

## CR1 EX 5 – CR1 SKIPPER- BAR CROSSING:

**Tasks & purpose:** To develop bar skills adequate for the variety of operational conditions.

### TASK 1. PREREQUISITE

**Crossing the Bar is the single greatest hazard in PMSRG operations.**

The trainee must be competent at bar crossing in the RIB, have developed adequate river & sea driving skills in CR1 and is able to describe the dynamics of the bar (to the trainer) with reference to the illustrations below. Variations on this exercise require repeated practice.



**Trainers must not expose Trainees to bar conditions beyond their skill or vessel's capabilities.**

### TASK 1. PREPARATION- the trainee demonstrated the preparations listed below:

Checks out conditions		Prepares vessel	
Yes	Tide times	Yes	Pre departure checks (watertight integrity)
Yes	Weather	Yes	Correct stowage & loading.
Yes	Swell & seas observation	Yes	Trim tabs appropriate for passage.
Briefs the crew		Proof tests	
Yes	Lifejackets	Yes	Acceleration test
Yes	Position for stability & their best security	Yes	Steering hard over test
Yes	Anticipated plan & conditions	Yes	Radio log on

### TASK 2. OUTBOUND CROSSING- the trainee demonstrated the plan & execution below:

The trainee observes the bar from a safe position to note the optimum moment and easiest overall course for crossing.

A planned passage for encountering many swells is accomplished by aiming for the average of available green water saddles & slowing to dead slow to take each wave face head on.

The bar zone is monitored by sounder & cleared promptly.



Photo courtesy of Bruce Robson

### TASK 3. INBOUND CROSSING- the trainee demonstrated the plan & execution below:



Photo courtesy of Geoff Shelton

The trainee observes the bar to note the optimum moment and course for crossing.

Markers are noted anticipating sight loss as the swell builds on the bar.

A planned passage is made that stays on the back of the last of the largest of the set of swells.



Photo courtesy of Bruce Robson

In white water cavitation is understood and throttle is backed off to limit the effect.

### TASK 4. PRESSURE WAVES OUT- the trainee demonstrated the plan & execution below:

The trainee observes the bar to note the optimum moment and course for exit.

The turn to the north is well clear of the north breakwall and subsequent parallel runs are well positioned in the trough. Seaward legs are accomplished by slow approach to green water saddles as they are encountered along the wave face. In white water cavitation is appreciated and limited.



### TASK 5. PRESSURE WAVES IN- the trainee demonstrated the plan & execution below:

The trainee observes the bar offshore to note the North Entry (visual marks of school over southern breakwall red beacon, approximately 220°M). A planned passage is made that keeps pace along the back of the swell.

The chosen route through the pressure waves demonstrates good “wave reading”. Broaching and surfing are avoided by judicious use of helm and throttle. Diving into troughs is limited by trimming tabs up. In white water cavitation is understood and throttle is backed off to limit the effect.



### Training resources:

Workbooks- “Manoeuvre small commercial vessels”.

Texts- “Crossing the Hastings Bar in Safety” & “Exercise Turbulent Tide”

Presentation - CD Index>CR1 Lessons> Manoeuvre Com. Vess > “Bar Crossing”

Motorboat Simulator- Port Easterly > Select options>boats>No limit 1500> environment.