

Expedition Plan

Dive 6 countries in 6 days

(all from the same boat)

Expedition leader: Michelle Haywood

Application for BEGS Grant made on behalf of

British Sub Aqua Club

Discover Diving 2348 branch

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Purpose

The aim of this Expedition is to set out from the Isle of Man and dive in six different countries territorial waters over six days. The target sites include known and unknown wrecks up to 50m. All dives will be conducted using rebreathers with mixed gas diluent where appropriate. The key features of this trip are the large distances to be navigated, the travel time in unfamiliar waters and the inclusion of two unidentified wrecks. I believe that the Irish Sea is the only place in the world where it is possible to dive in six different territorial waters during six days using the same boat, crew and divers.

Background

The leader of this trip regularly dives the wrecks around the Isle of Man. The island lies geographically central to the British Isles and the territorial waters lie 12 miles from the coast. The Manx waters are bounded by the territorial waters of Scotland, Northern Ireland, Ireland, Wales and England. This creates the opportunity to attempt to dive in all six territorial seas across a week long expedition. Wreck historian and published author Adrian Corkill has been consulted to assist with the suggesting wreck sites for which conclusive identification has not been possible. Many of these sites have been dived many years ago on air, but it is hoped that this expedition may provide clearer identification evidence for these sites. Video and stills photography will be used to document the trip and the dives.

The main challenge to this plan will be the distances to be covered, the weather and the time for travel. Returning to the Isle of Man between dives will not always be possible due to the distances involved, and so this expedition plan will address the logistics around access to different harbours, accommodation needs, gas fills etc. Given the large distances involved it is also important that we limit the amount of time at sea for the divers, and recognise the safety issues associated with long hours, especially in unfamiliar waters. To this end we will employ an additional skipper so that sensible break periods are possible during the travel times, and there is cover for diving. Four members of the team are qualified to take the helm as well and will do so on rotation.

The expedition is planned for Monday 8th to Saturday 13th August 2016, with one dive on each day. It is hoped that the weather conditions in August will be good enough for the plan to be safely completed. Many of the dive sites are sheltered from at least one direction of wind, so there is the possibility of re-organising the time line to allow for the weather patterns at the time of the expedition.

Dive Sites

The dive sites are all wrecks listed by the Hydrographic Office and information about the wrecks is available from Wrecksite.eu. Wreck historian Adrian Corkill provided additional information. Wrecks were selected on the basis that only a couple of the team had dived a couple of them, but many of them are unknown to the entire team. Each wreck lies within a different Territorial Sea boundary which divide the Irish Sea according to the countries around the perimeter.

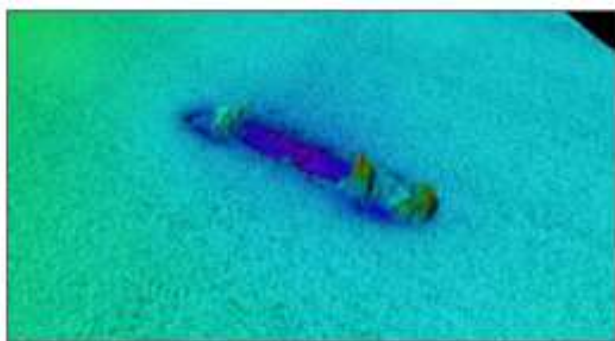
The depth of the Topaz is shallower than the other wrecks (around 20m). This was a deliberate choice as it will be the first dive of the expedition and follows a 50+ nautical mile journey (and an early start to catch the tides). The Topaz provides an easy warm up dive.

Wrecks will be located using the on board GPS and colour sounder on Endeavour. The location of some of the wrecks is already accurately known (especially the ones closer to the Isle of Man) but there are 3 that have not been visited before which we will have to find. Time has been allowed in the plans for wreck location and shotting. As the aim of the expedition is to dive in 6 countries in 6 days, even if we fail to locate the wreck target, a dive within the territorial waters would still count towards a successful expedition!

Day	Dive	Location
Monday 8th	Ireland – SS Topaz	53°52'209N 06°10'572W
Tuesday 9th	N Ireland – unknown SS	54°14'412N 05°25'243W
Wednesday 10th	IoM - Ringwall	54°07'018N 04°53'580W
Thursday 11 th	Scotland - Inkosi	54°35'448N 04°24'884W
Friday 12 th	England - Limesfield	54°01'875N 03°56'789W
Saturday 13th	Wales – unknown	53°35'730N 04°2'671W

SS Topaz

53°52'209N 06°10'572W



Length 48.8 m Beam 7.1m Draught 3m

Ran aground 28/12/1891. Steam coastal cargo ship with a 2 cylinder compound engine. Was salvaged in 1892/3 but boiler and stern remain 3 metres high. Single hold. Bow to the NW.

Unknown SS

54°14'412N 05°25'243W

NO IMAGE EXISTS

1975 Survey. Broken wreckage, Seabed is fine sand. Height 6m.

Dived in 2008. Upright steam ship. Stern section is intact but wreck is sharply broken aft of the engine room with debris flat on the seabed. Bow section lies away from the wreck with the bow pointing towards the surface. Assumed torpedoed. Appears WW1 by the general style.

Ringwall

54°07'018N 04°53'580W



Length 43.6m

Beam 7.7m

Draught 3.5m

407 tons gross

Sunk 27/01/1941

On passage from Dublin to Sillioth, when struck a mine off the south coast of the IoM. Sits upright on her keel about 5m from the seabed. Wreck is orientated on SE-NW axis. Seabed is sandy. Wreck is fished and there may be lines or nets present.

Inkosi

54°35'448N 04°24'884W



The 6 Countries in 6 days challenge

Length 106.7m

Beam 13.1m

Draught 6.1m

3661 tons gross

Sunk 28/03/1918

On passage from Liverpool to Lamlash when torpedoed by U96. Significant hull damage and probable broken keel. Lies on starboard side, broken in two. Intact in the aft section. Bell recovered in 2004.

Limesfield

54°01'875N 03°56'789W



Length 43.4m

Beam 7.9m

Draught 3.5m

427 tons gross

Sunk 7/02/1918

On passage from Belfast to Preston. Stopped and sunk by UB57. Wreck sits upright on its keel, rising 5.5m from the seabed. Orientated NNE bow to SSW stern. Sandy seabed. Main superstructure has collapsed to deck level. Hull largely intact with some damage on starboard side. Owned by the Zillah Shipping Line when sunk.

Unknown

53°35'730N 04°2'671W

NO IMAGE EXISTS

1988 sonar survey. Length approximately 100m. lies NNE/SSW. Height 5.75 meters.

Dived in 1991. Large and broken up Steamship, probably late 19th Century. Lies with the bow SSW with many girders and large frames standing proud. Recovered porthole engraved A HELDERS & ZN, ROTTERDAM.

Dived in 1995. Forward half of the ship has broken away from its shaft and is lying upside down. Stern is damaged but upright. The propeller has sheared from its shaft and is lying nearby.

