

## Commission on the Limits of the Continental Shelf

# SUMMARY OF RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF THE CONTINENTAL SHELF IN REGARD TO THE SUBMISSION MADE BY NORWAY IN RESPECT OF BOUVETØYA AND DRONNING MAUD LAND ON 4 MAY 2009¹ 

Recommendations prepared by the Subcommission established for the consideration of the Submission made by Norway

Approved by the Subcommission on 11 August 2016
Approved by the Commission, with amendments, on 8 February 2019

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## GLOSSARY OF TERMS

| $\mathbf{2 0 0} \mathbf{M}$ line | Line at a distance of 200 nautical miles from the baselines from which the breadth of the <br> territorial sea is measured |
| :--- | :--- |
| $\mathbf{2 , 5 0 0} \mathbf{m}$ isobath | A line connecting the depth of 2,500 metres |
| Article 76 | Article 76 of the Convention |
| Baselines | Baselines from which the breadth of the territorial sea is measured |
| BOS | Base of the continental slope |
| Commission | Commission on the Limits of the Continental Shelf |
| Convention | United Nations Convention on the Law of the Sea of 10 December 1982 |
| Depth constraint | Constraint line determined at a distance of 100 M from the $2,500 \mathrm{~m}$ isobath |
| Distance constraint | Constraint line determined at a distance of 350 M from the baselines from which the <br> breadth of the territorial sea is measured |
| Distance formula line | Line delineated by reference to fixed points determined at a distance of not more than <br> 60 nautical miles from the foot of the continental slope |
| Distance formula point | Fixed point determined at a distance of not more than 60 nautical miles from the foot of <br> the continental slope |
| DOALOS | Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, <br> United Nations |
| FOS | Foot of the continental slope |
| Guidelines | Scientific and Technical Guidelines of the Commission (CLCS/11 and CLCS/11/Add.1) |
| $\mathbf{M}$ | Nautical mile |
| Rules of Procedure | Rules of Procedure of the Commission (CLCS/40/Rev.1) |
| Secretary-General | Secretary-General of the United Nations |
| Sediment thickness <br> formula line | Line delineated by reference to the outermost fixed points at each of which the <br> thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such <br> point to the foot of the continental slope |
| Sediment thickness <br> formula point | Fixed point at which the thickness of sedimentary rocks is at least 1 per cent of the <br> shortest distance from that point to the foot of the continental slope |

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## I. INTRODUCTION

1 On 4 May 2009, Norway submitted to the Commission, through the Secretary-General ${ }^{1}$ of the United Nations, information on the limits of the continental shelf beyond 200 M from the baselines from which the breadth of the territorial sea is measured in respect of Bouvetøya and Dronning Maud Land, in accordance with paragraph 8 of article 76 of the Convention (the "Submission").

The Convention entered into force for Norway on 24 July 1996.
3 The Submission was "for two separate areas, in the South Atlantic Ocean adjacent to Bouvetøya and in the Southern Ocean adjacent to Dronning Maud Land." Consistent with particular circumstances concerning the area south of 60 degrees South Latitude and Antarctica, Norway requested the Commission, by note verbale dated 4 May 2009, "in accordance with its rules not to take any action for the time being with regard to information in this submission that relates to the continental shelf appurtenant to Antarctica, including Dronning Maud Land."
4 On 5 May 2009, the Secretary-General issued Continental Shelf Notification CLCS.30.2009. LOS $^{2}$ to make public the Executive Summary of the Submission in accordance with rule 50 of the Rules of Procedure. Pursuant to rule 51 of the Rules of Procedure, the consideration of the Submission was included in the agenda of the twenty-fifth session of the Commission from 15 March to 23 April 2010.
5 Pursuant to section 2 of Annex III to the Rules of Procedure, a presentation of the Submission was made to the plenary of the twenty-fifth session of the Commission on 9 April 2010, by Olav Myklebust, Acting Director-General of the Legal Affairs Department of the Ministry of Foreign Affairs and head of delegation. The delegation of Norway also included Morten Wetland, Permanent Representative of Norway to the United Nations, and a number of advisers. In addition to elaborating on substantive points of the Submission, Mr. Myklebust indicated that Mr. Harald Brekke, member of the Commission, ${ }^{3}$ had assisted Norway by providing scientific and technical advice with respect to the Submission. Mr. Myklebust also noted that there were no notes verbales by States with respect to the part of the Submission relating to Bouvetøya and that there were no neighbouring States near Bouvetøya. He also noted that Norway had requested the Commission, by note verbale dated 4 May 2009, consistent with particular circumstances concerning the area south of 60 degrees south, not to take any action for the time being with regard to information in the Submission relating to the continental shelf appurtenant to Dronning Maud Land.
6 The Commission took note of the note verbale from Norway dated 4 May 2009 on the issue of Dronning Maud Land. The Commission also took note of the communications addressed to the Secretary-General in connection with it, namely the notes verbales from the United States of America, dated 4 June 2009; the Russian Federation, dated 15 June 2009; India, dated 31 August 2009; the Netherlands, dated 30 September 2009; and Japan, dated 19 November 2009. In view of all these communications, the Commission

[^1]decided not to consider and qualify the part of the Submission relating to the continental shelf appurtenant to Dronning Maud Land.

7 The Commission addressed the modalities for the consideration of the Submission and decided that, as provided for in article 5 of Annex II to the Convention and in rule 42 of the Rules of Procedure, the Submission would be addressed through the establishment of a Subcommission at a future session.
in respect of Bouvetøya and Dronning Maud Land was established on 26 August 2013 during the plenary of the thirty-second session of the Commission. The following members of the Commission were elected as members of the Subcommission: Messrs. Arshad, Charles, Glumov, Haworth, Kalngui and Oduro. The Commission agreed that in view of the absence of two of its members, a seventh member of the Subcommission would be appointed at a subsequent stage. In addition, in conformity with the decision taken at its twenty-fifth session (see para. 6), the Commission instructed the Subcommission to examine the information submitted in respect of Bouvetøya and not to consider the part of the submission relating to the continental shelf appurtenant to Dronning Maud Land. The Subcommission elected Mr. Haworth as its Chairperson, and Mr. Arshad and Mr. Oduro as its Vice-Chairpersons. Following his election to the Commission on 12 June 2014 by States Parties at their twenty-fourth Meeting (SPLOS/277), the Commission appointed Mr. Ravindra as the seventh member of the Subcommission at its thirty-fifth session (CLCS/85). In order to optimize the distribution of work among its members, the Commission decided that Mr. Lyu would assist the members of the Subcommission in the finalization of the recommendations at its forty-first session (CLCS/95).
9 Following its establishment, the Subcommission met during the thirty-third session of the Commission from 11 to 22 November 2013 to commence its consideration of the Submission and to conduct a preliminary examination of the Submission pursuant to paragraph 5(1) of Annex III to the Rules of Procedure. It determined that, given the volume and nature of the data contained in the Submission, the Subcommission would require additional time to examine all the data. The Subcommission verified the format and completeness of the Submission and decided to address the question of the test of appurtenance in the context of the main scientific and technical examination of the Submission.

