Water Awareness and Charge Certificate Manual

Module 31: Introduction to the Gig

Current Document Revision Number: 1.5

Revision Date: 20 May 2017

Module Contents

. INI	RODUCTION TO THE GIG	. პ
1.1	Basic Terms Used in Pulling	. 4
1.2	Introduction to Pulling an Oar	. 6
1.3	Parts of a Gig	. 7
1.4	Cross Section of a Gig	. 8
1.5	Tips When Coxing	11
1.6	Basic Boat Skills	
1.6	.1 Procedure For Embarking	11
1.6	.2 Procedure For Disembarking	14
1.6	.3 Getting Underway	15
1.6	.4 Giving Way	15
1.6	.5 Backing Water	16
1.6	.6 Changing Pace	16
1.6	.7 Stopping	17
	.8 The Oars Command	
	.9 Trailing Oars	
	.10 Feathering	
1.6	.11 Turning	
1.7	Advanced Bode Brillotti	
	.1 Man Overboard	
	.2 Objects Overboard	
	.3 Tying Up	
	.4 Casting Off	
1.7	.5 Towing	25
	.6 Anchoring	
	The Bowman	
	.1 Bowman Commands	
	.2 Tips For Bowmen	
1.8	.3 Bowman Hand Signals	30

Module Tit	ile	Comments	Rev No	Revision Date
Module 13:	Introduction to the Gig	Initial Release	1.0	3 Jan 2010
Module 13: Gig	Introduction to the	Small updates	1.1	8 Jan 2010
Module 31:	Introduction to the Gig	Previous Module 13	1.2	25 Mar 2010
Module 31:	Introduction to the Gig	Updated Drills w.r.t. bowman's crutch and cross section diagram	1.3	10 Jun 2013
Module 31:	Introduction to the Gig	Updated Drills w.r.t. Man Overboard	1.4	20 May 2017
Module 31:	Introduction to the Gig	Outcomes Added	1.5	12 Sep 2018

Outcomes

After completing this module, the certificate holder will:

- Be able to demonstrate to pull an oar.
- Be able to identify parts of the boat
- Be able to perform basic and advanced pulling boat drills.

• Be able to demonstrate bowman and coxswain commands.

.

1 INTRODUCTION TO THE GIG

Pulling, or rowing as it is sometimes incorrectly known, is a team exercise. The team, called a crew, is made up of a Cox (short for Coxswain) and a number of crew members, from one to six or sometimes more.

The Cox is the leader of the crew, and is in command of the gig. It is his or her responsibility to make sure the gig performs correctly and safely. The Cox's position in the gig is at the rudder in the stern sheets. It is also the Cox's responsibility to see that his orders are carried out.

The rest of the crew, usually 4 or 6 members, consists of a stroke and a Bowman, with the others being ordinary oarsmen.

The stroke is the second most important man on the crew. The stroke is responsible for keeping the timing of the crew in good order and is also responsible for the crew if the Cox is occupied. The stroke's position in the gig is in the stern sheets facing the Cox.

The Bowman is responsible for directing the gig in confined spaces, or when approaching an object. Since he is in the bows, he has a better view of what is happening in front of the boat than the Cox does. The Bowman has two positions in the boat, one standing in the bows at his post, and the other sitting on the bows thwart.

The ordinary members of the crew have names according to their positions in the gig. The second stroke sits on the midships thwart, behind and on the opposite side to the stroke. The second stroke has to keep exact time with the stroke, since everybody on his side takes their time from him.

Next to the second stroke sits first amidships. Behind the second stroke sits second amidships, on the sails thwart second now sits next to second amidships.

The Cox faces forward in the gig and the rest of the crew face aft.

It was said before that the terms pulling and rowing were sometimes used interchangeably. To define the difference between them, we look at the type of boat used. Crewed, usually sea going vessels such as gigs, whalers, or cutters, are pulled. Small craft such as dinghies with one or two man crews and racing shells (such as sculls, fours and eights) are rowed.

Pulling boats generally have long ranges, many purposes and virtually all weather capability.

Rowing boats are usually single purpose, short distance boats with limited weather capability.

Rev 1.5 Page 3 of 30

1.1 Basic Terms Used in Pulling

GIG - A six oared pulling boat used by Sea Scouts.

AFT - The back third of a boat.

FORWARD - The front third of a boat.

MIDSHIPS - The middle third of a boat.

BOWS - The front ("sharp end") of a boat.

STERN - The rear of a boat.

PORT - The LEFT side of a boat, when standing aft facing forward.

STARBOARD - The RIGHT side of a boat, when standing aft facing forward.

GUNNELS - The top edge of the hull. Originally known as gunwales,

then shortened to gunnels.

SET - The angle that the width of an oar blade makes with the

water is called the set.

TIMING - The spacing between strokes. The timing should be kept

even, and all blades should enter and leave the water at the same time. If the blades do not enter and leave the water at the same time, the timing is said to be "out" because

some blades are taking longer strokes than others.

STROKE - (1) The member of the pulling section of the crew responsible

for keeping the timing, amongst other things.

The name given to the entire pulling cycle, namely catch,

(2) pull and recovery.

CATCH - This is the term given to the moment when the oar dips into

the water and "catches" it.

PULL - This means the power part of a stroke, i.e. the time when

the oar is pulled through the water.

RECOVERY - This is the term applied to the part of the stroke from the

time the blade leaves the water at the end of the pull to the time the blade leaves the water at the end of the pull to the time it dips towards the catch. During the recovery, the oar shaft and blade move in a flat line parallel to the gunnels. All oars should be lifted to the same height at the same time, so that, looking towards the bows of an approaching gig, one should only see what appears to be one oar rising

and falling on each side.

Rev 1.5 Page 4 of 30

CATCHING A CRAB

This happens when an oar catches the water with the wrong set. The blade fives deeply into the water and appears to catch on the bottom. Old tales told that a crab had caught the oar, hence the expression. To recover from a crab, twist your oar to the feather position by cocking your wrists back and up. The oar will pop out on its own.

