



INTERNATIONAL  
MARITIME RESCUE

# RESCUE BOAT OPERATOR SEARCH CARDS

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## Terminology

**COG – Course Over Ground**

**CSP – Commence Search Position**

**OSC – On-Scene Coordinator**

**SMC – Search Mission Coordinator**

**SOG – Speed Over Ground**

**SRU – Search and Rescue Unit**

## SEARCH CARD

## SMEAC Briefing

**SITUATION**

- Ground:
- Hazards:
- Weather:
- Tide:
- Other agencies:
- Event:

**S****MISSION**

- Our mission is:
- In order to:

**M****EXECUTION**

- General outline:
- Grouping/tasks:
- Emergency plan:

**E****ADMINISTRATION**

- Dress:
- Equipment:
- Food/water:
- Medical:
- Transport:
- Casualty routine/  
evacuation:

**A****COMMAND AND  
COMMUNICATION**

- Type:
- Call signs:
- Lost comms:
- Frequency/talkgroup:
- Ops normal:
- Confirmation of  
understanding
- Questions:

**C**












## SEARCH CARD

## Weather Terminologies

## Beaufort Wind Scale

	FORCE	DESCRIPTION	SEA CHARACTERISTICS	WIND SPEED		
				KNOTS	M.P.H.	Km/H
	<b>0</b>	<b>Calm</b>	Like a mirror.	1-3	1-3	2-6
	<b>1</b>	<b>Light Air</b>	Ripples like scales are formed.	1-3	1-3	2-6
	<b>2</b>	<b>Light breeze</b>	Small wavelets, still short but more pronounced, not breaking.	4-6	4-7	7-11
	<b>3</b>	<b>Gentle breeze</b>	Large wavelets, crests begin to break; a few white horses.	7-10	8-12	12-19
	<b>4</b>	<b>Moderate breeze</b>	Small waves growing longer; fairly frequent white horses.	11-16	13-18	20-28
	<b>5</b>	<b>Fresh breeze</b>	Moderate waves, taking more pronounced form; many white horses, perhaps some spray.	17-21	19-24	29-38
	<b>6</b>	<b>Strong breeze</b>	Large waves forming; white foam crests more extensive; probably some spray.	22-27	25-31	39-49
	<b>7</b>	<b>Near gale</b>	Sea heaps up; white foam from breaking waves begins to blow in streaks.	28-33	32-38	50-61
	<b>8</b>	<b>Gale</b>	Moderately high waves of greater length; edge of crests break into spindrift; foam blown in well-marked streaks.	34-40	39-46	62-74
	<b>9</b>	<b>Strong gale</b>	High waves with tumbling crests; dense streaks of foam; spray may affect visibility.	41-47	47-54	75-88
	<b>10</b>	<b>Storm</b>	Very high waves with long overhanging crests; dense streams of foam make surface of sea white. Heavy tumbling sea; visibility affected.	48-55	55-63	89-102
	<b>11</b>	<b>Violent storm</b>	Exceptionally high waves; sea completely covered with long white patches of foam; edges of wave crests blown into froth. Visibility affected.	56-63	64-73	103-117
	<b>12</b>	<b>Hurricane</b>	Air filled with foam and spray; sea completely white with driving spray; visibility very seriously affected.	64 plus	74 plus	118 plus

## Definitions of visibility at sea

**Area Forecast Visibility** (in nautical miles)

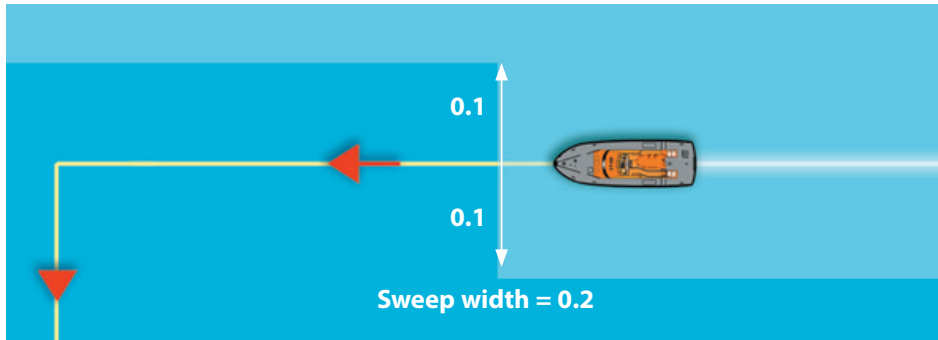
Very Good	=	more than 30 miles
Good	=	5 - 30 miles
Moderate	=	2 - 5 miles
Poor	=	1000 metres - 2 miles
Fog	=	less than 1000 metres