Expedition Plan

We will be using Endeavour IWP. She is a Lochin 40, with an MCA Cat 2 coding which allows operations up to 60nm from safe haven. Endeavour is equipped with chart plotters, depth sounders, radar, full first aid kit, oxygen and radios. The deck space is large with bench seating either side that will allow safe transport of rebreathers on the seats, with ample storage for dive kit underneath the seats. A bottle rack on the deck will hold stage and emergency cylinders. The forward cabin will be used for storage of overnight bags. Endeavour is equipped with a stern diver lift and toilet, as well as refreshment facilities on board.

Day	Depart	Dive	Overnight
Monday 8th	Port St Mary, Isle of Man	Ireland – SS Topaz	Carlingford Marina
Tuesday 9th	Carlingford	N Ireland – unknown SS	Strangford Lough
Wednesday 10th	Strangford Lough	IoM - Ringwall	Peel
Thursday 11 th	Peel	Scotland - Inkosi	Douglas
Friday 12 th	Douglas	England - Limesfield	Port St Mary
Saturday 13th	Port St Mary	Wales – unknown	Port St Mary

I have planned the route so that the longer journeys which require an overnight stay are at the start of the expedition. This will help to minimise diver tiredness which will increase as the week progresses. Two overnight stays are planned and then Endeavour will operate out of different ports around the Isle of Man to minimise travel distances but to allow divers to return to their own beds and be well rested to complete the week. This will also help minimise the cost per diver. Harbour calls are also planned around the need to refuel the boat during the week.

This expedition plan covers such a large area that tidal references need to be adjusted to local times. Liverpool has been used as a standard port throughout, with local corrections applied where necessary. Tidal corrections are given for High Water times and are not guaranteed for Low Water (which is when many of our dives are planned). Low water slack tends to be the better, longer slack window in the Irish Sea. However, given our inexperience of diving these sites, we will aim to arrive on site in plenty of time to use the sonar to check the location and direction of the wreck, to prepare and deploy a shot line and to drop divers in the best predicted tidal slack.

Dive	Slack water prediction	Tide times (BST) Liverpool	Local reference port HW adjustment	Predicted depth	Ideal dive time
8/8/16 Ireland – SS Topaz	(All states) -1hr HW +5/+6hr HW	HW 0303 LW 0958 HW 1523	Warrenpoint +20 mins Liverpool	20 m	08.23
9/8/16 N Ireland – unknown SS	-1hr HW/HW +5/+6hr HW	HW 0339 LW 1028 HW1602	Aardglass +6 mins Liverpool	36 m	08.33
10/8/16 IoM - Ringwall	30 mins before LW	HW 0420 LW 1103	Liverpool	38 m	10.33

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		HW 1648			
11/8/16 Scotland - Inkosi	30 mins before HW 30 mins before LW	HW 0509 LW 1151 HW 1745	Liverpool	48 m	11.21
12/8/16 England - Limesfield	30 mins before HW 30 mins before LW	HW 0615 LW 1259 HW 1858	Liverpool	41 m	12.29
13/8/16 Wales – unknown	-1hr HW/HW LW/+1hr LW	HW 0734 LW 1419 HW 2013	-25 mins Liverpool	39 m	13.54

The plans for the first day of diving require a 05.00 departure. Endeavour will be loaded with all equipment during the evening before departure. All divers are required to be present at Port St Mary Harbour for a prompt departure. Two nights will be spent in accommodation in Ireland and Northern Ireland before a return to the Isle of Man. Thereafter the Isle of Man is used as a base for diving activities. Divers in the expedition team are familiar with the ports and the parking at these ports. Additional information can be found at <https://www.gov.im/categories/travel-traffic-and-motoring/harbours/>.

Day	Depart	Dive	Total Distance	Estimated day length	Overnight
Monday 8th	Port St Mary, Isle of Man	SS Topaz	69.2nm	05.00 – 12.00 7 hours	Carlingford Marina
Tuesday 9th	Carlingford	unknown SS	42.9nm	06.00 – 12.00 6 hours	Strangford Lough
Wednesday 10th	Strangford Lough	Ringwall	38.8nm	08.00 – 13.30 5 ½ hours	Peel
Thursday 11 th	Peel	Inkosi	53.1nm	09.00 – 15.30 6 ½ hours	Douglas
Friday 12 th	Douglas	Limesfield	48.1nm	10.30 – 16.30 6 hours	Port St Mary
Saturday 13th	Port St Mary	unknown	63.1 nm	11.30 – 18.00 6 ½ hours	Port St Mary

The 6 Countries in 6 days challenge

Day 1 route plan Port St Mary, Isle of Man via SS Topaz to Carlingford Marina



Route Properties

Name: Light to Spot Depth 1 Color: Magenta

☒ Autonomie

Via Points Directions Notes

Print Directions...

Directions/Name	Distance	Leg Length	Leg Time	Total Time	Course	Position	Elevation
1. Light	0 m			0:00:00		N54 04.300 W 04 43.740	
2. 10.0 m depth	0.2 nm	0.2 nm		0:00:00	146° true	N54 04.169 W 04 43.587	
3. Military Practice Area	4.7 nm	4.5 nm		0:00:00	240° true	N54 01.903 W 04 50.287	
4. Wreck	53.1 nm	48.4 nm		0:00:00	259° true	N53 52.020 W 04 50.457	
5. Spot Depth	62.8 nm	9.7 nm		0:00:00	264° true	N54 00.726 W 04 53.227	
6. 315.4°	63.7 nm	0.9 nm		0:00:00	310° true	N54 01.330 W 04 54.442	
7. 10.0 m depth 1	64.5 nm	0.7 nm		0:00:00	292° true	N54 01.602 W 04 55.576	
8. Depth Area	65.3 nm	0.8 nm		0:00:00	287° true	N54 01.849 W 04 56.935	
9. Depth Area 1	65.5 nm	0.2 nm		0:00:00	297° true	N54 01.999 W 04 57.304	
10. 20N	66.1 nm	0.5 nm		0:00:00	314° true	N54 02.326 W 04 57.951	
11. Depth Area 2	66.4 nm	0.4 nm		0:00:00	332° true	N54 02.652 W 04 58.247	
12. Depth Area 3	66.8 nm	0.4 nm		0:00:00	315° true	N54 02.907 W 04 58.688	
13. Marine Chart	68.5 nm	1.7 nm		0:00:00	302° true	N54 03.798 W 04 59.128	
14. Spot Depth 1	69.2 nm	0.7 nm		0:00:00	193° true	N54 03.163 W 04 59.381	

Total Distance: 69.2 nm

☐ Center map on selected item(s)

Links:

File/URL:

The 6 Countries in 6 days challenge

Day plan

Estimated distance	53.1nm
Time to cover distance (speed approx. 16kns)	3 ½ hours
Predicted LW (BST)	10.23
Predicted slack	-2/-1hr LW
Predicted dive time	09.00
Ideal arrival on site	08.30
Departure time from port of origin	05.00
Diving concluded by	11.00
Distance to destination	16.1nm
Time to cover distance	1 hour
Arrival at destination	12.00 (may have to wait for tide to rise to gain entry to marina)

Overnight – Carlingford Marina

Small vessels should not enter or leave Carlingford Lough against the tide.