WINDMILLING

Windmilling is what happens when the oar handle is pushed too far down during the recovery. The shaft and blade are lifted above the gunnels in a most unseamanlike fashion and the blade drops into the water with a splash on the catch. This is a common beginner's mistake and it not only looks terrible, but it also wets the rest of the crew. Who will not appreciate it. The oar shaft and blade should move along a line parallel to and on the same level as the gunnels.

1.2 Introduction to Pulling an Oar

This section outlines the basic steps in pulling an oar. The correct starting is at **OARS**. Hold the oar handle in front of you, with your wrists cocked back as if throttling a motorbike.

On the command "PREPARE TO GIVE WAY"

Straighten your arms and lean towards the stern, pushing the oar handle from you. When you are comfortably forward, dip the oar towards the water. Don't let the oar blade touch the water yet. Twist the oar to the correct set by straightening your wrists. The correct set is to have the top edge of the blade slightly aft of the lower edge. This makes the oar tend to rise off the water during a stroke, rather than dig in. You are now ready for the next command.

On the command "GIVE WAY TOGETHER, ONE"

Wait for the "ONE" then dip your oar into the water by raising the handle slightly. The oar blade should be only about two thirds under the water. Then lean backwards, keeping your arms straight.

Keep a slight upward pressure on your oar to keep it in the water. When you are comfortably far backward, pull your arms in towards you. That completes your pull.

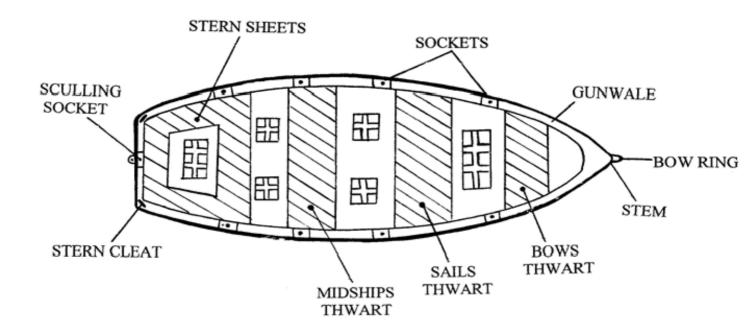
To start the recovery, push the oar handle down slightly to get the oar blade out of the water. Then lean forward, straightening your arms as you do so. When you are again comfortably far forward, your recovery is complete and you dip again towards the catch. The whole cycle should be relaxed, smooth and continuous.

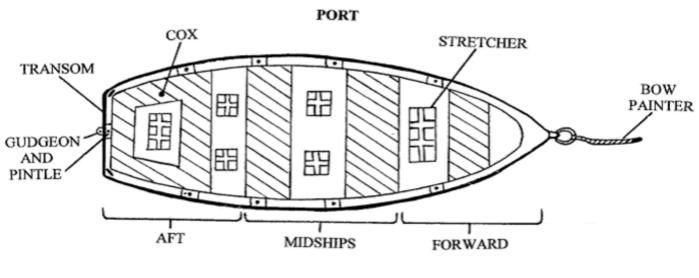
On the command "OARS"

Finish the stroke you are on, and give one more. Then, on your recovery, stop with the oar perpendicular to the gunnels and parallel to the surface of the water. Cock your wrists up and back to bring the blade flat. Sit up straight. You are now back at OARS.

Rev 1.5 Page 6 of 30

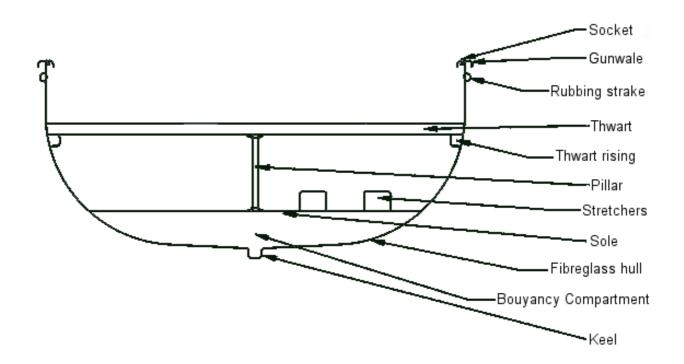
1.3 Parts of a Gig



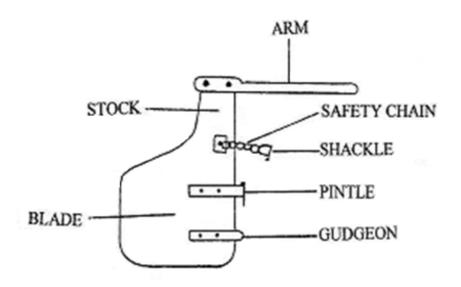


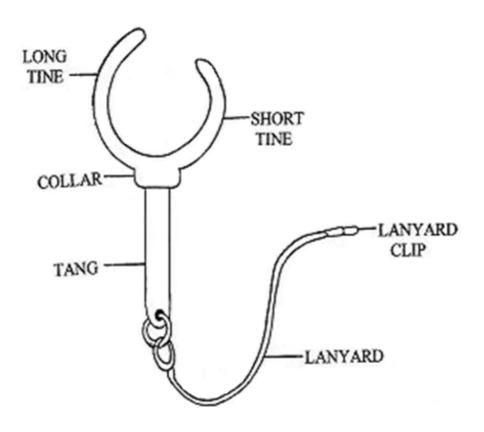
STARBOARD

1.4 Cross Section of a Gig

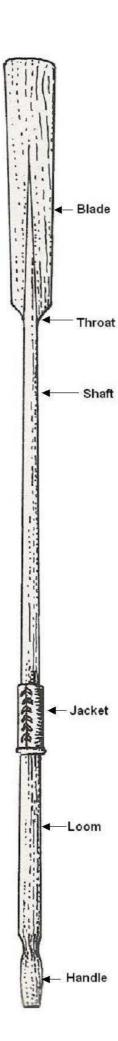


Cross section through a Gauteng Sea Scout Gig hull





Rev 1.5 Page 9 of 30



1.5 Tips When Coxing

- 1) Always plan your manoeuvres before giving commands.
- 2) Make your commands clear and firm.
- 3) Never use more than 45° of rudder.
- 4) Keep your crew informed, especially in emergencies.
- 5) Remember that the rudder works backwards when backwatering.
- 6) Always approach a mark by going into the wind.
- 7) Put passengers and spare crew in the bows when puling into heavy wind.
- 8) Remember that the crew is working harder than you are. Don't make them strain too much.
- 9) Give sufficient warning for orders. That means time your orders with spaces between then to prevent confusion.
- 10) Always be at attention before giving orders.
- 11) Feather oars when going to windward in bad weather.
- 12) Remember that you are entirely responsible for the boat and its crew.