10 The Subcommission continued its examination of the Submission during the following sessions: thirty-fourth, thirty-fifth, thirty-sixth, thirty-seventh, thirty-eighth, thirty-ninth, fortieth and forty-first. During the course of the consideration of the submission, upon the advice of the Subcommission, Norway transmitted to the Secretary-General a revised Executive Summary and on 28 May 2015, the Secretary-General issued Continental Shelf Notification CLCS.30.2009.LOS.Rev. $1^{4}$ giving it due publicity. During these sessions the Subcommission held 22 meetings with the Delegation in which it posed 20 questions in writing, presented nine preliminary considerations involving documents and presentations and a consolidated set of views and general conclusions covering the whole Submission, in accordance with paragraph 10.3 of Annex III to the Rules of Procedure. During the course of the examination of the Submission by the Subcommission, the Delegation

[^2]provided responses to the questions posed both in writing and as presentations, and provided additional material.

11 The Subcommission approved its Recommendations by majority in accordance with rule 37(1) of the Rules of Procedure on 11 August 2016 and submitted them to the Commission on 11 August 2016 for consideration and approval.

12 The Subcommission made a presentation to the Commission of the substance and rationale for its Recommendations on 15 August 2016. The Delegation subsequently made a presentation to the Commission on 16 August 2016 in accordance with paragraph 15.1 bis of Annex III to the Rules of Procedure.

13 On 16 March 2017, following extensive deliberations on the draft recommendations in the plenary, a member of the Commission expressed his view that all efforts to achieve consensus had been exhausted and moved to close the debate on the agenda item. Having given the floor, in accordance with rule 28 , to one member who opposed the motion and one member who favoured it, the Chair put the motion to the vote. The Commission decided in favour of the motion. Subsequently, the Chair of the Commission put to the vote the approval of the recommendations as prepared by the Subcommission. The Commission took the vote on the approval of the draft recommendations, which did not obtain the required two-thirds majority of members present and voting. Some members of the Commission expressed their regret that the draft could not be adopted, given the considerable work of the Subcommission in the examination of the submission and extensive discussion with the delegation of Norway, as reflected in the draft recommendations. The Commission decided to defer further consideration of the item to the forty-fourth session.
14 During the forty-fourth session, the Chair informed the Commission about a communication from Norway, dated 7 July 2017, in which the submitting State, in view of the election of new members of the Commission, had requested the opportunity to make a presentation pursuant to paragraph 15 (1 bis) of annex III to the Rules of Procedure. The Commission decided to accommodate that request, on the understanding that the Commission would apply, mutatis mutandis, the modus operandi established in that paragraph. Consequently, the presentation by Norway would merely be a repeat of the presentation that the submitting State had made on 16 August 2016, and it should not include new data or information. Following the presentations by the Subcommission and by the delegation of Norway, the Commission would resume deliberations on the recommendations in private.
15 Consequently, on 7 August 2018, Mr. Glumov reintroduced to the Commission the draft recommendations with regard to the submission made by Norway by repeating the presentation delivered by the Subcommission at the forty-first session. On the same day, the delegation of Norway made a presentation, in repetition of the one delivered at the forty-first session. The presentation was made by Kristian Jervell, Deputy Director-General for Legal Affairs of the Royal Norwegian Ministry of Foreign Affairs and head of the delegation and Harald Brekke, scientific and technical advisor.

16 During the forty-seventh session, Subcommission recommendations were amended to clarify aspects concerning information provided by Norway and considerations of the Subcommission. These clarifications allowed the Commission to proceed, at the forty-ninth session, with further deliberations on the updated draft recommendations in the context of the latest presentations by the Delegation, the Subcommission and additional Member considerations. Some members of the Commission expressed their
disagreement in respect to several substantive aspects of the Recommendations. On 8 February 2019, following extensive deliberations on the draft recommendations in the plenary, the Commission approved, by majority in accordance with rule 37(1) of the Rules of Procedure of the Commission (CLCS/40/Rev.1), the Recommendations of the Commission on the Limits of the Continental Shelf in regard to the submission made by Norway in respect of Bouvetøya and Dronning Maud Land on 4 May 2009, with amendments.
17 The Commission issued these Recommendations, taking into consideration article 6 of Annex II to the Convention and the internal procedures and the methodology outlined in the following documents of the Commission: the Rules of Procedure, and the Guidelines.
18 The Recommendations of the Commission are based on the scientific and technical data and other material provided by Norway in relation to the implementation of article 76. The Recommendations of the Commission only deal with issues related to article 76 and Annex II to the Convention and shall not prejudice matters relating to delimitation of boundaries between States with opposite or adjacent coasts, or prejudice the position of States which are party to a land or maritime dispute, or application of other parts of the Convention or any other treaties.
19 The Commission makes these Recommendations to Norway in fulfilment of its mandate as contained in paragraph 8 of article 76 and articles 3 and 5 of Annex II to the Convention.
20 The Commission makes Recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf in accordance with paragraph 8 of article 76 , of the Convention. Pursuant to this paragraph, the limits of the shelf established by a coastal State on the basis of these Recommendations shall be final and binding.
21 Throughout the examination of the Submission, the Subcommission requested and received support from the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs of the United Nations.

## II. CONTENTS OF THE SUBMISSION

## A. Original Submission

22 The original Submission received on 4 May 2009 contained three parts: an Executive Summary; a Main Body which is the analytical and descriptive part; and Scientific and Technical Data.
23 The Submission relates to "two separate areas, in the South Atlantic Ocean adjacent to Bouvetøya and in the Southern Ocean adjacent to Dronning Maud Land". However, the Subcommission was instructed by the Commission (see para. 8) to consider the information submitted in respect of Bouvetøya and not to consider that part of the Submission relating to the continental shelf appurtenant to Dronning Maud Land.

## B. Communications and additional material

24 In the course of the examination of the Submission by the Subcommission, the Delegation submitted additional material, including, responses to questions, requests for clarification and written preliminary considerations by the Subcommission.

## III. EXAMINATION OF THE SUBMISSION BY THE SUBCOMMISSION

A. Examination of the format and completeness of the Submission

25 Pursuant to paragraph 3 of Annex III to the Rules of Procedure, the Subcommission examined and verified the format and completeness of the Submission.

## B. Preliminary analysis of the Submission

26 Pursuant to paragraph 5 of Annex III to the Rules of Procedure, the Subcommission undertook a preliminary analysis of the Submission, in accordance with article 76 of the Convention and the Guidelines and determined that:
(a) the question of the test of appurtenance should be addressed as a matter of substance, in the context of the main scientific and technical examination of the Submission;
(b) the proposed outer limits of Norway's continental shelf for Bouvetøya beyond 200 M consist of 60 M formula points and the applied constraints;
(c) the construction of the outer limits of the continental shelf contains straight line segments not exceeding 60 M in length;
(d) the advice of any other member of the Commission and/or a specialist in accordance with rule 57 of the Rules of Procedure, or the cooperation of relevant international organizations, in accordance with rule 56 , would not be sought; and
(e) additional time would be required to review all data and to prepare the Recommendations during future sessions of the Commission.

