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Notice to Mariners

Site Investigations – Floating LiDAR Deployment & Metocean Survey Campaign – August 2024

Caledonia Offshore Wind Farm

Issue date	28/08/2024
Version	14
Activity	Deployment of two floating LiDAR buoys in the Moray Firth for the acquisition of Wind and Metocean Data for a period of 24 months – COWF-SWLB080 mooring system unmarked

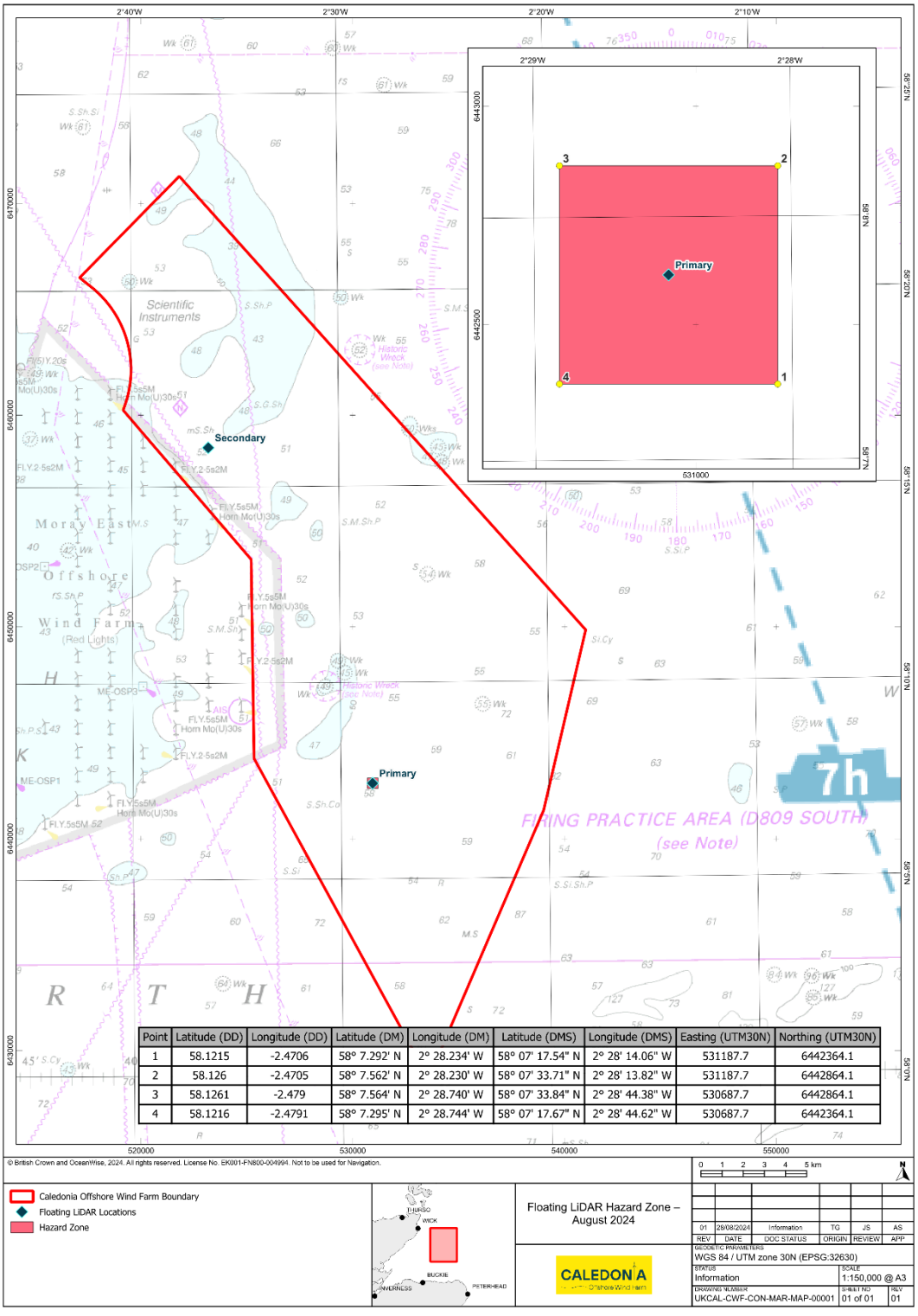
Revision History

Version	Issue Date	Status	Updates
1	25/05/2023	Issue	
2	01/06/2023	Update	Amendment to deployment date
3	06/06/2023	Update	Confirmation of as- deployed coordinates
4	05/12/2023	Update	Temporary replacement of COWF-SWLB080 with light beacon buoy during repairs.
5	18/12/2023	Update	COWF-SWLB080 reinstated
6	23/02/2024	Update	Temporary replacement of COWF-SWLB075 with light beacon buoy during repairs.
7	26/02/2024	Update	COWF-SWLB075 reinstated
8	04/03/2024	Update	COWF-SWLB075 UNLIT
9	02/05/2024	Update	Temporary replacement of COWF-SWLB075 and COWF-SWLB080 with light beacon buoy during maintenance
10	09/05/2024	Update	COWF-SWLB075 and COWF-SWLB080 reinstated
11	29/05/2024	Update	COWF-SWLB080 repositioning
12	04/06/2024	Update	COWF-SWLB080 in new position
13	26/08/2024	Update	COWF-SWLB080 broken free from mooring system.
14	28/08/2024	Hazard warning	**COWF-SWLB080 mooring system unmarked**

1. Introduction

COWF-SWLB080: Broken from Mooring, Mooring Unmarked