1.6 Basic Boat Skills

1.6.1 Procedure For Embarking

This section covers the standard procedure for boarding and disembarking from a gig. As mentioned before, crew discipline is the most important aspect of gig safety after boat seaworthiness. It is the Cox's responsibility to maintain discipline in the crew, though he may hand over to Stroke. Undisciplined boarding of a gig leads to damage of the boat, not to mention bruises for those crew members who fall over thwarts. This sequence of commands is similar to those used by the Navy.

It must be emphasised that a gig without its oars ready is a boat that is not under command. As a Cox, you cannot control the boat, and it is irresponsible to take out a boat you cannot control. For this reason, you must always have your oars out and ready before you cast off. If there is not enough space to ship your oars, then the crew must hold their oars at the tossed position and ship them as soon as they can.

The crew must carry out all commands promptly, directly after the command is given. To be really in top form, the crew must follow the command as soon as the Cox closes his/her mouth e.g. on coming to attention, the click should immediately follow the "T" in alert – so that it sounds like "ALER....T. (CLICK)".

Crew falls in, in order on the shore, facing the boat. The Cox falls in facing the crew. Everybody is "AT EASE".

Rev 1.5 Page 11 of 30

you are at ease. Always come to attention first.

Cox: CREW, CREW ALERT On the word ALERT, the crew comes to attention,

sliding their left foot towards their right foot to make a click. The click should be together – i.e.

one sound from the whole crew.

Cox: CREW NUMBER On the word NUMBER, each member of the crew

calls his/her number in turn. The Stroke "No. 1" calls "ONE" as the "R" ends. The crew follow on. There should be no pauses between the numbers. Generally, it is traditional to have odd numbers on the starboard side and even numbers on the port.

Cox: **BOWMAN TO YOUR POST**Bowman steps forward, unties the gig and holds

the bows.

Cox: **NO. 1 TAKE OVER** Stroke steps forward, stands at attention in front

of the Cox. Both salute each other. The Cox then boards the gig, while the stroke turns round to

face the crew.

The exchange of salutes indicates that the responsibility for crew discipline has been passed on to the stroke.

No.1: CREW STAND AT EASE:- The crew stands at ease by sliding their left foot

outwards. This includes the Bowman, but not the

(Stroke) stroke, who is on duty.

After boarding, the Cox moves towards the stern of the boat, checking that all equipment (anchor, oars, crutches, etc.) are in their correct places, ready for use. The Cox then ships the rudder and sits at attention in the stern.

Cox: CARRY ON, NO. 1 (STROKE)

No. 1: CREW, CREW ALERT

or **STROKE TAKE OVER**

No. 1: CREW EMBARK BY NUMBER

The Stroke then turns and boards the gig, moving to Stroke position. Then he/she sits down at attention (back straight, feet together, arms folded, looking down towards the stern). When No. 1 is sitting properly, No. 2 embarks. The rest of the crew, except the Bowman follow suit.

Note that there is only one correct way to board a gig. Step over the bows, steadying yourself is necessary by holding the gunwales with your fingers **inside** the boat. Then move to your position by stepping **over** the thwarts. **Don't step on the thwarts**, its bad for them.

Once the crew is aboard and at attention:

Cox: CREW SIGHT CRUTCHES Crew pick up crutches by the long line. The

> crutch is held in the outboard hand. The crutch is then held above the socket, and the inboard hand

pulls the lanyard tight.

Cox: SHIP....CRUTCHES On the word CRUTCHES, the lanyard is pulled and

> the crutch placed into the socket. This should be done together to make a single thump, i.e. you should hear "CRUTCHES, (THUMP)". The crew

then sits at attention again.

Cox: CREW SIGHT OARS Crew place hands on their own oars. Outboard

hand is placed underneath the oar, and the

inboard hand on top.

Cox: TOSS OARS BY NUMBER Stroke tosses his oars to a silent count of 1...2 3,

> 1. The oar comes up on the 1...., pauses for the 2 3, and gently thumps down on the 1. On the thump, Nos. 2 and 3 raise their oars together to the same count. After their thump, Nos. 4 and 5 The oars are held with the raise their oars. outboard hand above the jacket and the inboard hand below it. The blades must all be aligned

bows to stern.

Cox: CREW SHIP OARS The oars are lowered into the crutches and slid out

> until the jacket is comfortably within the crutch. The jacket pins must face towards the stern to

prevent damage to oar and crutch.

The oars are held in the **OARS POSITION**, i.e. perpendicular to the hull, parallel to the water and

with the blades flat.

Cox: **BOWMAN CAST OFF** Bowman pushes the gig out, stepping into the boat

as he does so.

Cox: **BOWMAN**, **IN YOUR OWN** Bowman checks that the painter is stowed, Sights

TIME

and ships his crutch, then sights his oar.

Bowman: OAR COMING UP Bowman warns that he is tossing his oar, tosses it

and ships it. He then picks up the timing and joins

in pulling.

That completed the process of embarking and getting underway. Some leeway is allowed, depending on the circumstances. For instance, it may be preferable to turn away from the shore, rather than to backwater and in such a case the crew must be prepared accordingly.

Another possible difference is that the command "toss oars" may be used instead of "toss oars by number". If this is done, all the oars must be tossed together and it is quite difficult to achieve a uniform thump.