## C. Main scientific and technical examination of the Submission

27 Pursuant to paragraph 9 of Annex III to the Rules of Procedure, the Subcommission conducted an examination of the Submission based on the Guidelines and evaluated the following, as applicable:
(a) the data and methodology employed by the coastal State to determine the location of the foot of the continental slope;
(b) the methodology used to determine the formula line at a distance of 60 M from the foot of the continental slope;
(c) the data and methodology used to determine the formula line delineated by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope, or not less than 1 kilometre in the cases in which the Statement of Understanding applies;
(d) the data and methodology employed in the determination of the 2,500-metre isobath;
(e) the methodology used to determine the constraint line at a distance of 100 M from the 2,500-metre isobath;
(f) the data and methodology used to determine the constraint line at a distance of 350 M from the baselines from which the breadth of the territorial sea is measured;
(g) the construction of the formulae line as the outer envelope of the two formulae;
(h) the construction of the constraint line as the outer envelope of the two constraints;
(i) the construction of the inner envelope of the formulae and constraint lines;
(j) the delineation of the outer limit of the continental shelf by means of straight lines not longer than 60 M with a view to ensuring that only the portion of the seabed that satisfies all the provisions of article 76 of the Convention and the Statement of Understanding is enclosed;
(k) the estimates of the uncertainties in the methods applied, with a view to identifying the main source(s) of such uncertainties and their effect on the Submission; and
(I) whether the data submitted are sufficient in terms of quantity and quality to justify the proposed limits.
In the conduct of its examination of the Submission, the Subcommission:
(a) examined the data and information supporting every FOS point selected for the establishment of the outer edge of the continental margin;
(b) sought clarifications and additional data from the Delegation, where necessary, by dialogue between the Delegation and the Subcommission;
(c) presented preliminary views and conclusions to the Delegation; and
(d) made a comprehensive presentation of the views and general conclusions to the Delegation, at an advanced stage of the examination of the Submission as provided for in paragraph 10.3 of Annex III to the Rules of Procedure.

## IV. RECOMMENDATIONS OF THE COMMISSION IN RESPECT OF BOUVETØYA

29 The Submission by Norway of 5 May 2009 is in respect of Bouvetøya and Dronning Maud Land. However, the current recommendations of the Commission relate only to the continental shelf appurtenant to Bouvetøya, an island in the South Atlantic.

1. Geographical and geological description of the region

30 Norway submits that Bouvetøya is located in the middle of the southern part of the South Atlantic Ocean. The island, at approximately $54.4^{\circ}$ South Latitude and $3.4^{\circ}$ East Longitude is situated approximately 280 km east of the Bouvet Triple Junction where the South American, the African and the Antarctic lithospheric plates meet. The plate boundaries are constituted by three separate spreading ridge systems, the Mid-Atlantic Ridge, the South American-Antarctic Ridge, and the Southwest Indian Ridge (Figure 1).


Figure 1: Physiographic elements in the vicinity of Bouvetøya as referred to in these Recommendations [SWIR: Southwest Indian Ridge, FZ: Fracture Zone] (Figure drafted by Commission)

31 The following description of the plate tectonic history is adapted from the presentation to the Commission by the Delegation on 9 April 2010 referring to Konig and Jokat (2006) and Marks and Tikku (2001) and more recently by their reference to Wen (2006):

- At the beginning of the continental breakup in the Middle Jurassic (167.2 Ma), the African continent was located with the Antarctic continent to the east and the South American continent to the south and west. The location of the Bouvet Hotspot at that time is shown by a red spot in Figure 2;


Figure 2: Location of the Bouvet Hotspot in the Middle Jurassic (indicated by red spot) (NOR1-PRE-01-18-11-2013 from König and Jokat, 2006)

- In the earliest Cretaceous, extension and opening started between the Antarctic and South American continents while the Bouvet Hotspot remained in the same position relative to the South African margin. The

African continent retained a fixed position relative to the mantle, while the other continents were moving;

- By the mid-early Cretaceous, extension and break-up started between the African and South American continents. This process initiated the formation of the present South Atlantic Ocean, but the Bouvet Hotspot remained close to the African continent;
- By 118.0 Ma, the African continent started to move relative to the Bouvet Hotspot;
- Separation between the Malvinas-Falklands Plateau (MFP) and South Africa was complete by the late Cretaceous ( 96 Ma ). The Bouvet Hotspot was positioned at the north-eastern end of the incipient Agulhas-Malvinas/Falklands Fracture Zone and all the three continents were then moving relative to the Bouvet Hotspot;
- Between 96 Ma and the present, the lithospheric plates moved over the Bouvet Hotspot which left a trail of its effects within the African plate (Figure 3); and


Figure 3: Postulated trail of the Bouvet Hotspot. (Slide 23 of NOR1-PRE-01-18-11-2013)

- The Bouvet Triple Junction, where all three lithospheric plates meet, lies just to the west of Bouvetøya, which overlies the hot spot area (Main Body, p.19) and "is interpreted to be the present position of the mantle plume" (Ligi et al., 1999).

2. The determination of the foot of the continental slope (article 76, paragraph 4(b))

32 The FOS should be established in accordance with paragraph 4(b) of article 76 of the Convention.

### 2.1 Considerations

33 In their Submission, Norway proposed that Bouvetøya is the surface expression of magmatism related to the Bouvet Hot Spot which is believed to have existed since the breakup of the Gondwana continent (after Konig and Jokat, 2006). The hot spot is considered to have had a stable location relative to the Earth's mantle, while the lithospheric plates were moving relative to it.

34 Norway contends that the lack of seismic activity for this section of the SWIR during recent times (Figure 4) indicates the degree to which it has been affected by the hot spot compared with other sections of the SWIR.


Figure 4: The locations of all earthquakes in the area as registered through time by the United States Geological Survey [All events subsequent to 1925 and greater than 3.6 magnitude]. (Figure 8 of NOR1-DOC-18-28-08-2015, north arrow added by Subcommission)

35 Norway noted that "Bouvetøya sits on an elevated area, caused by hot spot volcanism eastwards along the SWIR arm of the Bouvet triple junction. [...] The elevated area is elongated with Bouvetøya located at its western end and with Shaka Ridge at its eastern, thus forming a ridge-like seafloor high. This seafloor high has a general depth of less than 3000 m , thereby rising more than 1000 m from the surrounding abyssal depths of 4000 m and more." (Main Body, page 21).

36 In support of the morphological connection between the Bouvetøya Pedestal and the Shaka Ridge, Norway contracted additional surveys in 2016 which included a multibeam survey of the saddle between the two (Figure 5). These survey results further confirmed the morphological continuity, according to Norway.


