ROYAL CANADIAN SEA CADETS

PHASE TWO

INSTRUCTIONAL GUIDE

SECTION 3

EO M221.03 – REEVE BLOCKS

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 TP1 and TP2 as it allows the instructor to introduce blocks and to generate interest.

Demonstration and performance was chosen for TP3 as it allows the instructor to explain and demonstrate reeving a rope through a block while providing an opportunity for the cadets to practice this skill under supervision.

An in-class activity was chosen for TP4 as it is an interactive way to reinforce reeving a block and to confirm the cadets' comprehension of the material.

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall have reeved blocks.

IMPORTANCE

It is important for cadets to know how to reeve blocks as it is the first step in constructing pulley systems which will be introduced in future lessons. This skill will provide cadets with alternative options when lifting or moving heavy objects from one place to another.

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

Teaching point 1 **Describe the Parts of a Block**

Time: 5 min Method: Interactive Lecture

WHAT IS A BLOCK?

A block is a pulley made of wood, metal, and/or synthetic-resin bonded fibre and, in some cases, a combination of wood and metal. It is used to provide assistance when moving objects from one location to another.



Have a block to use as an example.

PARTS OF A BLOCK

Crown. The top area of the block.

Cheek. The side housing of the block.

Pin. Secures the sheave between the cheeks.

Becket. An eye connected to the bottom of the block, used for securing the line when reeving two or more blocks.

Tail. The lower area of the block.

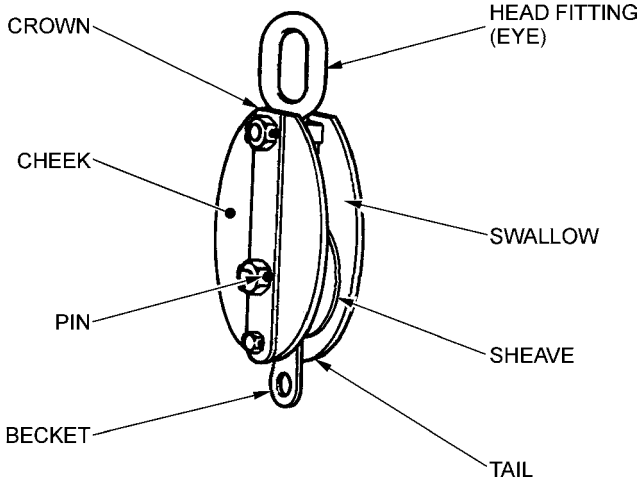
Sheave. The wheel found inside the cheeks of the block that the lines sits on.

Swallow. The space between the sheave and the crown of the block. This distance determines the maximum size of line a block can handle.

Head Fitting (Eye). An eye located at the top of the block, used for connecting the block to a deckhead, bulkhead, etc.

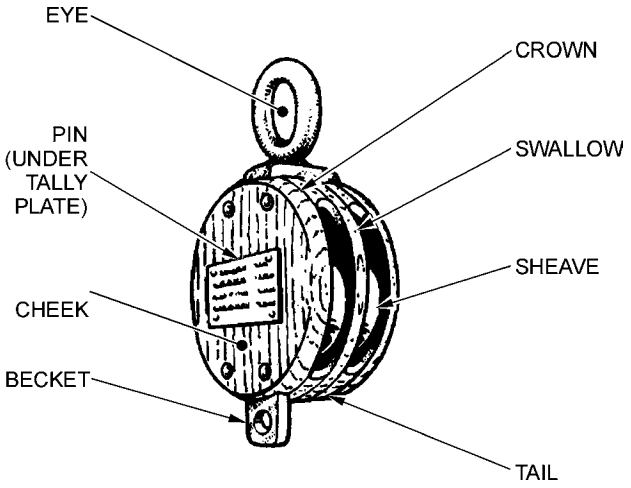
Tally plate. A metal plate that identifies a block's safe working load. It is fixed to the cheek of the block.

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.



B-GN-181-105/FP-E00 (p. 5-94)

Figure 1 Parts of a Metal Block



Royal Navy, Admiralty Manual of Seamanship
1964, Her Majesty's Stationery Office (p. 210)

Figure 2 Parts of a Wooden Block

CONFIRMATION OF TEACHING POINT 1

QUESTIONS

Q1. What is a block?

Q2. What is the side housing of a block called?

Q3. What is the swallow?

ANTICIPATED ANSWERS

A1. A block is a pulley made of wood, metal, and/or synthetic-resin bonded fibre and, in some cases, a combination of wood and metal.

A2. The cheek.

A3. The space between the sheave and the crown of the block. This distance determines the maximum size of line a block can handle.

Teaching point 2 **Describe the Blocks for Reeving**

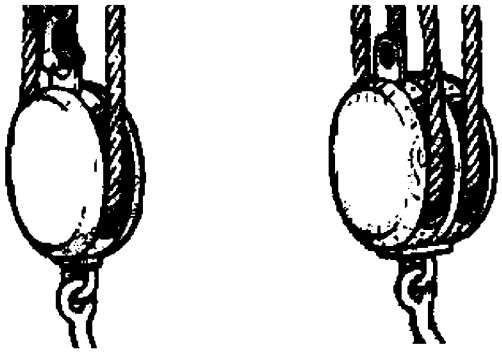
Time: 5 min Method: Interactive Lecture

There are two different blocks that are commonly used in the Cadet Program.

Single Block. This block consists of one sheave. A single block can be used as a stand alone block, which will provide a change of direction when pulling a load. It can also be used in series with additional single or double blocks.