1.6.2 Procedure For Disembarking

This procedure starts off with the gig approaching the landing spot, but still about 50m out. The gig is still underway.

Cox: **EASY OARS** Crew slow down pace, and reduce power.

Cox: **BOWMAN TO YOUR POST** Bowman tosses his oar.

Bowman: **OAR COMING DOWN** This lets the crew know that the oar is coming

down.

The Bowman then boats his oar and crutch and stands in the bows, facing out over them. He directs the gig to the landing place by means of hand signals, which the Cox has to relay to the crew.

NOTE: A good Bowman will judge the speed and distance of the boat so well that the gig comes to rest just short of the landing spot with the oars at the "oars" position. The Bowman must never let the gig hit the shore, or any other object.

On reaching the shore, the Bowman steps ashore and holds the boat.

Cox: **OARS**This is only if the Bowman has left the crew at

any other position (hold water, trail oars, etc.)

Cox: **TOSS OARS** Crew toss oars together. "TOSS OARS BY

NUMBER" can also be used.

Cox: **BOAT OARS BY NUMBER** Stroke boats his oar, Nos. 2 and 3 follow, then

Nos. 4 and 5.

Cox: **SIGHT CRUTCHES**Crew lift crutches to the sight position, just

above the sockets.

Cox: **BOAT CRUTCHES** Crew place crutches in the boat.

Cox: CREW DISEMBARK BY Crew disembarks one at a time in reverse

order, i.e. No. 5 disembarks first and when he/she is standing at attention on the shore No. 4 follows, etc. Stroke stands in front of the crew, since he has not been relieved of his

responsibility.

Rev 1.5 Page 14 of 30

NUMBER

After the stroke has disembarked, the Cox boats the rudder and disembarks, checking the equipment and the boat as he does so. On stepping onto the shore, the Cox stands facing the stroke and they salute each other. The Cox turns to face the crew and the stroke returns to his/her place in line. Everybody is still at attention.

Cox: **BOWMAN MAKE FAST**Bowman ties up the boat and returns to the

line.

Cox: **CREW DISMISS** Everybody turns to their right, takes three

steps, which finish in a click and then fall out.

These procedures are for six man crews. For four man crews, the procedure is still the same, except that No. 3 attends to Bowman's crutch. For crews of more than 6, extra crew (Nos. 7 +) board before the stroke and sit in the stern. On disembarking, the extra crew disembark after the stroke.

1.6.3 Getting Underway

Once on the water, the Cox needs to know the correct sequence of commands to get the boat moving to his wishes. This sequence of commands is used every time the Cox needs the boat to be moved forwards on the water. The starting position for getting underway is to have the crew at the "OARS" position. Traditionally, a crew should not obey any command, except for emergency commands, from any other position. In other words, the crew should be brought to "OARS" before giving the next command. The exceptions are the emergency "HOLD WATER" or "TRAIL OARS" commands, which must be obeyed immediately. Bowmen must also remember this when directing the boat from their post. Always signal "OARS" before the next signal. This may be relaxed during critical manoeuvres, when time is limited, e.g. in narrow channels, or dodging rocks. In these cases, the crew should be warned of what is happening, so that they concentrate fully.

1.6.4 Giving Way

This is used to get the gig to move forwards.

CREW IS AT OARS POSITION

Cox: **PREPARE TO GIVE WAY**The crew lean forward, pushing their blades back

and twist them to the correct set for pulling. The blades must be held above the water, not in it. The

blades should be at the same angle to the boat.

Cox: GIVE WAY TOGETHER,

ONE

On the word ONE, the crew dip their blades into the water and pull. The blades should dip at the same time, pull through the same distance and leave the

water at the same time. The oar stroke ends back $% \left(1\right) =\left(1\right) \left(1$

at the PREPARE position.

Cox: **TWO** The crew take the second stroke.

The Cox counts the first few strokes to give the stroke the correct timing. Counting always stays in single digit numbers, i.e., 1, 2, 3, 4, 5, 6, 7, 8 9, and then 1, etc. Again. In good crews, it is not necessary to count above 3 or 4. Some Cox's count to 3 for an easy stroke and up to 9 for a really fast stroke.

When the Cox thinks that the stroke has the pace, at the start of the next stroke:

Cox: FOLLOW STROKE Crew watch stroke oar for timing, no further count

is given. All blades dip in with the stroke oar, and

all recover in time with stroke oar.

1.6.5 Backing Water

Backing water, or backing down, is used to go backwards. It is always a slow, easy stroke, since it is difficult to control a gig that is reversing.

CREW IS AT OARS POSITION

TO Cox: **PREPARE BACKWATER**

Crew lean back, lower their blades towards the

water and twist them to the correct set.

Cox: BACKWATER TOGETHER, ONE

Crew dip their blades into the water and lean forward, pushing their oars away from them, ending the stroke at the PREPARE TO BACKWATER position.

The Cox then counts the crew, through the strokes, since backwatering is usually only a short distance operation. For longer distances, the Cox may order "follow stroke".

1.6.6 Changing Pace

Once the gig is under way, the Cox may wish to either speed up to slow down. To speed up the gig, the crew must either pull harder or pull faster. To get the crew to pull harder, the command "STROKE PULL HARD (or HARDER)" is used. To get the crew to pull faster, the command "STROKE, PICK UP PACE" is used. Usually, either command results in both an increase in stroke rate and an increase in pulling strength.

During races or emergencies, the command "CREW, STAND-UPS ONE" may be used for short bursts (less than ten strokes at a time). Stand-ups means that the crew dip their blades deeply at the beginning of the stroke and then pull hard on the blades, kicking with their legs at the same time. When done properly, the entire body lifts off the thwarts and the boat surges forward. The Cox should count for the entire sequence to ensure that proper timing is kept. Stand-ups are very tiring and should only be used in bursts to conserve the crew.

Slowing down the gig is achieved by using the command "STROKE, EASY OARS". The stroke slows down the rate and the pressure (strength of the pull) at the same time.