Figure 5: Physiographic elements in the vicinity of Bouvetøya as presented by Norway. The yellow polygon outlines the region of Bouvetøya Pedestal and the red polygon outlines the region of the Shaka Ridge. Inset: Location of Bouvetøya in the South Atlantic Ocean. (Figures from NOR1-PRE-01-18-11-2013, amended by Subcommission)

37 Norway provided a report "3D gravity and bathymetry data analysis in the Bouvet Island area" (in NOR1-DISC-06-19-02-2014) which postulates that
"...complex interplay between the hotspot and the spreading ridge determined the shape and extent of the depth anomaly". Norway asserts that this departure from expected seafloor depths is referred to as the Bouvet Depth Anomaly (BDA) (Figure 6).


Figure 6: Figures from Minakov and Faleide: "3D gravity and bathymetry data analysis in the Bouvet Island area" (in NOR1-DISC-06-19-02-2014)

38 Norway contends that this area of significant positive residual bathymetry is characterized by a thicker crust of different composition compared to the surrounding MORB-type oceanic crust of the abyssal plain. In other words, the residual bathymetry and crustal thickness are positively correlated. Furthermore, Georgen et al. (2001) showed that the BDA, with its thicker than normal oceanic crust, is associated with a distinct negative Residual Mantle Bouguer Anomaly (RMBA).

39 Based on geophysical modelling Norway stated that "...this seafloor high is due to a depth anomaly caused by hot spot magmatism. It forms a morphologically continuous feature of substantially elevated seafloor characterized by a residual bathymetry on the order of 2000 - 3000 meters along its central axis." (NOR1 DOC-18-28-08-2015) (Figure 7). This anomaly was used as a guide by Norway to the location of the base of the slope of the seafloor high.


Figure 7: Three-dimensional map of the seafloor area adjacent to Bouvetøya (Figure A. 3 from the Main Body of the Submission, north arrow and additional labels added by Subcommission)

40 Based on the available bathymetric profiles, Norway established a full envelope of foot of the slope points around the elevated area which includes the landmass of Bouvetøya (Figure 8).


Figure 8: Complete FOS envelope as proposed by Norway with the critical FOS points identified by white dots (NOR1-DISC-16-12-11-2014, north arrow added by Subcommission)

41 Norway established the FOS points by determining points of maximum change in gradient at the base of the slope of the seafloor high. The resulting FOS points envelop the entire above-mentioned discrete, elongate seafloor high, which thereby represents the submerged prolongation of the landmass of Bouvetøya. With respect to the continental margin in the immediate vicinity of Bouvetøya, the FOS points as originally submitted (Figure 9) lie within the Bouvet Fracture Zone immediately to the north of the Bouvetøya Pedestal, and
within the Islas Orcadas Fracture Zone immediately to the south. Those FOS points to the southwest of Bouvetøya do not contribute to the outer edge of the continental margin.

42 With respect to the continental margin in the vicinity of the Shaka Ridge, the FOS points as originally submitted by Norway lie in the Shaka Fracture Zone to the south of the margin and at the base of the northern flanks of the Shaka Ridge in its northern margin (Figure 9).


Figure 9: Initial envelope of FOS points encompassing Bouvetøya and the Shaka Ridge (Figure C.I.1.2.3 of Main Body, north arrow added by Subcommission)

43 In its consideration of the base of the continental slope presented in the Submission, the Subcommission examined each of the following elements: The morphology and its continuity between each of the constituent parts of the composite seafloor high as proposed by Norway; the nature of the proposed hot spot and migration of lithospheric plates over it; the nature of the depth anomaly; and the geology and geochemistry of the constituent parts.
44 The Subcommission identified the deepest point on the saddle (SWIR median valley) between Bouvetøya and the rest of the Pedestal to the northeast to be at a depth of approximately $2,000 \mathrm{~m}$. Since this deepest point on the saddle is more than $1,000 \mathrm{~m}$ above the adjacent Base of Slope zone, the majority of the Subcommission agreed with Norway that there is morphological continuity between Bouvetøya and the rest of the Pedestal. (One member expressed the dissenting view that the continental margin could not include a segment of the SWIR which is an oceanic ridge, referring to paragraph 3 of article 76).
45 Subsequent re-evaluation by Norway of the FOS points submitted, led them to suggest that the envelope might be expanded to include a lobe of residual seafloor topography (Figures 7 and 8 ) to the southeast. The Subcommission was not convinced of this extension. Furthermore, on closer examination of these FOS points, the Subcommission requested revision of FOS 10 as initially submitted, which was then substituted by points FOS ANTV3D and A2107L06A (as annotated in Figure 10). This then resulted in the Delegation proposing the envelope portrayed in Figure 8.


Figure 10: Critical FOS points from which the outer edge of the continental margin of Bouvetøya has been determined together with the bathymetric lines from which the FOS points were derived (Figure 1 from NOR1-DOC-19-17-112015, north arrow added by Subcommission)

46 Norway revised the outer limits of its continental shelf on 19 May 2015 proposing that the Shaka Ridge was in geological continuity with Bouvetøya. Subsequently, an additional FOS point, FOS 14, was introduced by the Delegation at the eastern extremity of the Shaka Ridge (see Figure 10). At the request of the Subcommission, Norway then provided the Subcommission with a full Geocap analysis of each of the proposed FOS points.

47 The Subcommission then closely examined the morphological continuity between the Bouvetøya Pedestal and the Shaka Ridge (Figure 5). In this context, Norway provided additional bathymetric data between the two features. Sufficient additional single beam bathymetric data were collected to enable the Delegation to satisfy the Subcommission that there is morphological continuity from Bouvetøya up to the Shaka Ridge, with the deepest pass point at a depth of $3,000 \mathrm{~m}$ between the two being at an elevation of approximately 700 m above the BOS (Figure 11).


Figure 11: Contour map of the pass point within the Saddle Valley between Bouvetøya and the Shaka Ridge (Yellow line is $3,100 \mathrm{~m}$ contour; white line is $3,000 \mathrm{~m}$ contour) (Slide 15 of Norway presentation 11-07-2016 Presentationpart2, north arrow added by Subcommission)

48 Based on all of the data and material submitted by Norway, the majority of the Subcommission agreed with the approach adopted by Norway to define the
base of the continental slope associated with Bouvetøya. In particular, based on the morphological and bathymetric evidence, supplemented by other geological and geophysical data provided by Norway, the majority of the Subcommission agreed with the way the locations of FOS points FOS 1 to 9 , 11, 12, 14, ANTV3D and A2107L06A were established (Figure 10).
49 The majority of the Subcommission agreed that eleven out of the twelve FOS points as originally submitted generate formula points beyond the 200 M line of Norway for Bouvetøya hence the Subcommission agreed that the test of appurtenance was satisfied (paragraphs 26(a) and 44). Six of these twelve FOS points (1, 2, 3, 10, 11 and 12) are associated with the Bouvetøya Pedestal, upon which Bouvetøya sits, and six are associated with the Shaka Ridge (4, 5, 6, 7, 8 and 9) (Figure 12).