## Swell height definitions

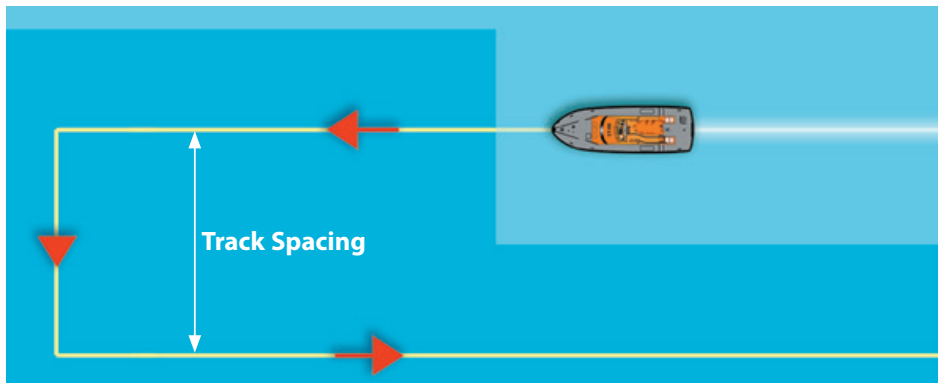
CALM	=	less than <b>0.1</b> metres
SMOOTH	=	<b>0.1 to 0.5</b> metres
SLIGHT	=	<b>0.5 to 1.25</b> metres
MODERATE	=	<b>1.25 to 2.5</b> metres
ROUGH	=	<b>2.5 to 4</b> metres
VERY ROUGH	=	<b>4 to 6</b> metres
HIGH	=	<b>6 to 9</b> metres
VERY HIGH	=	<b>9 to 14</b> metres
PHENOMENAL	=	in excess of <b>14</b> metres

**SEARCH CARD****Sweep Width, Track Spacing and Searched Area****Sweep Width**

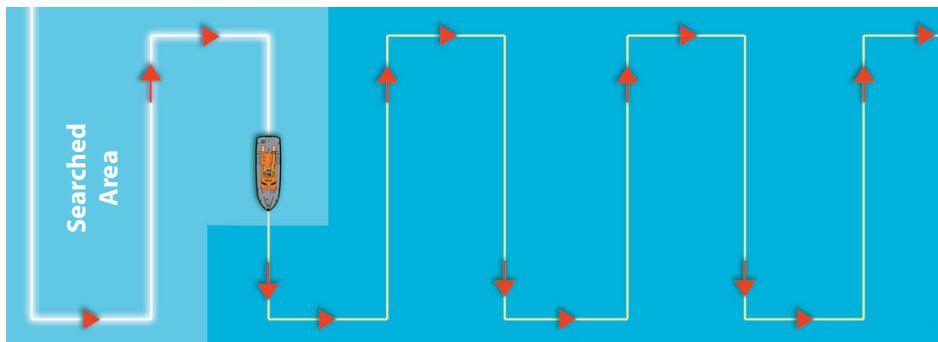
How far the crew will look out from either side of the vessel.

**Track Spacing**

The distance between each track.

**Searched Area**



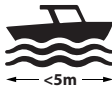

The result of using sweep width and track spacing cover the search area.