The approaches to Carlingford Lough are guarded by its 34 metre grey granite tower, The Haulbowline Lighthouse, standing west of the entrance. The entrance channel is marked by leading lights (inner and outer vidal) located at Green Island, west of Cranfield Bay.

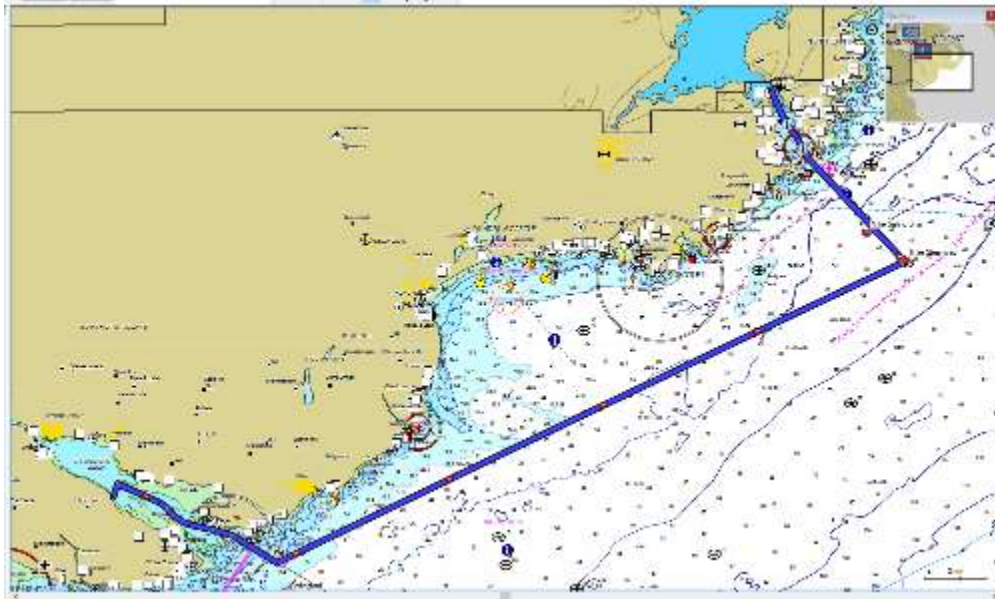
The recommended approach for Carlingford Marina is to continue down the shipping channel until you get to the Number 18 marker. Round the #18 and head straight for the marina entrance. For boats with a larger draft, we would advise not to try and enter the marina for an hour either side of low water. Clearance in the marina is 2.0m.

The ground floor apartments can sleep up to five people with two double beds and a single bed in each. Each of these apartments has a fully furnished kitchen and private, lockable washroom and shower. The maximum group booking accommodated for is 30 persons. Overnight accommodation @ €75.00 each.

Berth for Endeavour @€3.50 per meter 12m €42.00

The 6 Countries in 6 days challenge

Day 2 Route plan Carlingford Marina via Unknown wreck to Strangford Lough



Route Properties

Name: Spot Depth to Anchorage Area Color: blue

☒ Autonomie

Via Points Directions Notes

(Print Directions...)

Directions/Name	Distance	Leg Length	Leg Time	Total Time	Course	Position	Elevation
1. Spot Depth 1	0.7 nm	0.7 nm	0:00:00	0:00:00		N54 05.563 W6 11.301	
2. Marine Chart	0.7 nm	0.7 nm	0:00:00	0:00:00	129° true	N54 05.798 W6 11.128	
3. Depth Area1	2.3 nm	1.7 nm	0:00:00	0:00:00	122° true	N54 02.907 W6 08.888	
4. Depth Area2	2.7 nm	0.4 nm	0:00:00	0:00:00	135° true	N54 02.652 W6 08.247	
5. 20M	3.1 nm	0.4 nm	0:00:00	0:00:00	152° true	N54 02.326 W6 07.951	
6. Depth Area3	3.8 nm	0.5 nm	0:00:00	0:00:00	134° true	N54 01.959 W6 07.304	
7. Depth Area	3.8 nm	0.2 nm	0:00:00	0:00:00	117° true	N54 01.849 W6 06.935	
8. 10.0 m depth 1	4.7 nm	0.8 nm	0:00:00	0:00:00	107° true	N54 01.602 W6 05.576	
9. 310.4'	5.4 nm	0.7 nm	0:00:00	0:00:00	112° true	N54 01.330 W6 04.442	
10. Spot Depth	6.3 nm	0.9 nm	0:00:00	0:00:00	130° true	N54 00.726 W6 03.227	
11. 330.4'	7.4 nm	1.1 nm	0:00:00	0:00:00	151° true	N54 00.025 W6 01.858	
12. N 3re Steamship	33.3 nm	25.9 nm	0:00:00	0:00:00	30° true	N54 04.412 W5 25.243	
13. Recommended Ru...	39.4 nm	6.1 nm	0:00:00	0:00:00	326° true	N54 05.466 W5 30.091	
14. Information	39.8 nm	0.3 nm	0:00:00	0:00:00	341° true	N54 05.791 W5 31.101	
15. SALT ROCK LIGHT...	40.3 nm	0.5 nm	0:00:00	0:00:00	340° true	N54 20.286 W5 31.488	
16. Information 1	41.0 nm	0.7 nm	0:00:00	0:00:00	330° true	N54 20.923 W5 32.131	
17. 162°45'	42.8 nm	1.8 nm	0:00:00	0:00:00	340° true	N54 22.395 W5 33.019	
18. Anchorage Area	42.9 nm	0.1 nm	0:00:00	0:00:00	44° true	N54 22.693 W5 32.855	

Total Distance: 42.9 nm

☐ Center map on selected item(s)

Links

File/URL:

The 6 Countries in 6 days challenge

Day plan

Estimated distance	33.3nm
Time to cover distance (speed approx. 16kns)	2 ¼ hours
Predicted LW (BST)	10.34
Predicted slack	-2/-1hr LW
Predicted dive time	09.00
Ideal arrival on site	08.30
Departure time from port of origin	06.00
Diving concluded by	11.00
Distance to destination	9.6nm
Time to cover distance	45 mins
Arrival at destination	12.00