Figure 12: The 12 FOS points as originally submitted, eleven of which allowed the Submission to pass the test of appurtenance (Main Body, Figure C.I.3.1)

### 2.2 Recommendations

50 Based on its consideration of the technical and scientific documentation contained in the Submission of Norway for the Bouvetøya region and the additional information provided by Norway in subsequent documents and its own analysis, the Commission concludes by majority that the test of appurtenance according to the criteria prescribed in Section 2.2 of the Scientific and Technical Guidelines is passed.

51 The majority of members agreed with the determination by Norway of the FOS points listed in Table 1 of Annex I and that these fulfil the requirements of article 76 and Chapter 5 of the Guidelines. Consequently, the Commission recommends that these FOS points should form the basis for the establishment of the outer edge of the continental margin of Norway in respect of the Bouvetøya region.
3. The establishment of the outer edge of the continental margin (article 76, paragraph 4(a))
52 The outer edge of the continental margin of Norway in the Bouvetøya region should, for the purposes of the Convention, be established in accordance with paragraph $4(a)$ of article 76 of the Convention.
3.1 The application of the $\mathbf{6 0} \mathbf{~ M}$ distance formula (article 76, paragraph 4(a)(ii))

53 The outer edge of the continental margin is based entirely on fixed points constructed at a distance of not more than 60 M from FOS points on the continental margin of Norway in respect of Bouvetøya, in accordance with the provision contained in paragraph 4(a)(ii) of article 76 of the Convention.

54 The FOS points are: FOS 1 to 9, 11, 12, 14, ANTV3D and A2107L06A (Figure 10; Table 1, Annex I).
55 The Commission agrees with the procedure and its accuracy by which these points have been established by Norway in respect of Bouvetøya.

### 3.2 The application of the 1\% sediment thickness formula (article 76, paragraph 4(a)(i))

56 In the Bouvetøya region, Norway submitted no fixed points based on the sediment thickness provision of paragraph 4(a)(i) of article 76 of the Convention.

### 3.3 Configuration of the Outer Edge of the Continental Margin

57 The outer edge of the continental margin extends, from the 200 M line of Norway, in a general northeasterly direction from Bouvetøya to encompass the Shaka Ridge.

### 3.4 Recommendations

58 Norway established the outer edge of the continental margin beyond 200 M in the Bouvetøya region based on fixed points not more than 60 M from the foot of the continental slope (Figure 13) and straight line segments not exceeding 60 M connecting these points (as shown in Figure 14), as described in section 3.1 and in accordance with paragraph 7 of article 76 of the Convention. The Commission recommends that the location of the outer edge of the continental margin be used as the basis for delineating the outer limits of the continental shelf in this region, taking into account the constraints in article 76, paragraph 5.


Figure 13*: FOS points (in red) and the 60 M formula arcs derived from them (in white). 200 M line shown in yellow; Distance constraint line shown in light blue.

## 4. The application of the constraint criteria (article 76, paragraphs 5 \& 6))

59 The fixed points comprising the line of the outer limits of the continental shelf shall be based on the established outer edge of the continental margin as described in section 3.1, taking into consideration the constraints contained in paragraphs 5 and 6 of article 76 of the Convention.
60 The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraphs 4(a)(i) and (ii) of article 76 of the Convention, either shall not exceed 350 M from the baselines from which the breadth of the territorial sea is measured, or shall not exceed 100 M from the $2,500 \mathrm{~m}$ isobath.

61 For the outer limits of the continental shelf in the Bouvetøya region, Norway has invoked a combination of the distance and the depth constraints. In the vicinity of Bouvetøya, consideration of the outer limits of the continental shelf only involves an examination of the construction of the distance constraint line. However, in the vicinity of the Shaka Ridge, consideration of the outer limits also involves consideration of the application of the depth constraint (Figure 14). In the view of the Commission, the application of the depth constraint involves the examination of whether the relevant seafloor high, the Shaka Ridge, may be considered a natural component of the continental margin.

[^3]

Figure 14. Map showing seven 2500 m depth points identified for the construction of the depth constraint. The connection polygons connecting the depth points and the constraint line are shown in yellow. The outer edge of the continental margin line is shown in red. (Figure 1 of NOR1-DOC-21-02-12-2015.pdf, north arrow added by Subcommission)

62 Norway claims that Bouvetøya and its submerged Pedestal comprises volcanic rocks ( $<1.4 \mathrm{Ma}$ ) associated with the hot spot area (Main Body, page 19). It contends that hot spot activity resulted in formation of anomalous crust beneath Bouvetøya, uplifting the Pedestal and affecting parts of the seafloor in the area. Norway proposed that the zone of anomalous crust extends from Bouvetøya in the west through the Pedestal to the eastern end of the Shaka Ridge (O'Connor et al., 2012). The oblique trend of the Shaka Ridge to the pervasive NE trend of the spreading-related fracture zones, its thickened crust, and geochemical and petrographic dissimilarity to MORB are used by Norway to illustrate the consequences of Ridge-Hot spot interaction (Bouvet_Geopresentation_JIF (2013_11_20)).
63 According to Norway, the results of the geochemical analysis of samples collected from the Pedestal (both onshore and offshore) including those from the affected section of the SWIR are both indistinguishable from each other and markedly different from that of oceanic basalts of the SWIR (Simonov, 1996, 2000) (Figures 15 and 16).


Figure 15*: Location of rock samples in the vicinity of Bouvetøya (Pink Dots, after Simonov, 1996, 2000; Yellow Dots after Dick, 1989; Red Dots after Lin et al. 2001 and Dick et al. 2003); and locations of 2016 dredge samples as Green Dots)


Figure 16: Comparison of Geochemistry of Trace elements of rock samples from the Bouvetøya Pedestal (in yellow shaded area) and MORB (blue line) (NOR1-DISC-22-28-07-2015 Presentation - Part 2, slide 25)

64 Using published results from rock samples and data from additional dredge samples taken in 2016, Norway maintains that there is additionally a geochemical affinity between Shaka Ridge and the Pedestal that further supports the connection between the two regions. Norway showed geochemical analyses of Bouvetøya rock samples that are enriched in incompatible trace elements and display an alkaline character. Norway argues that these results are comparable to alkali-olivine basalts of ocean island type that are generated by deep seated mantle plumes indicating that Bouvetøya and its Pedestal are not part of normal oceanic crust of the deep ocean floor. The basalts from the Shaka Ridge are clinopyroxene phyric, which according
to Norway are characteristic of hotspot related basalts and anomalous for typical mid-ocean ridge basalts of the SWIR.

65 The Subcommission notes that the Pedestal, comprising Bouvetøya and the area immediately to the north-east that includes a section of the South West Indian Ridge (SWIR), has been affected by the influence of the hot spot. The Subcommission agrees that results of the geochemical analysis of samples collected from the Pedestal (both onshore and offshore), including those from the affected section of the SWIR, are both indistinguishable from each other and markedly different from that of oceanic basalts of the SWIR (see paragraph 49 et seq.).