On the 24/08/2024, Primary Buoy, COWF-SWLB080, broke free from its moorings and drifted from its position in a Northeast direction. Vessel Mar Fortune recovered the buoy on 26/08/2024. **COWF-SWLB080 mooring system remains on site and unmarked.** Unmarked clump weight (3.25T) and mooring line (approximately 110m, see Figure 4). Marine users should continue to maintain a safe clearance distance from this location due to potential snagging or propellor fouling risk, please see recommended **500m hazard zone** around primary buoy's original location. This NtM will be updated once a mitigation strategy/retrieval plan is in place.



Point	Latitude (DD)	Longitude (DD)	Latitude (DM)	Longitude (DM)	Latitude (DMS)	Longitude (DMS)	Easting (UTM30N)	Northing (UTM30N)
1	58.1215	-2.4706	58° 7.292' N	2° 28.234' W	58° 07' 17.54" N	2° 28' 14.06" W	531187.7	6442364.1
2	58.126	-2.4705	58° 7.562' N	2° 28.230' W	58° 07' 33.71" N	2° 28' 13.82" W	531187.7	6442864.1
3	58.1261	-2.479	58° 7.564' N	2° 28.740' W	58° 07' 33.84" N	2° 28' 44.38" W	530687.7	6442864.1
4	58.1216	-2.4791	58° 7.295' N	2° 28.744' W	58° 07' 17.67" N	2° 28' 44.62" W	530687.7	6442364.1

Figure 1 Map of activity

2. Works Conducted

2.1 Locations

Buoy	AToN Name	Latitude (WGS84 DDM)	Longitude (WGS84 DDM)
Primary (NEW)	COWF-SWLB080	58° 7.426' N	02° 28.467' W
Primary (PREVIOUS)	*COWF-SWLB080*	*58° 15.930' N*	*02° 26.594' W*
Secondary	COWF-SWLB075	58° 15.996' N	02° 36.302' W

Note: Primary (New) Buoy (COWF-SWLB080) is currently off position following broken mooring.

