

OBJECTIVES

To give members with little or no boathandling experience, theoretical and practical instruction in the safe handling of small powerboats at sea.

REQUIREMENTS

Current S.A.A. membership.
Current S.A.A./BDSG Course Manual, see page 2.
No diving qualification needed.

QUALIFICATION AWARDED

Qualification book and wall certificates.

SYLLABUS OF THEORY SKILLS

1. Small boat terminology.

A description of seaman's boating terms

2. Boat awareness.

Types of craft (seaworthiness)
Preparation
Launching
Loading
Recovery from water

3. Outboard Engine.

Routine maintenance
Basic "trouble shooting".

4. Seamanship.

Boathandling — Low speed
High speed
Rough water

Anchoring

Picking up a mooring
Recovery of a diver
Coming alongside

5. Buoyage system.

Rules of the road

6. Navigation.

- Charts
- Nautical Almanacs
- Instruments
- Compass courses
- Transit bearings
- Tidal Streams
- Knots (speed)

7. Basic weather forecasts.

- Radio
- Marinas

8. Bends and Hitches.

- Bowline
- Clove Hitch
- Round turn and two half hitches
- Fisherman's bend

9. Distress.

- V.H.F. Radio
- Flares
- Signals
- Towing
- First Aid

10. Miscellaneous.

- Co-ordinators discretion

PRACTICAL SKILLS

- Prepare boat
- Launch and load
- Slow speed
- Manoeuvring in confined areas
- High speed
- Emergency stop
- Rough water handling (when possible)
- Picking up a mooring/buoy
- Man overboard
- Simulated recovery of a diver
- Anchoring
- Coming alongside
- Steering a compass course
- Finding a transit bearing
- Beaching boat
- Recovery of boat from water
- Load boat on to trailer

All candidates must receive from the Course Coordinator, at the start of the course, a current SAA/BDSG Course Manual. Payment for the manual will be included in the course fee; however, the manual may be purchased in advance from the Sales Office.

GUIDELINES FOR BOATHANDLING INSTRUCTORS**1. SMALL BOAT TERMINOLOGY.*****Parts of the boat***

Port	Starboard
Bow	Stern
Transom	Freeboard
Painter	Knots (speed)
Warps	

2. BOAT AWARENESS

Types of craft.

Inflatables

May rip on sharp objects (multi tube)
Portable
High stability
Very buoyant
Low directional stability
Wet ride

R.I.B.s

High buoyancy
Good directional stability
Very seaworthy
Centre console
Some have flooding keel
Requires trailer or trolley

Dories and Cathedral hulls

Good load carrying capacity
Low speed directional stability
High stability at rest
Hard ride

V shaped hull

Low initial stability at rest
Buoyancy must be built in

Pre launch assessment

Suitability of area
Weather and sea conditions
State of the tide

Pre launch preparation

Security of engine
Tilt engine
Controls connected?
Fuel tanks filled and connected, open vent
Reserve fuel/oil

Launching

- Slip way/Ramp/Beach
- Use of trailer
- Float boat off
- Use of crew
- Loading of equipment/crew for safety
- Park trailer

Recovery

- Re-assessment of conditions
- Can you use the car?
- Correct position of boat on trailer
- Effect of wind and tidal stream

3. OUTBOARD ENGINES

- Manual/Electric
- 2 or 4 stroke
- Oil mixture
- Plugs
- Long/short shaft
- Tiller/remote controls
- Security of engine

Routine maintenance

- Cleaning plugs
- Greasing/damp proof electrics
- Wintering

Trouble shooting

- Tool Kit/engine spares
- Spare starter cord
- Shear pins
- Changing propeller
- Submerged engine
- Manual/electric start (fuses)

4. SEAMANSHIP**Boathandling**

- Stop and start engines
- Neutral gear
- Fuel line primed
- Use of choke/cold start
- Check cooling

Low/High speed/Rough water

- Engine running
- Keep a good look-out
- Leaving beach/quay/slip
- Warn crew of intentions
- Bow or stern first
- Effects of wind/tide

Anchoring

- Type and size in common use
- Length/size of warp
- Use of anchor buoy/quick release
- Secure end
- Get ready to anchor
- Boat stopped (engine running)
- Before letting anchor go
- Confirm anchor holding
- Pay out enough warp for depth
- Stop engine

Departure

- Start engine
- Recover anchor/releasing fouled anchor
- Moving off
- Stow anchor/warp tidy and safe

Picking up a mooring/coming alongside

- Mooring line ready Warn crew
- Approach into wind/tide
- Slow controlled approach
- Watch for mooring lines
- Bow or stern first
- Make secure
- Stop engine

Leaving

- Start engine
- Warn crew
- Effect of wind/tide/current
- Watch for other traffic
- Move off (avoiding mooring lines)

Man overboard

- Warn crew
- Turn to keep prop clear
- U turn/crash stop
- Direction of final approach
- Engine out of gear close to man over board (MOB).
- Stop engine for pickup
- May have to put someone in water
- May have to treat for shock/injuries

Recovery of diver

- Slow controlled approach
- Side of boat for pickup
- Engine out of gear close to diver
- Stop engine for pickup?
- Stow gear (tidy and safe)

Compass/Transit bearings

- True/Magnetic/Compass
- Choose prominent marks
- Match speed to conditions
- Use of crew
- Keep a good look-out

Beaching Boat

- Warn crew
- Watch waves/surf
- Be prepared to put some crew into water

5. BUOYAGE SYSTEM

- IA LA.
- Needs compass
- Port/Starboard hand buoys
- Other buoys

Rules of the road. IRPCS

- Keep a good look-out
- Vessels on a collision course
- Speed limits
- Local byelaws
- Mention lights and sounds (briefly)
- RIGID "A" flag when divers are down

6. NAVIGATION

- Types of charts
- Nautical almanacs
- Instruments used
- Tidal stream atlases

7. BASIC WEATHER FORECASTING

- Radio/TV.
- Shipping/inshore (suggest use of taped forecast)
- Marinas
- Marinecall

8. BENDS AND HITCHES

- Types of rope
- Bowline, Clove hitch, Fisherman's bend
- Round turn and two half hitches

9. DISTRESS

- Coastguard 999
- V.H.F. Radio Ch. 16
- Flares
- Visual signals
- First Aid
- Decompression first aid
- Towing disabled craft

10. MISCELLANEOUS

Briefly mention:-

Responsibilities of Cox:

Trailing boats

Trailer laws

Launching fees

Suggest use of land marshal! to log radio calls if radios are used, can also help in changing crews around.

SUGGESTED TIMES FOR LECTURES

1.	Small boat terminology	30 mins
2.	Boat awareness	60 mins
3.	Outboard engines	30 mins
4.	Seamanship	60 mins

These times will allow a degree of flexibility and a break in a 3.5 hour session.

5.	Buoyage system	20 mins
6.	Navigation	20 mins
7.	Basic weather forecasting	20 mins
8.	Bends and Hitches	45 mins
9.	Distress	20 mins
10.	Miscellaneous	20 mins

Again a degree of flexibility and a break in a 3.5 hour session leaving time for any questions, when and where to meet, allocation of boats, make up of crews.

This type of layout is suitable for a course where the theory is presented at a different time and venue to the practical, but can be altered to suit circumstances as long as all the subjects are presented.