66 The Subcomission was still not convinced on the nature of the Shaka Ridge as a submarine elevation. In order to further support their views in this regard, Norway undertook dredge sampling on the Shaka Ridge in 2016.
67 Of 88 samples collected, 35 were identified as having little alteration. Only the non-metamorphosed, magmatic rocks (basalts and volcanic slag and pumice) were considered by Norway as being of local origin, the remaining samples being ice rafted rocks from elsewhere. Of the 14 basalt samples, 11 were calc-alkaline basalts, commonly identified as having been generated in a subduction zone (Williams and Eubank, 1995). Norway provided evidence of the affinity between the calc-alkaline samples and those from the South Sandwich Islands (Pearce et al, 1995). The remaining three samples were alkaline basalts commonly identified as having been generated above a mantle plume (Crosby et al, 2006). The geochemical nature of these samples falls within the trace element envelope of those from the Bouvetøya Pedestal (Figure 17). Three samples, one of which had a freshly broken surface implying it was broken loose by the dredge (F-B-2016-3.2.13), were recovered from the Shaka Ridge. Norway presented this (and the previous petrographic observations) as evidence of the geological continuity between the Shaka Ridge and the Bouvetøya Pedestal.


Figure 17: Comparison of Geochemistry of Trace Elements of rock samples from the Shaka Ridge (grey, red and blue small solid circles) and the envelope of geochemical analyses of rock samples from onshore Bouvetøya. (Slide 42 of the 11072016 Presentation by Delegation)

68 As a result of the geochemical nature of the samples from Shaka Ridge falling within the trace element envelope of those from the Bouvetøya Pedestal, the majority of the Subcommission agreed that the Shaka Ridge is a submarine elevation in the sense of paragraph 6 of article 76 of the Convention.

### 4.1 The construction of the distance constraint line

69 The distance constraint line submitted by Norway is constructed by arcs at 350 M distance from the baselines (Figure 13). The Commission agrees with the methodology and its accuracy applied by Norway in the construction of this constraint line.

### 4.2 The construction of the depth constraint line

70 The Delegation of Norway informed the Subcommission in the meeting of 6 March 2015 that Norway intended to submit a Revised Executive Summary in support of the Shaka Ridge being a submarine elevation in the sense of paragraph 6 of article 76. Consequently, in NOR1-DOC-17-18-06-2015, Norway provided information supporting the construction of the depth constraint line. Seven depth points were found within the interval $2,500 \pm 25$ meters, in accordance with previous recommendations adopted by the Commission, and Norway used these points to construct the depth constraint.

71 The majority of members of the Commission is in agreement with Norway that the Shaka Ridge is a submarine elevation in the sense of paragraph 6 of article 76. The Commission agrees with Norway that the depth constraint of 100 M seaward of the $2,500 \mathrm{~m}$ isobath is an applicable constraint on the Shaka Ridge, and agrees with the methodology and its accuracy applied by Norway in the construction of this constraint line (Figure 14).

### 4.3 The construction of the combined constraints line

72 In the Bouvetøya region, Norway proposed in its Revised Executive Summary a constraint line based on the combination of lines constructed by the application of both the distance and depth constraints contained in paragraph 5 of article 76 of the Convention (see sections 4.1 and 4.2 above). The Commission agrees with the methodology and its accuracy by which the combined constraint line is constructed for the entire continental margin of Norway in respect of Bouvetøya (Figure 18).


Figure 18: The distance constraint (orange) and the depth constraint (dark blue) in combination constitute the combined constraint line. The outer limit of the continental shelf (paragraph 7 of article 76 ) is delineated by FOS +60 M arcs (green points) and straight lines not exceeding 60 M in length (red) (Submitted by Norway on 2016_02_19, north arrow added by Subcommission)

73 The outer limits of the continental shelf result from the application of the combined constraints line determined according to paragraph 73 above. In the Bouvetøya region as contained in the Submission of Norway dated 4 May 2009 and as revised on 19 May 2015, the outer limits of the continental shelf consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table 2, Annex I. The fixed points are established in accordance with article 76 of the Convention, or points located on Norway's 200 M line associated with Bouvetøya (Figure 19).


The outer limit of the continental shelf beyond 200 M off Bouvetoya

Figure 19: The outer limit of the continental shelf beyond 200 M off Bouvetøya (Figure 2 of the Revised Executive Summary, with revised depth constraint submitted by Norway 2016_02_19).

## 5. Recommendations for Norway in respect of Bouvetøya (article 76, paragraph 8)

74 The majority of members of the Commission agrees with the determination of the fixed points listed in Table 2, Annex I, establishing the outer edge of the continental margin of Norway in respect of Bouvetøya. The Commission recommends that the delineation of the outer limits of the continental shelf of Norway in respect of Bouvetøya be conducted in accordance with paragraph 7 of article 76 of the Convention by straight lines not exceeding 60 M in length, connecting fixed points, defined by coordinates of latitude and longitude. Further, the Commission agrees with the methodology and its accuracy applied in delineating the outer limits of the continental shelf of Norway in respect of Bouvetøya, including the determination of the fixed points listed in Table 2, Annex I, and the construction of the straight lines connecting those points.

75 The Commission recommends that Norway proceeds to establish the outer limits of the continental shelf in respect of Bouvetøya from fixed point BO-1 to fixed point BO-541 accordingly (Figure 19).

ANNEX I: TABLES OF COORDINATES, FOOT OF CONTINENTAL SLOPE POINTS AND OTHER INFORMATION RELATED TO THE ESTABLISHMENT OF THE OUTER EDGE OF THE CONTINENTAL MARGIN BEYOND 200 M (TABLE 1) AND THE DELINEATION OF THE OUTER LIMITS OF THE CONTINENTAL SHELF BEYOND 200 M (TABLE 2) AS RECOMMENDED BY THE COMMISSION, BASED ON THE SUBMISSION BY NORWAY IN RESPECT OF BOUVETØYA AND DRONNING MAUD LAND MADE ON 4 MAY 2009