**SEARCH CARD**

**Sweep Width Table**

		WIND SPEED / SEA STATE ON-SCENE					
		<16kts/<0.6m Sea		16-25kts/0.6m-1.2m		>25kts/>1.2m Sea	
		ASSUMED SPEEDS					
		20 knots		12 knots		8 knots	
	TARGET TYPE	PERSON IN WATER					
	PERSON IN WATER	SWEEP WIDTHS					
	Visibility <3NM	30secs (0.17 nm)	30secs (0.10 nm)	30secs (0.07 nm)			
	LIFERAFT						
	Visibility 1NM	2mins 30secs (0.83 nm)	2mins (0.40 nm)	1 min 30secs (0.20 nm)			
	Visibility 3NM	6mins (2.00 nm)	5mins (1.00 nm)	3mins 45secs (0.50 nm)			
	Visibility 5NM	8mins (2.66 nm)	6mins 45secs (1.35 nm)	5mins (0.67 nm)			
	POWER AND MFV <5m						
	Visibility 1NM	1 min 15secs (0.42 nm)	1 min (0.20 nm)	45secs (0.10 nm)			
	Visibility 3NM	2mins 30secs (0.83 nm)	2mins (0.40 nm)	1 min 30secs (0.20 nm)			
	POWER & MFV 5m-15m						
	Visibility 1NM	2mins 30secs (0.83 nm)	2mins (0.40 nm)	1 min 30secs (0.20 nm)			

		ASSUMED SPEED
TARGET TYPE		10 knots
PERSON IN WATER		SWEEP WIDTH
Visibility <3NM		60secs (0.17 nm)

**NOTES**

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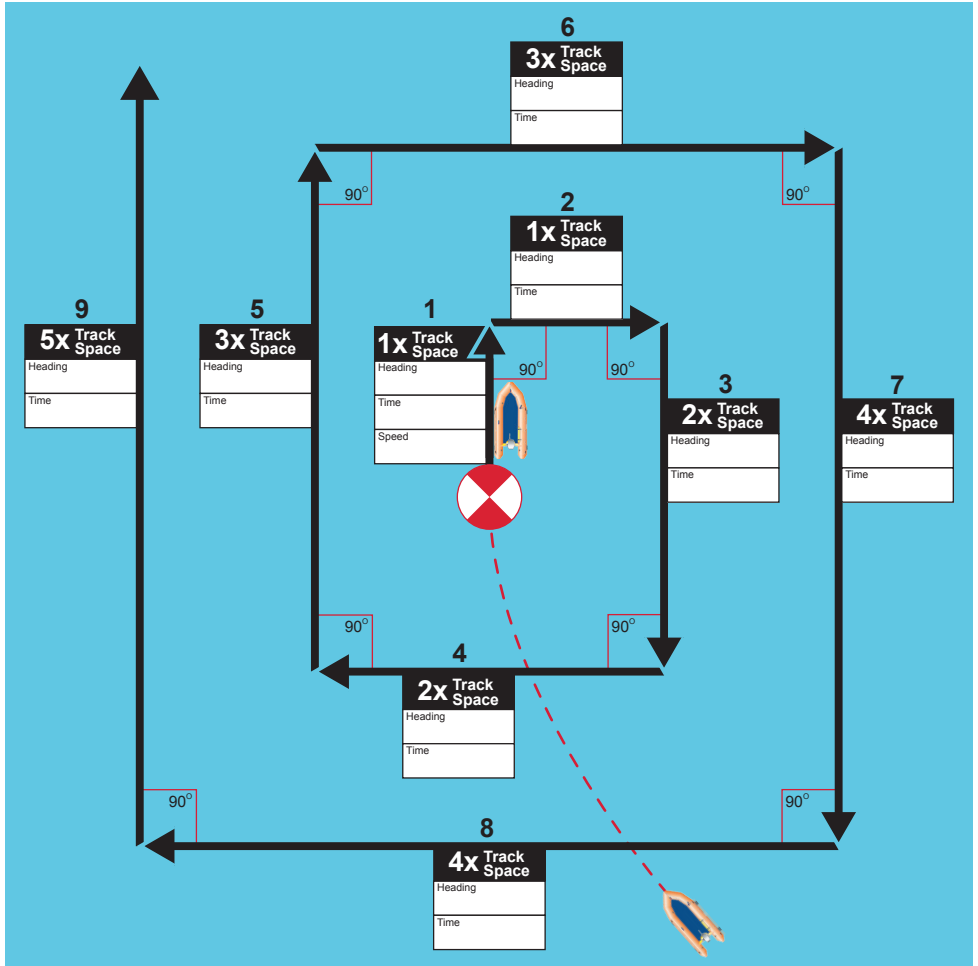
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## SEARCH CARD