Rev 1.5 Page 16 of 30

1.6.7 Stopping

Sooner or later, it is necessary to stop a gig. In pulling, there are three types of stop, namely the gradual stop, the sharp stop and the emergency stop.

In the gradual stop, the Cox calls "OARS" and the boat is allowed to drift to a stand-still.

The **sharp stop** is used to bring the boat to a halt. The Cox calls "**OARS**" to bring the crew to the OARS position and then calls "HOLD WATER". The crew set their blades and dip them into the water where they act as brakes. The oars are kept perpendicular to the gunwales. This brings the gig to a sharp stop and is normally used at low speeds, since the strain on the crew is tremendous at higher speeds. Before giving further commands, the Cox must call the crew back to OARS.

The emergency stop is used only in emergencies. The Cox calls "HOLD WATER". The crew immediately hold water and lean into their oars to achieve a sort of backwater stroke. Often it is necessary to control the set of the oar blades, as the normal set can knock the crew off the thwarts. Practice is the best way to earn to control an oar during emergency stops, especially at faster speeds. The emergency stop, if done properly, will stop a gig in its own length even at racing speeds. "HOLD WATER" is an emergency command and is obeyed immediately.

1.6.8 The Oars Command

The OARS command is used to get the crew to stop whatever they are doing and pay attention. On the call of "OARS", the crew pull one more stroke and come to the OARS position. The OARS position has the blades perpendicular to the hull, parallel to the water and with the blades flat.

If "OARS" is called in the middle of a stroke, the crew finish the stroke, give one more and come to OARS. For this reason, the call is usually made at the end of a stroke, as the crew start their recovery.

1.6.9 Trailing Oars

In cases where the gig must go through a narrow space, or where there is a danger of an object hitting the oars (such as when coming alongside), the command "TRAIL OARS" is used. TRAIL OARS is an emergency command and must be obeyed immediately. The crew continue the stroke they are on, bringing their blades out of the water and next to the hull. If the blades are out of the water, (i.e. during recovery) the blades are pulled through the air and swept up next to the hull.

If the crew is pulling, the blades are swept to the stern. If the crew is backwatering, the blades are swept to the bows. In both cases, TRAIL OARS is a continuation of the stroke being used.

To recover from TRAIL OARS, the command "OUT OARS" is used. OUT OARS brings the oars back to the OARS position.

Page 17 of 30

1.6.10 Feathering

In heavy weather, with large waves and/or strong winds, the oars make a considerable drag on the boat during the recovery. This drag slows down the boat and wears out the crew, since the oars are pushed against the wind and through the waves. To stop this, the Cox calls "**FEATHER OARS**". The crew then have to turn their oars flat (parallel to the water) during the recovery by cocking their wrists backwards (similar to throttling a motorbike) and then reset them just before the catch. Feathered oars offer much less resistance to the wind and skip over the waves rather than ploughing through them. This means the boat is not slowed as much. It is hard on the wrists at first.

1.6.11Turning

As with stops, there are several types of turn, rates on how fast they turn the boat. In turning, there are five types, listed here in increasing order of effectiveness.

- (a) Rudder turn
- (b) Easy turn
- (c) Oars turn
- (d) Fast turn
- (e) Stationary turn
- (a) The **rudder turn** involves turning the boat by using the rudder. As stated before the Cox must not use more than 45° of rudder to avoid stressing the crew on the inside of the turn. In practice, even less rudder should be used. The rudder turn is only used for slight changes of course. Larger changes of course require crew commands. Remember also that the rudder can only work while the boat is moving.
- (b) The **easy turn** is a slow turn equivalent to about 30 45° degrees of rudder, but does not strain the crew. The procedure is as follows:

FOR A PORT TURN:

Cox: PORT, PICK UP PACE

The port crew give one hard pull to stop the swing and then pull at the same pace as the rest of the crew.

NOTE: The Cox must give the EASY and PICK UP commands at the end of a stroke, so that the crew can easily fit in the change of pace.

FOR A STARBOARD TURN, GIVE THE COMMANDS TO THE STARBOARD CREW

(c)The **oars turn** is similar to an easy turn, but is faster, being equivalent to about 45-60° of rudder.

FOR A PORT TURN:

Cox: **PORT, OARS** The port crew come to OARS.

JUST BEFORE THE BOAT IS ABOUT TO COME ON COURSE:

Cox: **PORT, PICK UP STROKE** The port crew give one hard pull to stop the swing and

then pull at the same pace and time as the rest of the

crew.

NOTE: The PICK UP command must be given while the starboard crew are in the middle of a stroke, so that the port crew can recover to the PREPARE position in time with the starboard crew. Then both crews will start the next stroke together, with port puling harder to stop the boat's swing.

FOR A STARBOARD TURN, GIVE THE COMMANDS TO THE STARBOARD CREW

(d) A **fast turn** is a turn where one side of the boat holds water, causing the boat to turn quickly.

FOR A PORT TURN:

Cox: **PORT, OARS**The port crew come to OARS.

Cox: **PORT, HOLD WATER**The port crew hold water.

JUST BEFORE THE BOAT IS ABOUT TO COME ON COURSE:

Cox: **PORT, OARS** The port crew come to OARS.

Cox: **PORT, PICK UP STROKE**The port crew give on hard pull to stop the swing

and then pull at the same pace and time as the rest

of the crew.

NOTE: The Cox must time the commands carefully to ensure that the boat does not turn too far. As with the oars turn, the PICK UP command must be given while the starboard crew are in the middle of a stroke, so that the port crew can recover to the PREPARE position in time with the starboard crew. Then both crews will start the next stroke together, with port pulling harder to stop the boat's swing.

FOR A STARBOARD TURN, GIVE THE COMMANDS TO THE STARBOARD CREW

(e) A **stationary turn** is a very fast turn where the boat turns on its own length. One half of the crew backwaters, while the other half gives way. The turn is done when the boat is stationary, to avoid straining the crew and the equipment. Stationary turns are usually used to turn th egig around, i.e. through 180° .