2.2 Hazard Zone

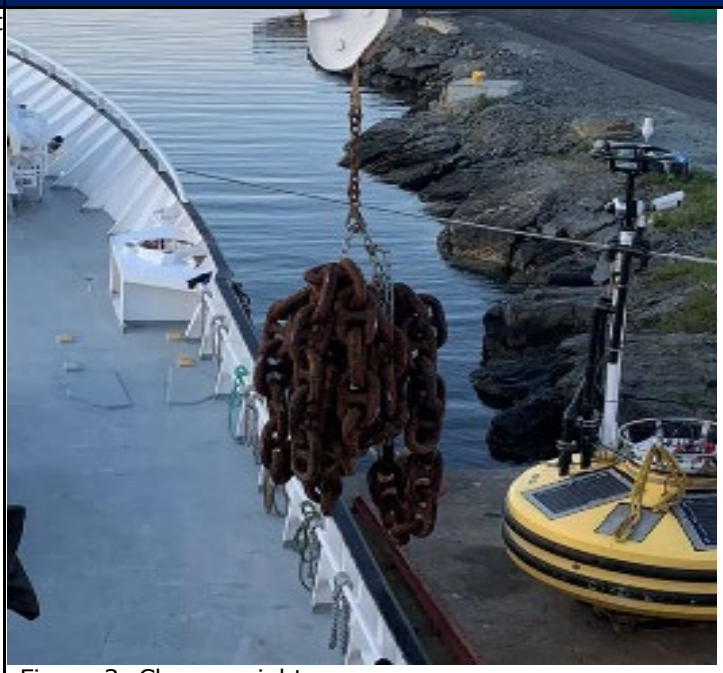
Hazard Zone Coordinates	Latitude (WGS84 DDM)	Longitude (WGS84 DDM)
1	58° 7.292' N	02° 28.234' W
2	58° 7.562' N	02° 28.230' W
3	58° 7.564' N	02° 28.740' W
4	58° 7.295' N	02° 28.744' W

2.3 Buoy Specification

High level parameters	
Model	Seawatch Wind LiDAR Buoy 3.0
Buoy Dimensions	Diameter: 2.9 m Height (above waterline): 4.5 m Full height (above & below waterline): 7.4 m Approximate weight: 2500 kg
Buoy Colour & Shape	Buoy colour: Yellow Buoy shape: See Figure 2.
Mooring Arrangement	110 m mooring chain, 3 – 4.5 tonne weight Drift radius: 110 – 135m
Lighting & Markings	Standard SL-07 yellow flash light Range: 1 - 5nm Height of light (above waterline): 3.85 m Topmark: St Andrews Cross (yellow)
Positioning System	Iridium modem with GPS, with back-up AIS: Chronos Wifi & 4G unit - Sierra RV55
Power Source:	Battery; 4 x 62 Ah lead acid battery 4 x 272Ah lithium battery

Figure 2: Seawatch Wind Lidar Buoy 3.0

2.4 Mooring Specification

High level parameters		
Anchor	3.25 T clump weight (see figure 3)	 Figure 3: Clump weight
Mooring system	Approximately 110m comprised of Dyneema rope, float, and rubber cord	See Figure 4.