Overnight – Strangford Lough

Lat: 54 22 72'N Long: 05 32 85'W

100 meters south of the ferry slipway in Portaferry

Charts: 2156 Strangford Lough and 2159 Strangford Narrows

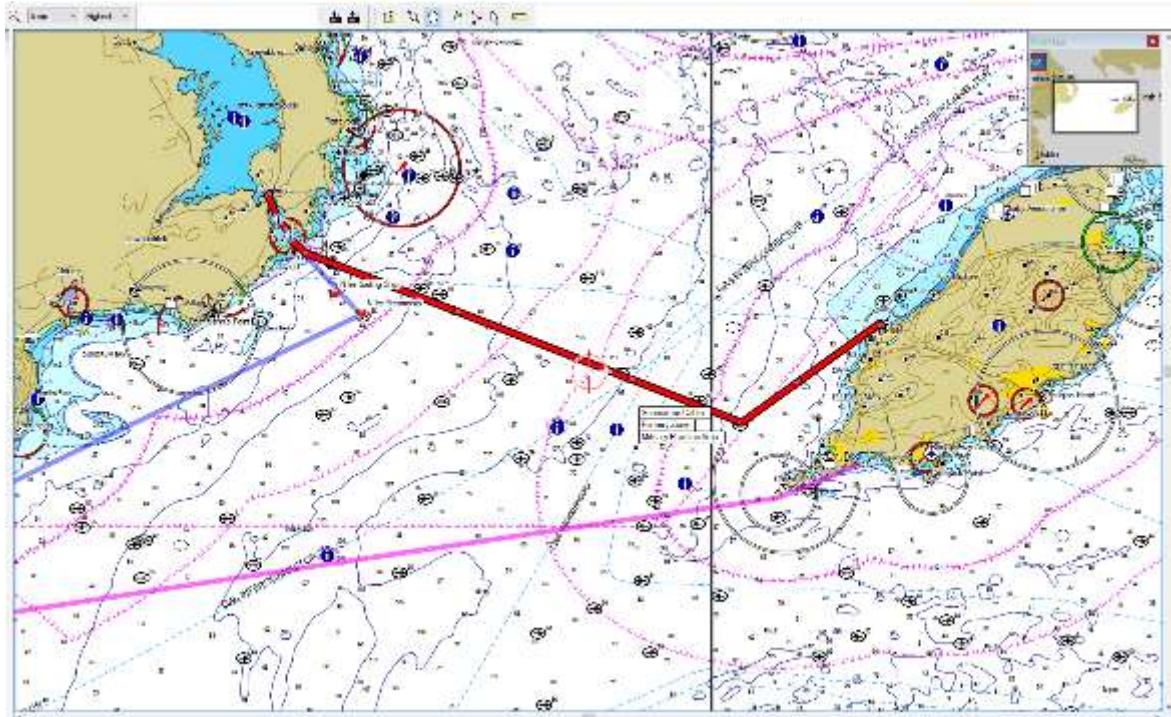
Tides: HW +02 00 hrs Dover and + 01 52 Belfast.

General information: There is a strong tidal flow in the narrows (up to 8 knots during spring tides). The Marina is entered from the South and skippers should be aware of the speed and direction of the tide when making their approach. Berthing is not permitted along the outer side of the breakwater. The Marina can accommodate up to 50 boats, however the 'nose to tail' berths can only accommodate boats less than 6 meters in length and many of these are let seasonally to local boat owners. Approximately 12 'finger' berths are reserved purely for visitor use and most of these are serviced (i.e. have electricity supply). There is a toilet cubicle located near the security barriers.

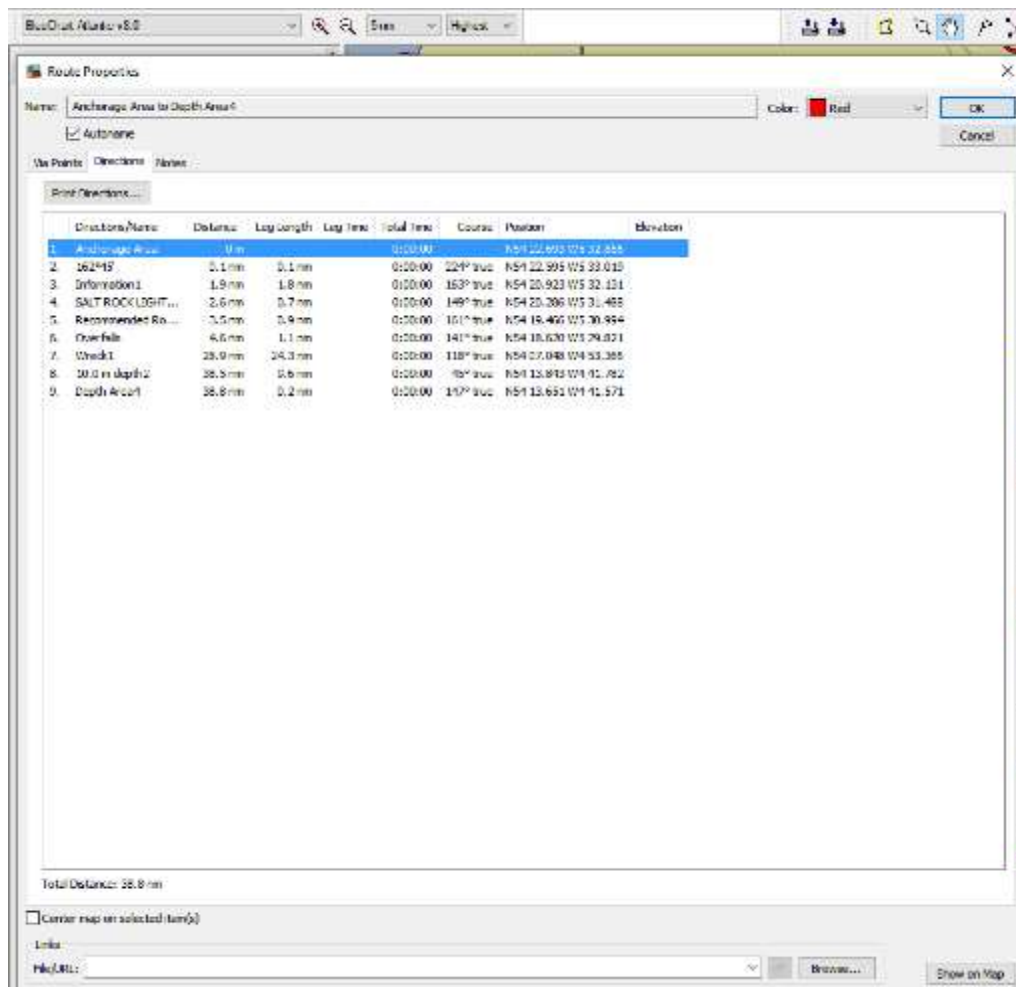
Accommodation will be at <http://www.barholmportaferry.co.uk/index.html> from £14.00 pp pn in dormrooms, double rooms are £50 per night and single rooms from £29 per night.