THE CREW IS AT OARS.

Rev 1.5

FOR A PORT TURN:

Cox: PORT, PREPARE TO BACKWATER

Cox: STARBOARD, PREPARE TO GIVE WAY

BOTH CREWS ARE NOW READY TO ACT.

Cox: GIVE WAY TOGETHER, ONE

BOTH CREWS GIVE WAY (PORT BACKWATERS, STARBOARD PULLS). THE BOAT TURNS RAPIDLY.

JUST BEFORE THE BOAT IS ABOUT TO COME ON COURSE:

Cox: **OARS** Entire crew comes to OARS

Cox: **HOLD WATER**This is optional, but may be needed to stop the

swing on the boat.

Cox: **OARS** Entire crew comes to OARS.

FOR A STARBOARD TURN, GIVE THE COMMANDS TO THE STARBOARD CREW

In turning, the Cox must exercise discretion in the choice of turn type to be used. The Cox may also vary the commands slightly, for instance, by ordering single strokes by one side or the other. All turns can be made faster by calling (in the case of a port turn) "STARBOARD PULL HARD". In this case the command "STARBOARD EASY OARS" must be given before port can PICK UP STROKE.

Page 20 of 30

1.7 Advanced Boat Drills

Boat drills are standard manoeuvres that the Cox is expected to know. These include the drills for collecting objects from the water for anchoring, towing and tying up. In all these drills, except for towing, the Cox needs to use the Bowman. This is because the Cox's view forward over the bows is limited and it becomes difficult to judge distances correctly.

1.7.1 Man Overboard

THIS IS THE MOST IMPORTANT OF THE DRILLS, SINCE IT MAY BE REQUIRED TO SAVE A LIFE.

THE DRILL COVERED HERE IS FOR A CONSCIOUS, CALM PERSON.

The general procedure is as follows:

- 1) Throw something that will float to the person if you can. If the person is not very close by then don't waste time trying to throw something.
- 2) Warn your crew "MAN OVERBOARD".
- 3) Make a fast turn towards the person using your crew.
- 4) Call the Bowman to his post "BOWMAN TO YOUR POST".
- 5) Try to make your approach into the wind. This helps to slow your gig down and make it easier to control. If conditions are bad then it may be better to go straight to the person, provided you are at least going across the wind.
 - **NEVER, EVER APPROACH ANYTHING FROM UPWIND (WITH THE WIND BEHIND YOU)**. The wind will blow you onto the object and probably over it. If you are upwind, go past the object and then turn and approach into the wind.
- 6) As you approach, call **"EASY OARS"**. Gigs are heavy boats with hard bows. It will not do the person in the water much good if you ram them at racing speed.
- 7) Make your final approach under Bowman's directions.
- 8) **HOLD WATER** just before reaching the person.
- 9) If the person is calm, Bowman grasps the person.
- 10) Cox gives the command: "**PORT** (or **STARBOARD**), **BOAT OARS**". The oars, on the side where the man overboard is going to be recovered, are brought in board.
- 11) Pass the person down the boat from crew member to crew member until the Cox can take hold of the person over the side of the gig in the aft quarter.
- 12) As soon as the person is held by cox (and first stroke), cox gives the command "**LEAN**". At this command, the remaining crew lean towards the person in the water, until the gunnel is nearly touching the water surface.
- 13) The cox and possibly the stroke, pull the person until he is partially over the gunwale. At this stage, the cox gives the command "ROLL" at which command, the remaining crew throw their weight to the opposite side, thereby righting the boat. This righting momentum assists in lifting the person clear of the water and

Page 21 of 30

- into the gig. The aft quarter has the lowest gunwales and so heavy objects are usually brought aboard there.
- 14) Cox gives the command "**PORT** (or **STARBOARD**), **SHIP OARS**", to get the boat under control as soon as possible.
- 15) **APPLY FIRST AID**. The person you have just rescued is guaranteed to be in shock at the very least. If conditions are bad, the Cox can either apply first aid and hand over command to the stroke, or hand the patient over to the stroke. In either case, the stroke must boat his oar first.
- 16) Return the Bowman to his oar.
- 17) Get under way.
- 18) Head for shore to deliver your patient.

1.7.1.1 Unconscious People

The following changes apply to unconscious people.

- Get there very fast but don't run them over
- Approach into the wind ALWAYS.
- Bring them over the stern, or you may need to boat all oars and crutches on one side of the boat, bring the patient to the side of the boat and carefully lean the boat over to scoop him in. In this case, use the crew to balance the boat.
- Check immediately to see if CPR is required. Administer if necessary.

1.7.1.2 Panicking People

In the event that the person is in difficulty and panicking:

EXERCISE EXTREME CARE - THESE PEOPLE ARE DANGEROUS

- Approach calmly.
- Either approach stern first and let them grab the stern. Beware of the rudder. It may be wise to boat it temporarily as you approach. This does make the gig harder to control, however.

OR

- Bowman passes the person an oar / rope / floating object. Keep the person at a distance. Don't give panicking people your hand. He/she will probably pull you in.
- Try not to let the person catch hold of the side of your boat until he/she reaches the stern.
- Calm the person down.

- When calm, head for the shore.

1.7.2 Objects Overboard

The classic example of this is an oar overboard.

- 1) Warn the crew.
- 2) Make a turn downwind.
- 3) Go a few boat lengths beyond the object. This gives you room to manoeuvre.
- 4) Turn into the wind.
- 5) Call the Bowman to his post.
- 6) Call easy oars.
- 7) Approach the object under Bowman's directions.
- 8) Stop just short of the object either by holding water or by oars.
- 9) The Bowman collects the object.
- 10) If the object is an oar, the Bowman passes it in the water along the boat to the careless crew member.
- 11) If the boat is small, the Bowman may bring it in directly over the bows. If it is large or heavy, pass it to the stern and recover it there.
- 12) Return the Bowman to his/her oar.
- 13) Get underway.
- 14) (Optional) when you reach shore, correct the crew member who lost the oar so that he/she remembers to concentrate next time!