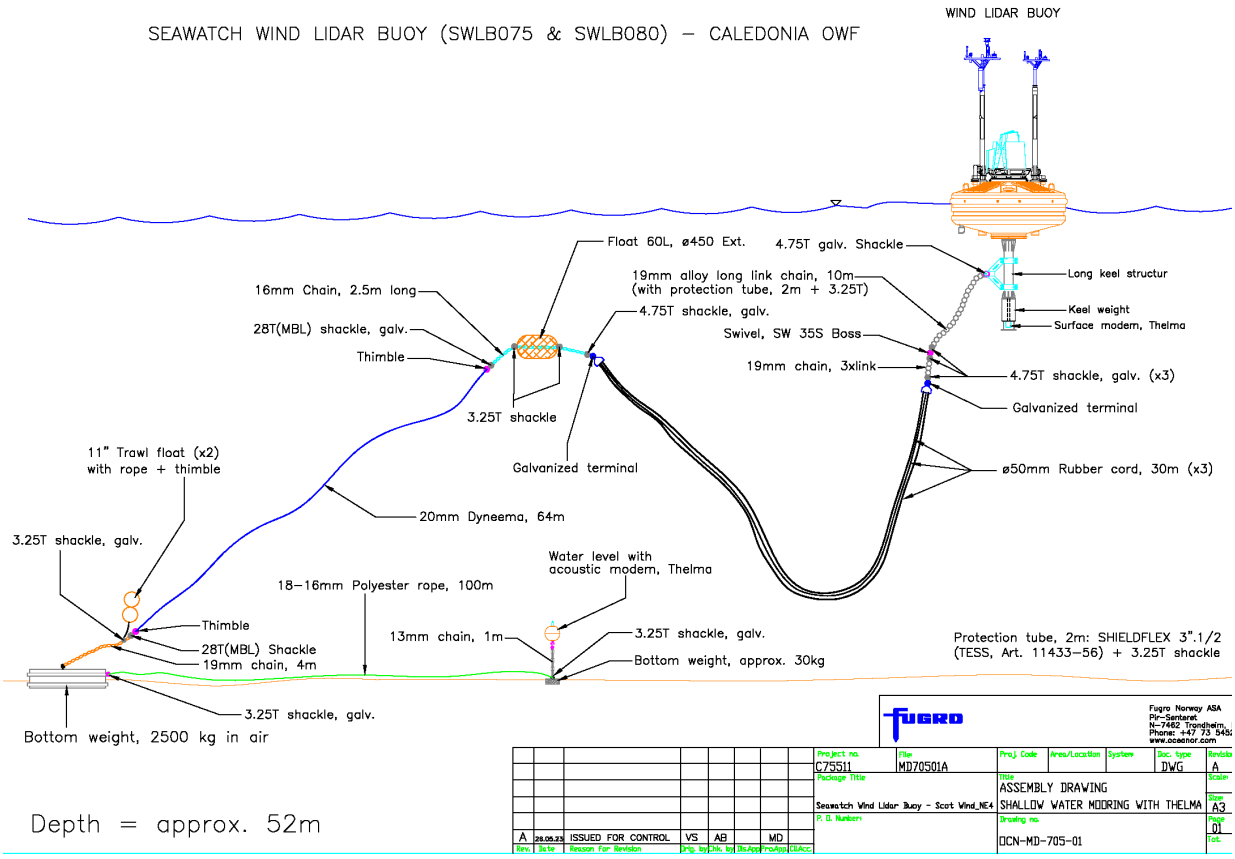


Figure 4. Mooring system

3. Developer Contact Details

Enquiries regarding the contents of this Notice to Mariners should be directed to the Caledonia OWF team (contact details below).

For fisheries related matters, please contact the Fisheries Liaison Officer, using the contact details provided below:

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Appendix 1 – Caledonia Coordinates

WGS84 (DD)		WGS84 (DMM)	UTM30		UTM30
Latitude	Longitude	Latitude	Longitude	Easting	Northing
Project Boundary					
58.134654	-2.569732	58° 8.080′ N	02° 34.184′ W	525337.13	6443782.58
58.219111	-2.571085	58° 13.147′ N	02° 34.265′ W	525197.67	6453185.05
58.282743	-2.673439	58° 16.965′ N	02° 40.407′ W	519150.3	6460235.99
58.339026	-2.708013	58° 20.342′ N	02° 42.48′ W	517095.65	6466493.05
58.381835	-2.627196	58° 22.91′ N	02° 37.632′ W	521801.03	6471282.74
58.176644	-2.283641	58° 10.598′ N	02° 17.018′ W	542134.17	6448600.53
57.998343	-2.431967	58° 59.9′ N	02° 25.918′ W	533577.3	6428666.86