The 6 Countries in 6 days challenge

Day 3 Route Plan Strangford Lough via Ringwall to Peel



The 6 Countries in 6 days challenge



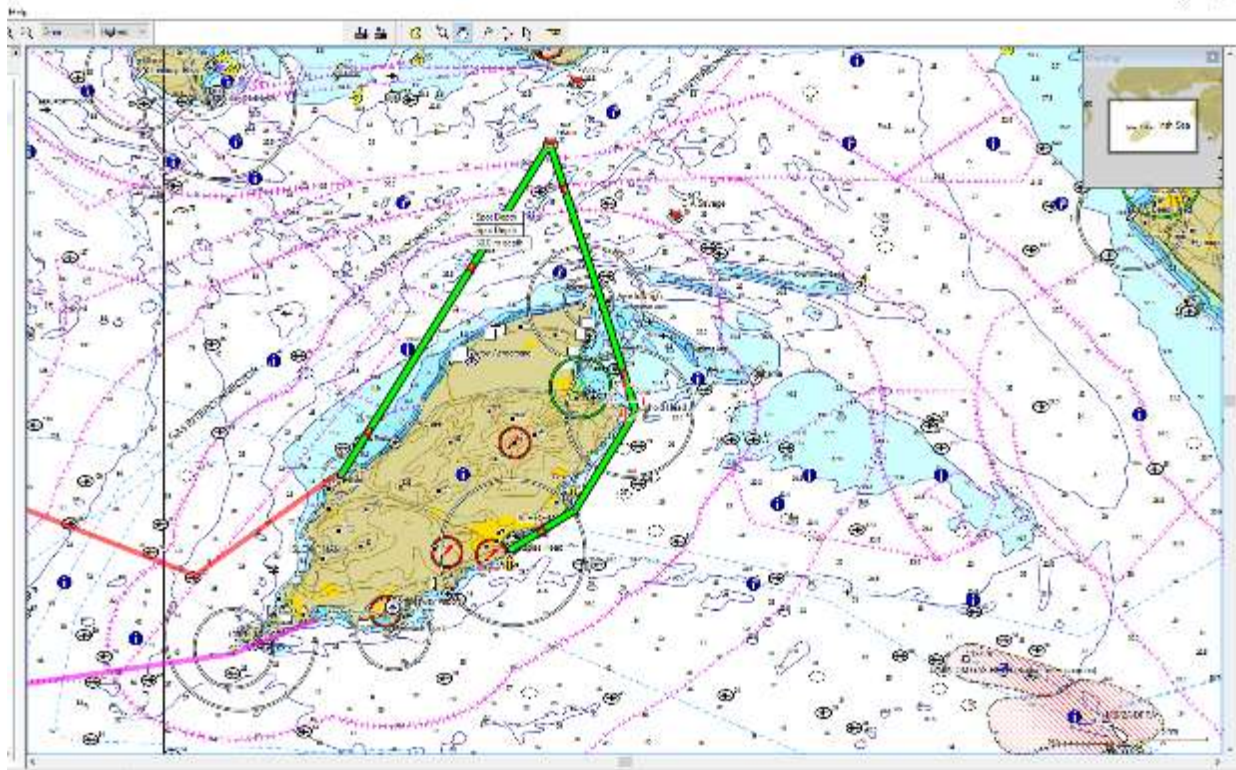
Day plan

Estimated distance	28.9nm
Time to cover distance (speed approx. 16kns)	2 hours
Predicted LW (BST)	11.03
Predicted slack	-1/2 hr LW
Predicted dive time	10.30
Ideal arrival on site	10.00
Departure time from port of origin	08.00
Diving concluded by	12.30
Distance to destination	10.1nm
Time to cover distance	45 mins
Arrival at destination	13.30

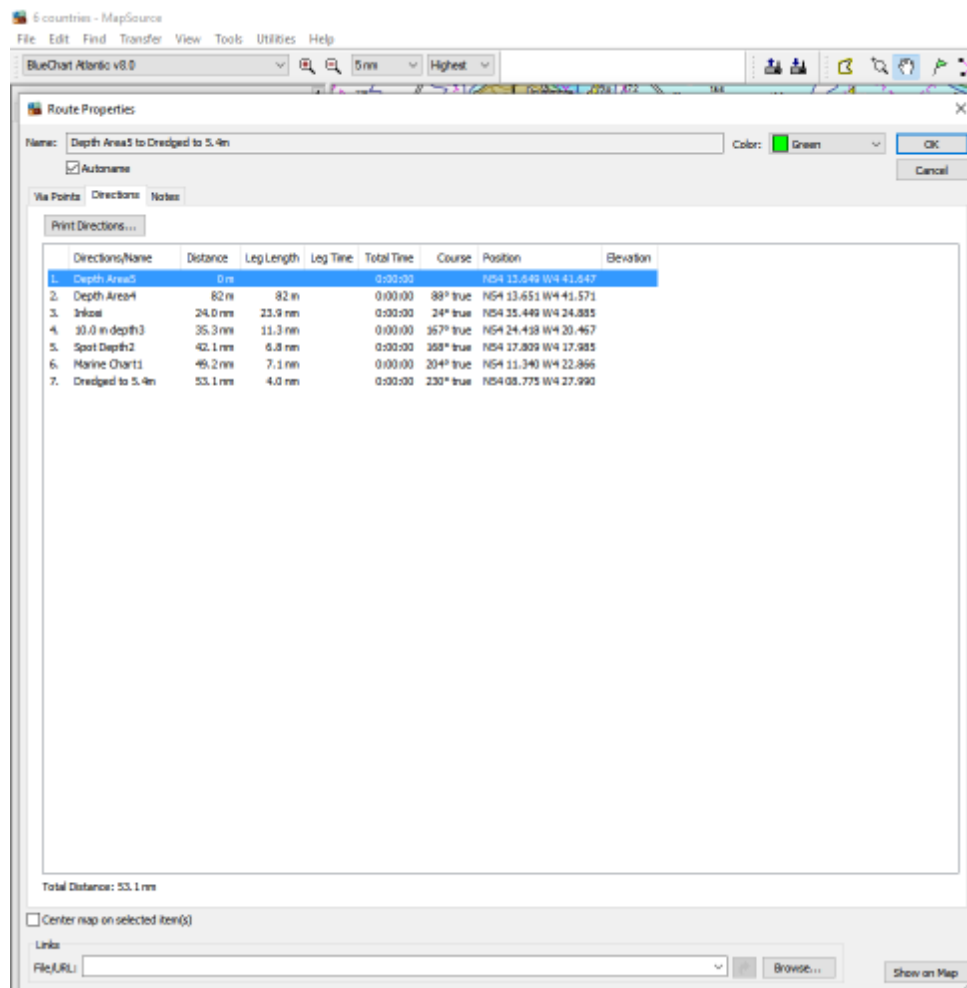
Transport will be arranged to meet the dive team in Peel Marina and return them to their own vehicles. Overnight stay at home. Boat will be refuelled in Peel. Cylinders can be refilled in the afternoon.