Double Block. This block consists of two sheaves. The double block is not a stand alone block, and is used in a series with other types of blocks.

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.



SINGLE BLOCK DOUBLE BLOCK

Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 218)

Figure 3 Single and Double Block



Have a single and double block to use as an example.

CONFIRMATION OF TEACHING POINT 2

QUESTIONS

Q1. How many sheaves does a single block have?

Q2. What type of block has two sheaves?

Q3. What does a stand alone single block provide?

ANTICIPATED ANSWERS

A1. One.

A2. A double block.

A3. A change of direction.

Teaching point 3 **Demonstrate and Have the Cadets Practice Reeving a Line Through a Block**

Time: 10 min Method: Demonstration and Performance



Explain and demonstrate how to reeve a line through a block.

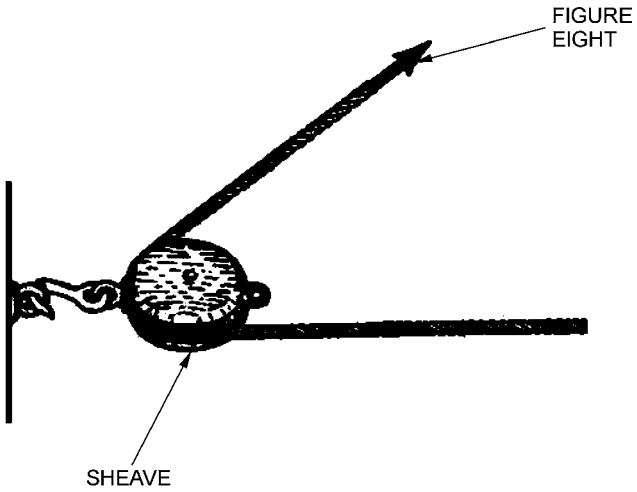
REEVING

Lines are reeved through the sheave of the block.

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

When reeving blocks the line should be checked for kinks and tangles. Coiling or faking out the line will help prevent this from occuring.

Take one end of the line and feed it through the sheave of the block. When the line has been reeved through the block a figure eight knot shall be tied in the end.



Royal Navy, Admiralty Manual of Seamanship 1964, Her Majesty's Stationery Office (p. 216)

Figure 4 Reeving a Block



Allow the cadets to practice reeving a single block. The block should be attached to a wall or object to prevent the block from moving while reeving.

CONFIRMATION OF TEACHING POINT 3

The cadet's participation in reeving blocks will serve as the confirmation of this TP.

Teaching point 4 **Conduct an Activity for Reeving Blocks**

Time: 5 min Method: In-Class Activity

ACTIVITY

OBJECTIVE

The objective of this activity is to have cadets review the parts of a block and reeve blocks.

RESOURCES

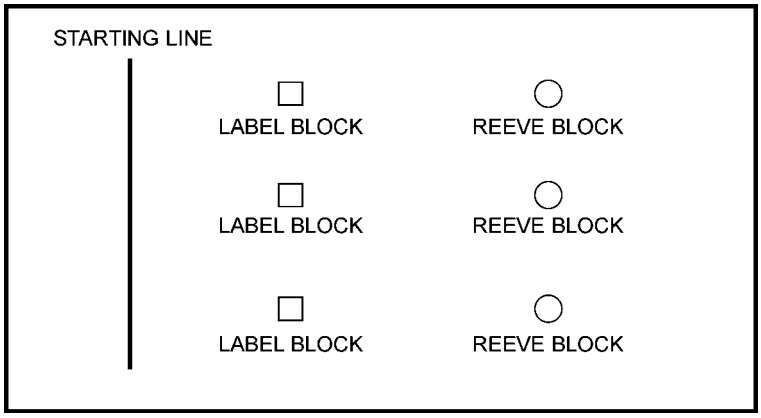
- Block labels located at Annex A.
- Two single blocks per group.
- Tape.

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

- Bag per group.
- A length of line per group.

ACTIVITY LAYOUT

- Mark off a starting line.
- For each group, lay out one single block for labelling the parts five metres from the starting line.
- Lay another single block with a length of line at a distance five metres from the other block.
- Cut out the block labels and place them in a bag.



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

Figure 5 Activity Layout

ACTIVITY INSTRUCTIONS

- Divide the cadets into two groups.
- Have each group line up behind the starting line.
- On the starting signal, the first cadet must choose a label from the bag, run to the block, and place the label on the corresponding part.
- When the label is placed on the block, return to the starting line, where the next person will choose a label from the bag and run to the block and label it accordingly.
- If a team member labels a part incorrectly, the label is to be placed back into the bag.
- The first team to label the entire block correctly will advance to the other single block and reeve it.
- The block is reeved once the figure eight knot has been tied.
- The first team to correctly label and reeve the block is the winner.

SAFETY

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

CONFIRMATION OF TEACHING POINT 4

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

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

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

For a block to work efficiently the line must move freely; therefore lines should be free of kinks and tangles when reeving blocks. This skill will be applied in future rigging tasks.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

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

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

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

THIS PAGE INTENTIONALLY LEFT BLANK

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

BLOCK LABELS

HEAD FITTING (EYE)
SWALLOW
TAIL
CHEEK
CROWN
SHEAVE
BECKET
PIN

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.

THIS PAGE INTENTIONALLY LEFT BLANK

Unofficial convenience copy of A-CR-CCP-602/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-602-PF-001/A-CR-CCP-602-PF-001.pdf.
Verify against the official publication.