1.7.3 Tying Up

Tying up or making fast is the name given to the process of attaching a boat to a buoy, shore, or another boat by means of a rope.

- 1) Get down wind of the mark A mark is any object you are intending to go to.
- 2) Turn into the wind.
- 3) Call Bowman to post
- 4) Call easy oars
- 5) Approach under Bowman's directions.
- 6) Stop just short of the mark.
- 7) Call "**BOWMAN, MAKE FAST"**. The Bowman then ties the boat to the mark with a bowline on the bow painter.

- 8) The Bowman calls "**READY**" when he is finished. The Cox may then tell him to sit down or to return to his position, in which case he sits at attention.
- 9) If the boat is only going to be tied up for a short time, the command "CROSS OARS" may be used, the crew then slide their oars across the boat so that the handles can be placed under the gunnels on the opposite side.
- 10) For longer periods, oars should be tossed and boated. For very short times, leave the oars at oars or hold water.

1.7.4 Casting Off

This is the opposite of making fast.

- 1) Call the crew to "OARS". If the oars were crossed, the command is "OUT OARS". If the oars were boated, they must be tossed and shipped.
- 2) The Cox tells the Bowman "PREPARE TO CAST OFF".
- 3) The Bowman unties the boat and keeps hold of the mark.
- 4) When the boat is untied, the Bowman calls "READY".
- 5) The Cox then prepares the crew to get under way. Giving way, backwatering, or turning are all options, depending on the circumstances.
- 6) The Cox calls "BOWMAN, CAST OFF".
- 7) The Bowman lets go of the mark.
- 8) The Cox gets the boat under way.
- 9) The Cox tells the Bowman "BOWMAN, IN YOUR OWN TIME".
- 10) The Bowman coils the bow painter neatly, ships his oars and picks up stroke.

Rev 1.5 Page 24 of 30

1.7.5 Towing

Gigs may sometimes be required to tow other boats that are in difficulties. Before towing any vessel, make sure that:

- 1) It is safe to approach the vessel.
- 2) It is safe to tow the vessel. i.e. The vessel is not too large for either the crew or the equipment. DON'T pull your stern cleats off trying to tow heavy vessels.
- 3) Make sure your towline is long enough to let you manoeuvre out of the way of the tow. If you make the tow line too short, the tow will probably ram you from behind, especially at higher speeds.
- 4) It is a good idea to have a knife or an axe handy to cut the tow if you run into trouble.

The general procedure for towing is as follows:

- 1) Approach the tow.
- 2) Turn so that the stern of the gig is towards the tow.
- 3) Backwater until you are within throwing distance of the tow. In the case where it is safe to go closer, do so.
- 4) Hold water.
- 5) Pass a strong line to the tow. If the tow is abandoned, place one or two crew members on board **ONLY IF SAFE TO DO SO**.
- 6) Have the line made fast to the bows of the tow. If the tow is aground, or needs to be towed backwards, make fast to the centre of the tow's stern.
- 7) If possible, take your stern painter, divide it in half and make a loop in the centre. Then tie each end of the stern painter to the stern cleats to form a yoke.

 ONLY DO THIS IS THE STERN PAINTER IS STRONG ENOUGH.
- 8) Make your end of the towline fast to either the loop in the yoke, or to the stern cleats. The use of the yoke spreads the load over both cleats and keeps the tow on the centreline of the gig. This stops the gig from being pulled off course.
- 9) If the tow has either a centreboard / dagger board or a keel, make sure that it is down (or lower it at the first opportunity). Raise the rudder, or tie it down so that it can't pull the tow off course.
- 10) If there is no keel / centreboard, then have the rudder left down and tied.
- 11) Call the crew to oars.
- 12) Give way with very easy oars to take up the slack.
- 13) Pull gently until the tow has gathered way.
- 14) Then you can increase speed.

NOTE: Never tow fast. Fast tows are hard to control and will probably ram you. Such a ram can easily take out your rudder, leaving you in trouble.

1.7.6 Anchoring

Anchoring means securing a boat in one area by means of an anchor various types of anchor are available for different boats and bottoms. There are a few general rules for anchoring. These are:

1.7.6.1 Before You Leave Shore:

- Make sure that your anchor is big enough to hold your boat.
- Make sure that the anchor is suitable for use on the lake bottom you expect to encounter.
- Make sure that it is properly tied on, both at the anchor and at the boat.

1.7.6.2 When You Anchor:

- Head into the wind.
- Check that you are not standing on the anchor rope.
- Lower your anchor, don't throw it.
- Measure the depth of the water as you lower the anchor.
- Pay out extra rope until you have three times the depth of the water between you and the anchor. Pay out more in heavy weather.
- Check that your boat will not swing into anything if the wind changes.

Assuming you have checked your anchor before leaving:

- 1) Pick your spot.
- 2) Head into the wind.
- 3) Call the Bowman to post.
- 4) Tell the Bowman "BOWMAN, PREPARE TO ANCHOR". The Bowman gets the anchor ready to lower.
- 5) Call easy oars.
- 6) When you are over the intended spot, hold water.
- 7) Call "BOWMAN, ANCHOR".
- 8) The Bowman lowers the anchor and measures the depth of the water.
- 9) The Bowman calls "ANCHOR DOWN".
- 10) The crew must then backwater gently as the Bowman pays out another two times the depth of the water.

- 11) The crew must then backwater gently as the Bowman pays out another two times the depth of the water.
- 12) The Bowman tugs on the line to check that the anchor has taken hold, secures the anchor line and calls "**ANCHORED**".
- 13) Call "OARS".
- 14) Tell the Bowman to sit down.
- 15) Check your position several times to ensure that you are not drifting.
- 16) Boat or cross the oars if desired.