The 6 Countries in 6 days challenge

Day 4 Route plan Peel via Inkosi to Douglas



The 6 Countries in 6 days challenge



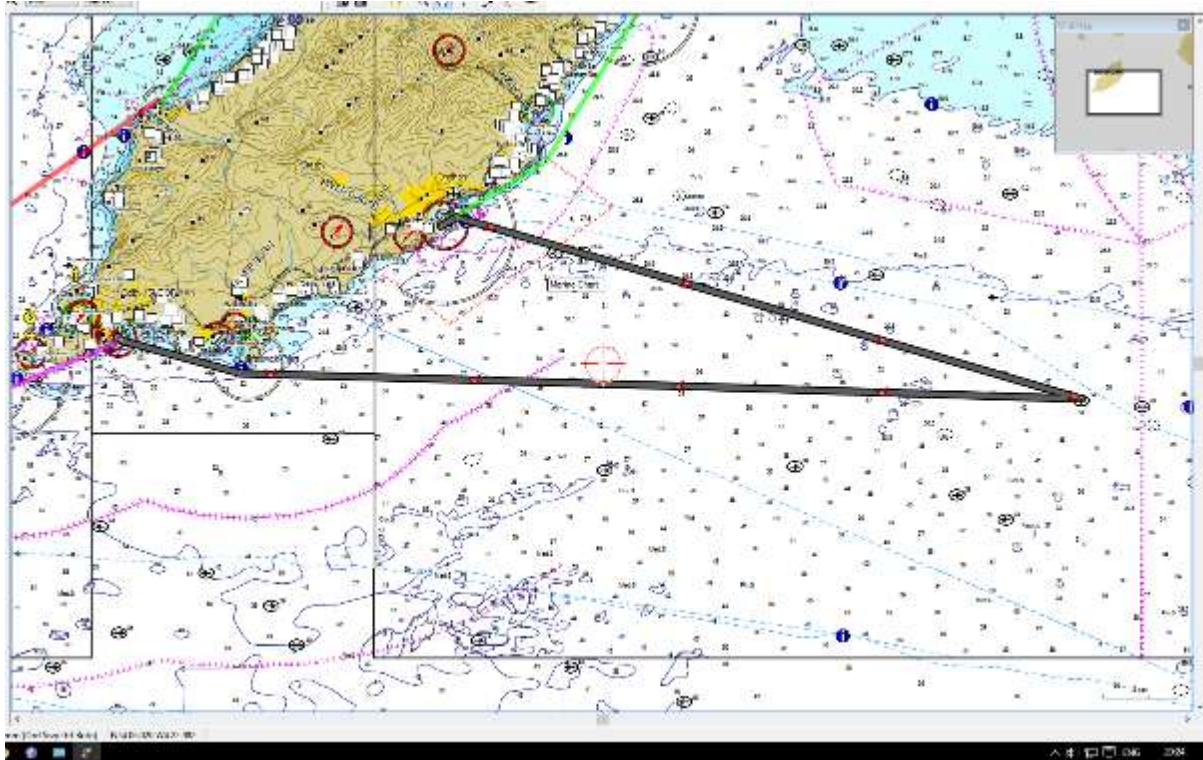
Day plan

Estimated distance	23.9nm
Time to cover distance (speed approx. 16kns)	1 ½ hours
Predicted LW (BST)	11.51
Predicted slack	-1/2 hr LW
Predicted dive time	11.20
Ideal arrival on site	10.45
Departure time from port of origin	09.00
Diving concluded by	13.30
Distance to destination	29.1nm
Time to cover distance	2 hours
Arrival at destination	15.30

Transport will be arranged to meet the dive team in Douglas Harbour and return them to their own vehicles. Overnight stay at home. Cylinders can be refilled in the afternoon.

The 6 Countries in 6 days challenge

Day 5 Route Plan Douglas via Limesfield to Port St Mary



Route Properties

Name: Escorted to 2.4m to 2.0m depth

Color: Dark Gray

Autonomous

No Points Directions Notes

Print Directions...

Directions/Name	Distance	Leg Length	Leg Time	Total Time	Bearing	Position	Direction
1. Douglas to 2.4m	0.0 nm	0.0 nm	0:00:00	0:00:00	359.0° true	N5406.127 N 4 23 200	
2. Spot Depth 3	2.6 nm	2.6 nm	2:00:30	2:00:30	122° true	N5406.127 N 4 23 200	
3. Wreck 2	12.9 nm	10.3 nm	2:00:30	4:01:00	122° true	N5406.127 N 4 23 200	
4. 30.0 m depth	11.1 nm	21.2 nm	2:00:30	6:01:30	279° true	N5406.127 N 4 23 200	
5. Depth 20m	47.8 nm	47.8 nm	2:00:30	8:02:00	291° true	N5406.127 N 4 23 200	
6. Depth Area 7	48.0 nm	0.2 nm	2:00:30	10:02:30	107° true	N5406.127 N 4 23 200	
7. 2.0 m depth	48.2 nm	0.2 nm	2:00:30	12:03:00	212° true	N5406.127 N 4 23 200	

Total Distance: 48.3 nm

☐ Do not map on selected area list

Units:

The 6 Countries in 6 days challenge

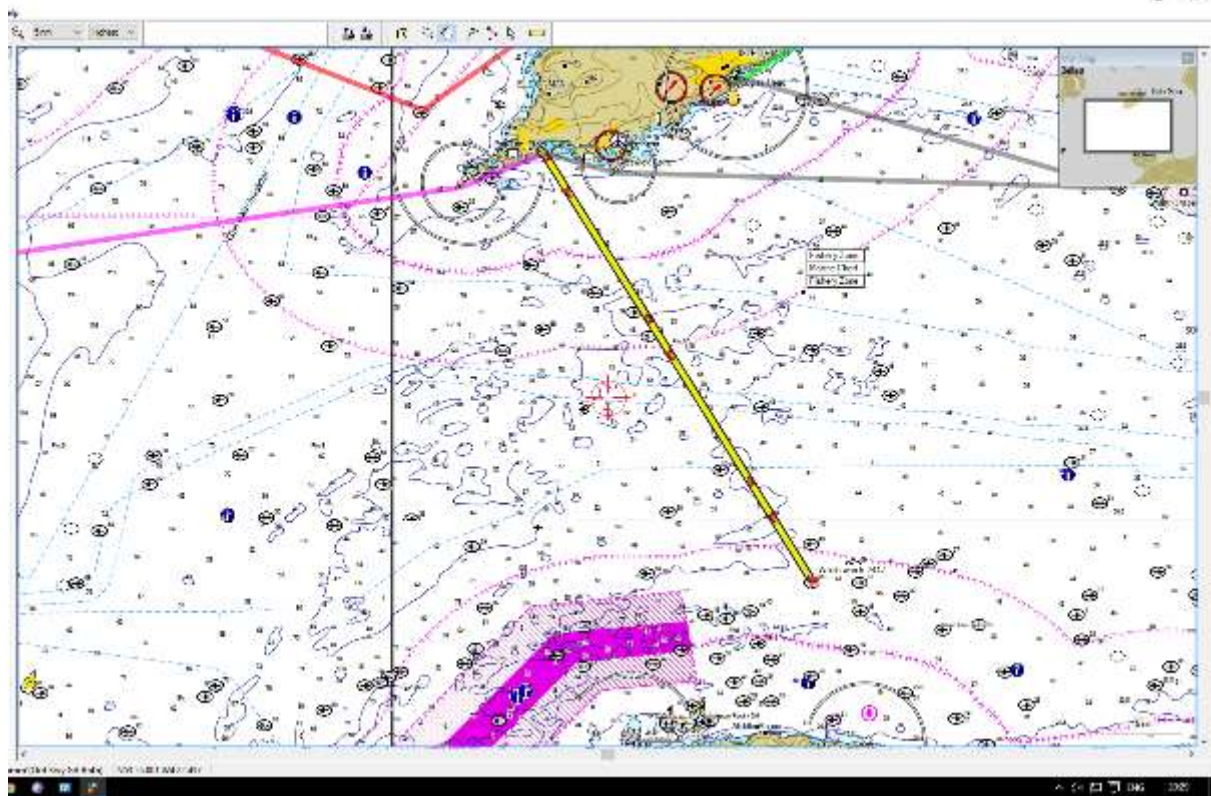
Day plan

Estimated distance	19.9nm
Time to cover distance (speed approx. 16kns)	1 1/4 hours
Predicted LW (BST)	12.59
Predicted slack	-1/2 hr LW
Predicted dive time	12.30
Ideal arrival on site	12.00
Departure time from port of origin	10.30
Diving concluded by	14.30
Distance to destination	28.2 nm
Time to cover distance	2 hours
Arrival at destination	16.30

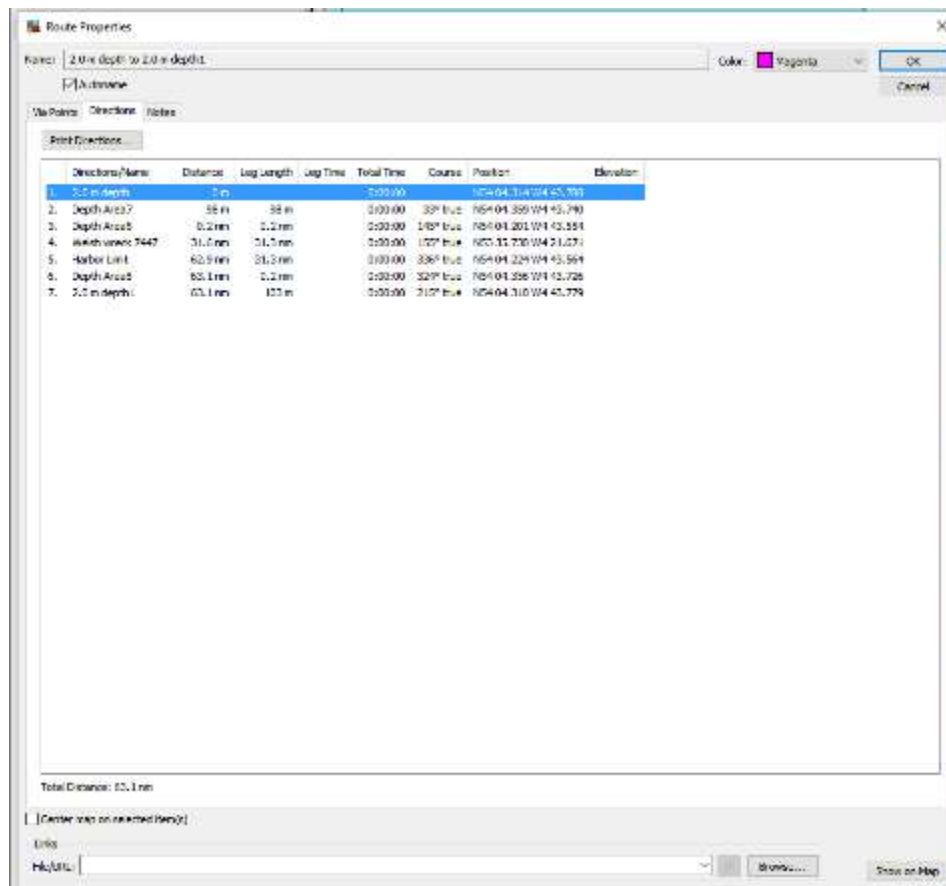
Transport will be arranged to meet the dive team in Port St Mary and return them to their own vehicles. Overnight stay at home. Cylinders can be refilled in the afternoon.

The 6 Countries in 6 days challenge

Day 6 Route Plan Port St Mary to Unknown wreck and return



The 6 Countries in 6 days challenge



Day plan

Estimated distance	31.6 nm
Time to cover distance (speed approx. 16kns)	2 hours
Predicted LW (BST)	13.54
Predicted slack	LW
Predicted dive time	14.00
Ideal arrival on site	13.30
Departure time from port of origin	11.30
Diving concluded by	16.00
Distance to destination	31.6 nm
Time to cover distance	2 hours
Arrival at destination	18.00

Dive team vehicles can be left in Port St Mary for the day. End of diving operations Go to the pub and celebrate.

Expedition Management

The Expedition manager is Michelle Haywood. Commercially qualified skippers Steve Cowley and Ian Ball will be used to assist in the safe delivery of the expedition. Divers will come from Discover Diving (BSAC branch 2438) and Isle of Man Sub Aqua Club (BSAC branch 76).

Diving Protocols

All diving will take place within BSAC Safe Diving Practices.

- Maximum run time for any dive is 120 minutes
- Trimix diluent to be used for any dive below 30 minutes
- Minimum oxygen content for all gases 17%.
- Maximum ppO₂ 1.3 for dive and 1.4 for decompression
- Scrubber duration will be tracked and used conservatively
- All gas analysed and labelled prior to diving
- All divers expected to return to shotline, but will carry dSMB for use if necessary.

Task allocations

The following tasks will be assigned within the team

- Wreck site location and verification
- Preparation of shot lines and deployment
- Dive detail recording
- Data collation of stills and video images
- Deck manager
- Safety equipment checks
- Weather and up to date Notice to Mariners information gathering
- Housekeeping
- Gas checks and verification
- Accommodation organiser/transport co-ordinator

Safety information

Build up dives and experience

This trip is only open to divers holding suitable qualifications. They must be BSAC Dive Leaders or above (or equivalent) and hold a rebreather qualification (preferably with mixed gas diluent) from a recognised training agency. Bail out gas plans will be submitted by each diver prior to each dive.

The 6 Countries in 6 days challenge

This expedition is timed for August which gives ample opportunity for the divers on the expedition to have built up experience during the months before the trip. It is anticipated that divers will have completed at least 20 dives, of which 10 will be using a rebreather.

Several of the divers are Diver Cox'n qualified or higher. Many hold boat handling instructor qualifications.

First aid and rescue skills in the group

Three of the team are First Aid Instructors. The others have rescue skills as part of their training.

All other divers attending will complete a rescue skills scenario prior to the departure of the trip. This rescue scenario will use Endeavour as the platform for the rescue so that the skills practised and lessons learned are directly applicable to the boat we are using. This practise session will familiarise the divers with the location and use of safety equipment on board.

On board safety equipment and procedures

Endeavour has a full safety procedure. The crew are already familiar with this document, but it will be provided to the divers so that they are equally aware. The MCA coding for Endeavour is current and all safety equipment is up to date and regularly checked.