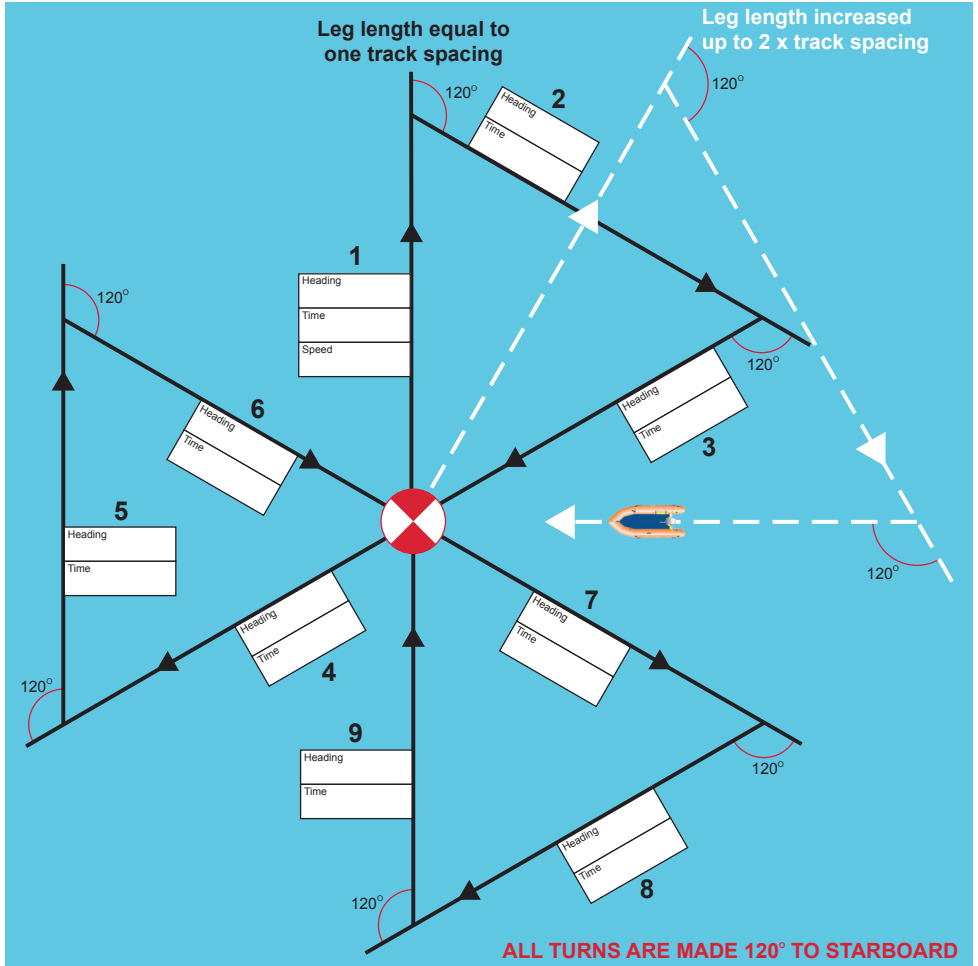
## Expanding Square Drift Search Pattern



- **Use a compass and stopwatch only**
- Get the speed and timings from the table on Page 7
- Set the speed on the first leg and **do not adjust**
- Get the sweep width (how far to look) from the table on Page 7
- Multiply the leg timings as per diagram.

## SEARCH CARD

## Sector Drift Search Pattern



- Place a datum in the water (Fender/Buoy with line)
- **Use a compass and a stopwatch only**
- Get the speed and timings from the sweep width table on Page 7
- Set the speed on the first leg and **do not adjust**
- Get the sweep width (how far to look) from the table on Page 7.