1.7.6.3 Raising The Anchor

- 1) Tell the Bowman "BOWMAN, PREPARE TO RAISE ANCHOR".
- 2) "PREPARE TO GIVE WAY".
- 3) Call "BOWMAN, RAISE THE ANCHOR". The Bowman unties the temporary securing holding the anchor and begins to bring in the anchor line, coiling it as he does so.
- 4) Get under way; use easy oars to take the boat along the line as the Bowman brings the line in. "GIVE WAY, EASY OARS".
- 5) The Bowman may direct the boat until it is over the anchor.
- 6) When the boat is above the anchor, the Bowman calls "UP AND DOWN".
- 7) "HOLD WATER".
- 8) The Bowman raises the anchor until it is clear of the water. Then he calls "ANCHOR'S AWEIGH" to tell the Cox that the anchor is out of the water.
- 9) The Cox calls the crew to oars and gets under way.
- 10) The Cox calls "**BOWMAN, IN YOUR OWN TIME**". The Bowman stows the anchor and line neatly and commences pulling.

Rev 1.5 Page 27 of 30

1.8 The Bowman

The Bowman is an important member of the pulling crew. His position at post in the bows gives him an excellent view of what is directly ahead and often also of what is just beneath the surface of the water. For this reason, the Bowman is required to direct the boat in narrow or rocky waters and into marks.

The Bowman directs the boat via the Cox by means of hand signals. These hand signals tell the Cox where to go, how fast to go and when to stop. Since the commands must go from Bowman to Cox to crew, the Bowman must anticipate the movement of the boat well enough to make sure that the command can be applied in time. It is the Bowman's responsibility to stop the boat from colliding with rocks, objects, shores and other vessels when he is at post.

Beyond directing the boat, the Bowman has several additional duties including making fast, collecting objects from the water and anchoring.

1.8.1 Bowman Commands

These are covered in the section on Coxing, but are repeated here for easy reference.

BOWMAN, HOLD THE BOAT. This is given on shore. The Bowman must until the

boat and hold it firmly to prevent it from drifting away. If the boat has been pulled up, the Bowman

must push it into the water after untying.

BOWMAN, CAST OFF This command may be given on embarking or after

making fast at a mark. In al cases it means that the Bowman must push the bows of the boat clear of the shore or mark. On leaving shore, the Bowman must step into the boat as he pushes it

clear.

BOWMAN, IN YOUR OWN

TIME

This command tells the Bowman to stow any gear he has been using, ship his crutch and oar, and pick up stroke. All lines must be coiled and anchors

need to be made safe.

NOTE: Before tossing his oar, the Bowman must always warn the rest of the crew by calling "oar coming up".

BOWMAN, TO YOUR POST

On receiving this command, the Bowman must toss and boat his oar, then boat his crutch, before standing in the bows, facing forward. The Bowman then directs the gig by means of hand signals.

NOTE: before boating his oar, the Bowman must always warn the rest of the crew by calling "oar coming down".

BOWMAN, MAKE FAST This means tie the gig to the mark in question using

the bow pointer. The correct knot to use is a bowline. Once the boat is secured, the Bowman must call "**READY**" to let the Cox know that the

boat is secure.

Page 28 of 30

BOWMAN, PREPARE TO CAST OFF

The Bowman must until the gig from its mooring and hold onto the mooring. This command is followed by the CAST OFF command.

BOWMAN, **PREPARE** TO **ANCHOR**

The Bowman must ready the anchor for lowering. DON'T STAND ON THE ANCHOR LINE.

BOWMAN, ANCHOR

The Bowman lowers the anchor, measuring the rope in spans as he does so until the anchor reaches the bottom. He then calls "ANCHOR **DOWN**" to let the Cox know that the anchor is down. The crew then backwater and the Bowman must let out more line equal to twice the depth of the water. The Bowman checks to see that the anchor is holding by tugging the line. If it holds, he calls "ANCHORED" to the Cox. If not, he should put out another depth of line and check with a sharp tug. If this fails, the anchor is probably unsuitable for the bottom and anchoring may be impossible.

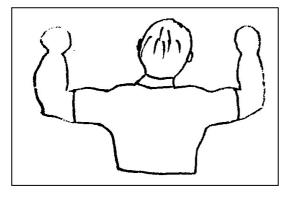
For the Bowman's role in life saving, see the appropriate section in Coxing.

1.8.2 Tips For Bowmen

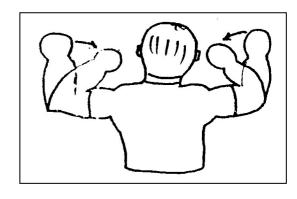
- 1) Always approach objects, such a buoys, from downwind, i.e. always head into the wind when tying up, etc.
- 2) Always plan your manoeuvres well in advance.
- 3) Give ample warning of your intentions.
- 4) Make sure that your signals are clear.
- 5) Don't be indecisive.
- 6) Remember to look down into the water when approaching shores or shallows.
- 7) Keep all lines (anchor, sounding, painters, etc.) Neatly coiled and stowed.
- 8) Don't leave anything loose, loose objects tend to roll around and get in the way.

Page 29 of 30

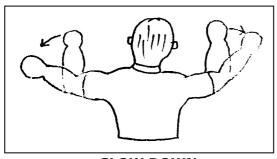
1.8.3 Bowman Hand Signals



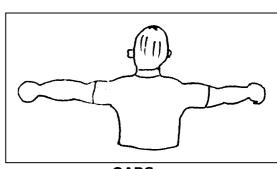
CARRY ON



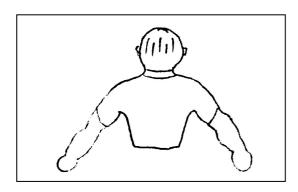
SPEED UP



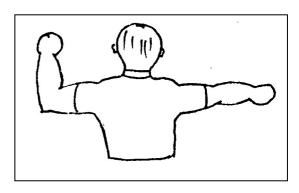
SLOW DOWN



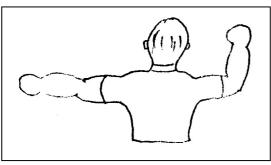
OARS



HOLD WATER



STARBOARD TURN



PORT TURN