2 Marincox oxygen sets are available, but given the distance from the dive sites to medical facilities additional oxygen will be carried throughout the trip. Helicopter evacuations are available throughout the Irish Sea, with a maximum waiting time of 45 minutes. We will carry enough oxygen to sustain 2 divers for 90 minutes.

Recompression facilities

The National Hyperbaric Centre (Ireland)

54 Great Strand Street

Dublin 1

Ireland

Director: Thomas Cummins MD phone 01 8733044

24 hr phone 087 9729366 fax 01 8733969

email: hyperinfo@eircom.net

Regional Recompression Chamber Unit for Northern Ireland

Craigavon Area Hospital

Lurgan Road

Portadown

Northern Ireland

BT63 5QQ

Director: Dr John E Galway

phone 00 44 801762 33 4444 / 0711

The 6 Countries in 6 days challenge

North West Emergency Recompression Unit

Murrayfield Hospital

Holmwood Drive

Thingwall

Wirral

CH61 1AU

Principal medical director Dr John Harrison

Day time phone numbers 0151 648 8000

Emergency phone numbers 0151 648 8000

Isle of Man Hyperbaric Facility

Fire HQ

Peel Road

Douglas

Isle of Man

Principal medical director Dr D H K Chalmers

Day time phone numbers 01624 626394

Emergency phone numbers 01624 626394

Harbour contacts

Carlingford Lough

Warrenpoint HM VHF #12 tel +44 (0)2841 752878

Carlingford Lough Yacht Club tel +44 (0)2841 738604

Carlingford Sailing Club tel +353 (0)42 937 3238 (International rates from UK mobile)

Carlingford Marina VHF #37 tel +353 (0)42 937 3072 (International rates from UK mobile)

Strangford Lough

Strangford HM at Ferry Terminal VHF #12 #14 tel 028 448 1637.

Peel

Harbour Keeper VHF 12 tel no +44 (0)1624 842338

Peel Sailing & Cruising Club tel no +44 (0)1624 842390

Douglas

Harbour Control VHF 12 tel no 01624 686628

Inner Harbour Office tel no 01624 686923

Douglas Bay Yacht Club tel no 01624 673965

Port St Mary

Harbour Keeper VHF 12 tel no +44 (0) 1624 833205

Coastguard Information

Dublin MRCC

Marine Rescue Coordination Centre,

The 6 Countries in 6 days challenge

Irish Coast Guard Headquarters,
Department of Transport,
Tourism and Sport,
Leeson Lane, Dublin 2.
Tel +353 1 662 0922 (24 hr) Fax +353 1 6620795
Administration: Tel +353 1 678 2313/2304

Belfast Coastguard operations centre
HM Coastguard
Bregenz House
Quay Street
Bangor
Co Down
BT20 5ED
Phone 02891 463 933

Holyhead Coastguard operations centre
HM Coastguard
Prince of Wales Road
Holyhead
Anglesey
North Wales
LL26 1ET
Phone 01407 762 051/763 911

Weather information

Weather information is freely available from many sources and will be assessed on an ongoing basis. Broadcast weather reports from Coastguard stations will be monitored on an ongoing basis on the boat.

Fuel Considerations

Endeavour holds 1000 litres of marine grade diesel. For a loaded vessel operating at 16 knots 3 litres of fuel will be burned per mile. The total predicted mileage for this expedition is 315nm. This would require 945 litres of fuel.

Endeavour will be fully fuelled on Day 1 of the Expedition. She will be refuelled again at the conclusion of diving on Day 3 (in Peel). The fuel consumption for day 1-3 will be approximately 450 litres, leaving over half the tank as reserve. After refuelling, the remainder of the expedition will require 495 litres of fuel. This leaves an acceptable reserve for all stages of the expedition.

Risk Assessment

Many of the risks have been dealt with by proper planning and are detailed in this expedition plan and safety sections. Some additional risks have been identified.

The 6 Countries in 6 days challenge

Risk	Who affected	Mitigation measures
Seasickness	All	Individual responsibility. Medication where necessary. Must be non-drowsy variety to dive.
Poor weather	All	Weather forecast checked regularly. Nearest safe refuge from poor weather identified (depends on direction of weather). Equipment secured at all times.
Decompression illness /missed decompression stops.	Divers	Divers to plan dives and use computer and back up computer to monitor decompression stops. Conservative approach to diving. Rich decompression mixes used as standard. Emergency oxygen on board. Contact coastguard.
Skipper's repertoire of bad jokes	All	Earplugs or the ability to keep a straight face and not encourage further interaction. Earplugs must be removed before diving.
Fatigue	Skippers	Regular changes of skipper. Divers to act as additional look out during manoeuvres in unknown territory.
Equipment failure	Divers	All personal diving equipment is the responsibility of the diver. Limited spares can be carried. Two of the team are service technicians and may be able to assist with repairs.
Loss of gas	Divers	Every diver will carry suitable bailout for the dive. Divers should be confident to hand off cylinders underwater if required.
Entanglement	Divers	All divers to carry knives.
Separation	Divers	Buddy pairs will be selected on the basis of compatible gas mixes and dive plans. Buddies are to remain together throughout the dive – including decompression stops. At least 2 surface signaling devices to be carried by all divers (horn or whistle, torch, dSMB or EPIRB)
Failure to locate wreck site	Divers	A decision will be taken by the Exped leader on whether to dive. Seasearch forms will be completed for any seabed dives (might as well get something useful out of it).

Costings

The costings are calculated based on 10 divers and 2 crew. The cost of crew accommodation will be shared by the divers.

Costings do not include gas fills which are a matter of diver preference.

Costings do not include food. The charter of Endeavour includes hot drinks, cakes and biscuits. Divers will provide their own food for during the day. Local restaurants will be used for eating during overnight stays.

Item	Day rate	No	Total	Cost per diver
Charter of Endeavour	£500	6	£3000	£300
Fuel supplement	£60	6	£360	£36
Overnight stay Carlingford	£54	12	£648	£64.80
Berthing charge Carlingford	£31	1	£31	£3.10
Overnight stay Strangford	£14	12	£168	£16.80
Berthing charge Strangford	£23	1	£23	£2.30
		Total	£4230.00	£423.00

Post Expedition reporting

As well as an Expedition report being written up and submitted to BSAC HQ, it has already been agreed that this expedition is suitable material for at least 2 articles in SCUBA magazine. Michelle already writes a column for the magazine and will provide the text. The divers in the expedition will provide stills images to accompany the articles.

Dive reports will be added to the appropriate entries on Wrecksite.eu so that the information we gain is shared widely.

Summary

This is an ambitious expedition that will involve over 300 nautical miles of travelling and visit 6 countries territorial waters. It will visit 2 unidentified wrecks with the hope of recording stills and video images that may contribute to their identification. It will involve team work from all the divers to ensure the passages, dives and berthing are all safely carried out. But most of all it is a challenge to deliver a slightly mad idea!