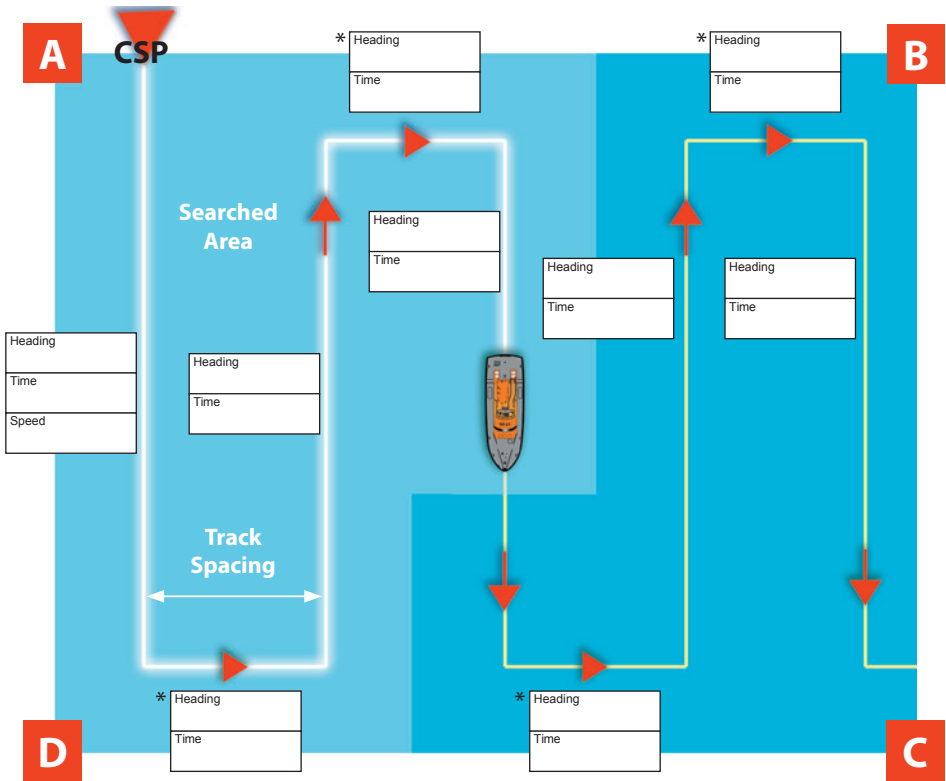
### 2nd Sector Search

- Add 30 degrees to your initial heading and double the time.



**SEARCH CARD**

**Creeping Line Ahead Area Search Pattern**



- CSP should be  $1/2$  track spacing inside search area
- The casualty could be anywhere in the area
- GPS can be used
- Get the sweep width (how far to look) from the table on Page 7
- \*Get the timings for short legs from the table on Page 7.

**NOTES**

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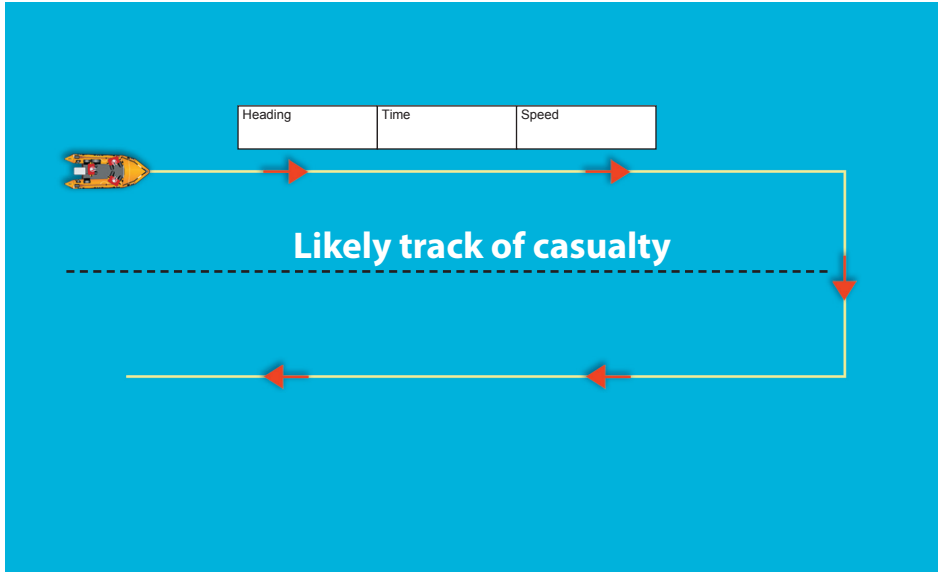
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**SEARCH CARD**

**Track Line Area Search Pattern**



- The direction of the search follows the likely track of the casualty
- Get the sweep width (how far to look) from the table on Page 7.

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