PIPES ARE MADE DURING THIS TIME.
TIDDLEY	NEAT/SMART/CLEAN.
AHOY	A WAY OF ATTRACTING ATTENTION.

AVAST	STOP WHAT YOU ARE DOING.
BATTEN DOWN	TO SECURE CLOSED/SHUT.
CAST OFF	TO LET GO.

CHECK AWAY	TO EASE OUT A LINE OR WIRE.
HAUL TAUT	TO PULL TIGHT.
WALK BACK	TO PAY OUT BY WALKING, KEEPING THE LINE IN HAND.



# ROYAL CANADIAN SEA CADETS PHASE TWO INSTRUCTIONAL GUIDE



## **SECTION 9**

## **EO C223.02 - PIPE THE SIDE**

Total Time:	30 min

#### **PREPARATION**

#### PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-602/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson. Ensure boatswain's calls and cleaning solution are available prior to the start of this lesson.

Photocopy the handout located at Annex A of this Instructional Guide for each cadet.

## PRE-LESSON ASSIGNMENT

N/A.

#### **APPROACH**

An interactive lecture was chosen for TP1 to introduce the Side and provide an overview of its purpose.

Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate piping the Side while providing an opportunity for the cadets to practice the call under supervision.

#### INTRODUCTION

#### **REVIEW**

N/A.

#### **OBJECTIVES**

By the end of this lesson the cadet shall be expected to pipe the Side.

## **IMPORTANCE**

The boatswain's call is used as a naval form of communication. It is important for cadets to know how to respond to the various pipes and to execute notes using the boatswain's call in order to perform the various pipes. These pipes will be used by the duty quartermaster, which will be a duty for Phase Three cadets. The Side will only be used on occasions onboard ship, as the Side is never used at ashore establishments.

# **Teaching Point 1**

# Identify the Purpose of the Side

Time: 5 min Method: Interactive Lecture

The Side is piped for a Commanding Officer (CO) of Her Majesty's Canadian Ship (HMCS), for Royalty, and for any foreign naval officers.

The Side is piped when the officer (from those listed above) crosses the brow of the ship on arrival and departure.

It is important to note that the Side is not piped at any shore establishment.

## **CONFIRMATION OF TEACHING POINT 1**

## **QUESTIONS**

- Q1. For whom is the Side piped?
- Q2. What is the purpose of the Side?
- Q3. When is the Side not used?

#### **ANTICIPATED ANSWERS**

- A1. The Side is piped for COs of HMC ships, for Royalty, and for any foreign naval officers.
- A2. The side is piped when particular personnel arrive and depart a ship, as they cross the brow.
- A3. The Side is not piped at any shore establishment.

# **Teaching Point 2**

Demonstrate, Explain, and Have the Cadets Practice Piping the Side

Time: 20 min Method: Demonstration and Performance

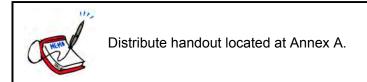


Audio samples of the Side can be found at http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500

The Side is sounded by blowing a low note for four seconds, gradually ascending to a high note for four seconds, gradually descending to a low note for four seconds with a sharp finish. The Side lasts for a total of 12 seconds.



Placing the teeth on the ridges at the mouth of the boatswain's call will assist in controlling the pipes as the tongue can be used to stop the air flow, keeping the notes sharp.



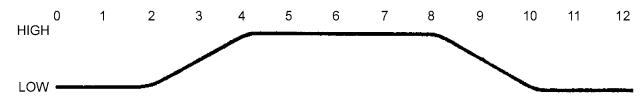


Figure 1 The Side

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)



Demonstrate and have each cadet practice piping the Side.

## **CONFIRMATION OF TEACHING POINT 2**

#### **QUESTIONS**

- Q1. How is the Side sounded?
- Q2. How long does the Side last?

# **ANTICIPATED ANSWERS**

- A1. The Side is produced by blowing a low note for four seconds, gradually ascending to a high note for four seconds, gradually descending to a low note for four seconds with a sharp finish.
- A2. Twelve seconds.

## **END OF LESSON CONFIRMATION**

The cadets' participation in TP2 will serve as the confirmation of this lesson.

## CONCLUSION

## HOMEWORK/READING/PRACTICE

N/A.

# **METHOD OF EVALUATION**

N/A.

#### **CLOSING STATEMENT**

Sounding pipes on the boatswain's call is a tradition that has been maintained for hundreds of years. Using pipes to deliver orders is a large part of what makes naval institutions unique. Using pipes to get the attention of the ship's company or to get everyone to come to attention is a common and practical use of the boatswain's call.

## **INSTRUCTOR NOTES/REMARKS**

Instructors can find audio samples of the Side at reference A1-022 that may be played for the cadets during this lesson.

Ensure the boatswain's calls are cleaned with a cleaning solution in between uses.

## **REFERENCES**

A1-022 Canadian Navy. (2006). *Youth Section – Pipe Sounds*. Retrieved 29 February 2007, from http://www.navy.forces.gc.ca/cms\_youth/youth\_articles\_e.asp?id=500.

C1-043 Ready Aye Ready. (ND). *The Boatswain's Call.* Retrieved 19 February 2007, from http://www.readyayeready.com/navy-life/boatswains-call.htm.

C1-049 (ISBN 0 II 771958 7) Royal Navy. (1967). *Admiralty Manual of Seamanship 1964* (Vol. 2). Cambridge, England: Her Majesty's Stationery Office.

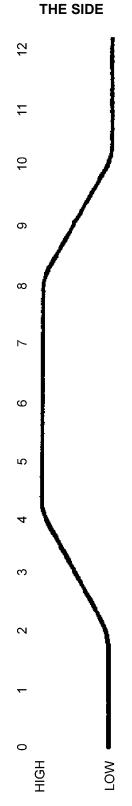


Figure A-1 The Side

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 340)