Table 1. Coordinates for the foot of the continental slope points (table constructed from document NOR1-DOC-19-17-11-2015 Revised, provided by Norway on 2 December 2015)

| FOS Point | Bathymetric Profile | Latitude | Longitude |
| :--- | :--- | :--- | :--- |
| FOS 1 | I1176 | $54.106670^{\circ} \mathrm{S}$ | $8.037684^{\circ} \mathrm{E}$ |
| FOS 2 | I1176 | $53.902583^{\circ} \mathrm{S}$ | $8.480985^{\circ} \mathrm{E}$ |
| FOS 3 | I1176 | $53.286506^{\circ} \mathrm{S}$ | $9.338267^{\circ} \mathrm{E}$ |
| FOS 4 | CH115L03 | $52.325666^{\circ} \mathrm{S}$ | $10.989513^{\circ} \mathrm{E}$ |
| FOS 5 | I1176 | $51.708096^{\circ} \mathrm{S}$ | $12.136216^{\circ} \mathrm{E}$ |
| FOS 6 | C1314 | $51.241699^{\circ} \mathrm{S}$ | $13.169299^{\circ} \mathrm{E}$ |
| FOS 14 | Compiled Agulhas Shaka NE | $50.484881^{\circ} \mathrm{S}$ | $14.417373^{\circ} \mathrm{E}$ |
| FOS 7 | KN162L09 | $50.255699^{\circ} \mathrm{S}$ | $13.737500^{\circ} \mathrm{E}$ |
| FOS 8 | I1176 | $51.232791^{\circ} \mathrm{S}$ | $12.385652^{\circ} \mathrm{E}$ |
| FOS 9 | CH115L03 | $51.841138^{\circ} \mathrm{S}$ | $11.113745^{\circ} \mathrm{E}$ |
| FOS A2107L06 A | A2107L06 | $52.292232^{\circ} \mathrm{S}$ | $9.361552^{\circ} \mathrm{E}$ |
| FOS ANTV3 D | ANTV3 | $52.371905^{\circ} \mathrm{S}$ | $8.026294^{\circ} \mathrm{E}$ |
| FOS 11 | CH115LO3 $^{\text {FOS 12 }}$ | ANTIV3 | $52.394435^{\circ} \mathrm{S}$ |

Table 2. Coordinates for the outer limits of the continental shelf fixed points beyond $\mathbf{2 0 0} \mathbf{M}$ (provided by Norway on 3 March 2016)

| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-1 | -54.880674 | 9.120891 | -54 | 52 | 50.43 | 9 | 7 | 15.21 | $\begin{aligned} & \text { Art. 76.4(a)(ii):FOS }+60 \mathrm{M} \text {, } \\ & 200 \mathrm{M} \end{aligned}$ | 0 | 0 |
| BO-2 | -54.699958 | 9.508032 | -54 | 41 | 59.85 | 9 | 30 | 28.91 | Art. 76.4(a)(ii):FOS+60 M | 17.286 | 32014 |
| BO-3 | -54.694877 | 9.519403 | -54 | 41 | 41.56 | 9 | 31 | 9.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-4 | -54.689739 | 9.530697 | -54 | 41 | 23.06 | 9 | 31 | 50.51 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-5 | -54.684547 | 9.541915 | -54 | 41 | 4.37 | 9 | 32 | 30.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-6 | -54.679299 | 9.553054 | -54 | 40 | 45.48 | 9 | 33 | 11.00 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-7 | -54.673996 | 9.564115 | -54 | 40 | 26.39 | 9 | 33 | 50.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-8 | -54.668640 | 9.575096 | -54 | 40 | 7.10 | 9 | 34 | 30.35 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-9 | -54.663229 | 9.585997 | -54 | 39 | 47.63 | 9 | 35 | 9.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-10 | -54.657766 | 9.596817 | -54 | 39 | 27.96 | 9 | 35 | 48.54 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-11 | -54.652249 | 9.607555 | -54 | 39 | 8.10 | 9 | 36 | 27.20 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-12 | -54.646679 | 9.618211 | -54 | 38 | 48.05 | 9 | 37 | 5.56 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-13 | -54.641058 | 9.628783 | -54 | 38 | 27.81 | 9 | 37 | 43.62 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-14 | -54.635384 | 9.639271 | -54 | 38 | 7.38 | 9 | 38 | 21.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-15 | -54.629659 | 9.649674 | -54 | 37 | 46.77 | 9 | 38 | 58.83 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-16 | -54.623883 | 9.659992 | -54 | 37 | 25.98 | 9 | 39 | 35.97 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-17 | -54.618057 | 9.670224 | -54 | 37 | 5.00 | 9 | 40 | 12.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-18 | -54.612180 | 9.680368 | -54 | 36 | 43.85 | 9 | 40 | 49.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-19 | -54.606254 | 9.690425 | -54 | 36 | 22.51 | 9 | 41 | 25.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-20 | -54.600278 | 9.700394 | -54 | 36 | 1.00 | 9 | 42 | 1.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-21 | -54.594254 | 9.710274 | -54 | 35 | 39.31 | 9 | 42 | 36.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-22 | -54.588181 | 9.720064 | -54 | 35 | 17.45 | 9 | 43 | 12.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-23 | -54.582060 | 9.729763 | -54 | 34 | 55.42 | 9 | 43 | 47.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-24 | -54.575892 | 9.739372 | -54 | 34 | 33.21 | 9 | 44 | 21.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-25 | -54.569677 | 9.748888 | -54 | 34 | 10.84 | 9 | 44 | 56.00 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-26 | -54.563415 | 9.758313 | -54 | 33 | 48.29 | 9 | 45 | 29.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-27 | -54.557107 | 9.767644 | -54 | 33 | 25.58 | 9 | 46 | 3.52 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-28 | -54.550753 | 9.776882 | -54 | 33 | 2.71 | 9 | 46 | 36.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-29 | -54.544354 | 9.786026 | -54 | 32 | 39.67 | 9 | 47 | 9.69 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-30 | -54.537910 | 9.795074 | -54 | 32 | 16.48 | 9 | 47 | 42.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-31 | -53.908542 | 10.651154 | -53 | 54 | 30.75 | 10 | 39 | 4.15 | Art. 76.4(a)(ii):FOS+60 M | 48.371 | 89583 |
| BO-32 | -53.901965 | 10.659782 | -53 | 54 | 7.08 | 10 | 39 | 35.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-33 | -53.895345 | 10.668315 | -53 | 53 | 43.24 | 10 | 40 | 5.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-34 | -53.888683 | 10.676751 | -53 | 53 | 19.26 | 10 | 40 | 36.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-35 | -53.881979 | 10.685090 | -53 | 52 | 55.13 | 10 | 41 | 6.32 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-36 | -53.875234 | 10.693332 | -53 | 52 | 30.84 | 10 | 41 | 35.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-37 | -53.868448 | 10.701476 | -53 | 52 | 6.41 | 10 | 42 | 5.31 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-38 | -53.861621 | 10.709521 | -53 | 51 | 41.83 | 10 | 42 | 34.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-39 | -53.854754 | 10.717467 | -53 | 51 | 17.11 | 10 | 43 | 2.88 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS Point | Latitude <br> Degrees | Longitude <br> Degrees | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \\ \hline \end{gathered}$ | meters |
| BO-40 | -53.847848 | 10.725313 | -53 | 50 | 52.25 | 10 | 43 | 31.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-41 | -53.840903 | 10.733059 | -53 | 50 | 27.25 | 10 | 43 | 59.01 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-42 | -53.833920 | 10.740705 | -53 | 50 | 2.11 | 10 | 44 | 26.54 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-43 | -53.141459 | 11.938197 | -53 | 8 | 29.25 | 11 | 56 | 17.51 | Art. 76.4(a)(ii):FOS+60 M | 59.779 | 110711 |
| BO-44 | -53.136587 | 11.949414 | -53 | 8 | 11.71 | 11 | 56 | 57.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-45 | -53.131658 | 11.960561 | -53 | 7 | 53.97 | 11 | 57 | 38.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-46 | -53.126672 | 11.971637 | -53 | 7 | 36.02 | 11 | 58 | 17.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-47 | -53.121630 | 11.982640 | -53 | 7 | 17.87 | 11 | 58 | 57.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-48 | -53.116532 | 11.993571 | -53 | 6 | 59.51 | 11 | 59 | 36.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-49 | -53.111378 | 12.004428 | -53 | 6 | 40.96 | 12 | 0 | 15.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-50 | -53.106169 | 12.015211 | -53 | 6 | 22.21 | 12 | 0 | 54.76 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-51 | -53.100905 | 12.025918 | -53 | 6 | 3.26 | 12 | 1 | 33.31 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-52 | -53.095587 | 12.036550 | -53 | 5 | 44.11 | 12 | 2 | 11.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-53 | -53.090215 | 12.047105 | -53 | 5 | 24.77 | 12 | 2 | 49.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-54 | -53.084789 | 12.057583 | -53 | 5 | 5.24 | 12 | 3 | 27.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-55 | -53.079309 | 12.067982 | -53 | 4 | 45.51 | 12 | 4 | 4.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-56 | -52.473286 | 13.178066 | -52 | 28 | 23.83 | 13 | 10 | 41.04 | Art. 76.4(a)(ii):FOS+60 M | 54.425 | 100795 |
| BO-57 | -52.045448 | 14.122226 | -52 | 2 | 43.61 | 14 | 7 | 20.01 | Art. 76.4(a)(ii):FOS+60 M | 43.272 | 80140 |
| BO-58 | -52.040436 | 14.133000 | -52 | 2 | 25.57 | 14 | 7 | 58.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-59 | -52.035368 | 14.143704 | -52 | 2 | 7.32 | 14 | 8 | 37.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-60 | -52.030244 | 14.154336 | -52 | 1 | 48.88 | 14 | 9 | 15.61 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-61 | -52.025064 | 14.164896 | -52 | 1 | 30.23 | 14 | 9 | 53.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-62 | -52.019830 | 14.175384 | -52 | 1 | 11.39 | 14 | 10 | 31.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-63 | -52.014540 | 14.185798 | -52 | 0 | 52.35 | 14 | 11 | 8.87 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-64 | -52.009197 | 14.196137 | -52 | 0 | 33.11 | 14 | 11 | 46.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-65 | -52.003800 | 14.206402 | -52 | 0 | 13.68 | 14 | 12 | 23.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-66 | -51.998349 | 14.216591 | -51 | 59 | 54.06 | 14 | 12 | 59.73 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-67 | -51.992845 | 14.226704 | -51 | 59 | 34.24 | 14 | 13 | 36.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-68 | -51.987289 | 14.236739 | -51 | 59 | 14.24 | 14 | 14 | 12.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-69 | -51.981680 | 14.246697 | -51 | 58 | 54.05 | 14 | 14 | 48.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-70 | -51.976019 | 14.256576 | -51 | 58 | 33.67 | 14 | 15 | 23.67 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-71 | -51.970307 | 14.266376 | -51 | 58 | 13.10 | 14 | 15 | 58.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-72 | -51.964544 | 14.276096 | -51 | 57 | 52.36 | 14 | 16 | 33.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-73 | -51.958730 | 14.285735 | -51 | 57 | 31.43 | 14 | 17 | 8.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-74 | -51.952866 | 14.295293 | -51 | 57 | 10.32 | 14 | 17 | 43.06 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \\ \hline \end{gathered}$ | meters |
| BO-75 | -51.946952 | 14.304769 | -51 | 56 | 49.03 | 14 | 18 | 17.17 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-76 | -51.940989 | 14.314163 | -51 | 56 | 27.56 | 14 | 18 | 50.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-77 | -51.934977 | 14.323473 | -51 | 56 | 5.92 | 14 | 19 | 24.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-78 | -51.928916 | 14.332700 | -51 | 55 | 44.10 | 14 | 19 | 57.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-79 | -51.232524 | 15.463985 | -51 | 13 | 57.08 | 15 | 27 | 50.35 | Art. 76.4(a)(ii):FOS+60 M | 59.523 | 110237 |
| BO-80 | -51.226933 | 15.473807 | -51 | 13 | 36.96 | 15 | 28 | 25.71 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-81 | -51.221291 | 15.483553 | -51 | 13 | 16.65 | 15 | 29 | 0.79 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-82 | -51.215598 | 15.493220 | -51 | 12 | 56.15 | 15 | 29 | 35.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-83 | -51.209853 | 15.502810 | -51 | 12 | 35.47 | 15 | 30 | 10.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-84 | -51.204057 | 15.512320 | -51 | 12 | 14.61 | 15 | 30 | 44.35 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-85 | -51.198211 | 15.521751 | -51 | 11 | 53.56 | 15 | 31 | 18.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-86 | -51.192315 | 15.531101 | -51 | 11 | 32.34 | 15 | 31 | 51.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-87 | -51.186370 | 15.540371 | -51 | 11 | 10.93 | 15 | 32 | 25.34 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-88 | -51.180376 | 15.549559 | -51 | 10 | 49.35 | 15 | 32 | 58.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-89 | -51.174333 | 15.558665 | -51 | 10 | 27.60 | 15 | 33 | 31.19 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-90 | -51.168241 | 15.567688 | -51 | 10 | 5.67 | 15 | 34 | 3.68 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-91 | -51.162102 | 15.576628 | -51 | 9 | 43.57 | 15 | 34 | 35.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-92 | -51.155916 | 15.585484 | -51 | 9 | 21.30 | 15 | 35 | 7.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-93 | -51.149683 | 15.594255 | -51 | 8 | 58.86 | 15 | 35 | 39.32 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-94 | -51.143403 | 15.602941 | -51 | 8 | 36.25 | 15 | 36 | 10.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-95 | -51.137078 | 15.611541 | -51 | 8 | 13.48 | 15 | 36 | 41.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-96 | -51.130707 | 15.620054 | -51 | 7 | 50.54 | 15 | 37 | 12.19 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-97 | -51.124291 | 15.628481 | -51 | 7 | 27.45 | 15 | 37 | 42.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-98 | -51.117830 | 15.636820 | -51 | 7 | 4.19 | 15 | 38 | 12.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-99 | -51.111325 | 15.645070 | -51 | 6 | 40.77 | 15 | 38 | 42.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-100 | -51.104777 | 15.653233 | -51 | 6 | 17.20 | 15 | 39 | 11.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-101 | -51.098186 | 15.661305 | -51 | 5 | 53.47 | 15 | 39 | 40.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-102 | -51.091551 | 15.669288 | -51 | 5 | 29.59 | 15 | 40 | 9.44 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-103 | -51.084875 | 15.677181 | -51 | 5 | 5.55 | 15 | 40 | 37.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-104 | -51.078157 | 15.684983 | -51 | 4 | 41.37 | 15 | 41 | 5.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-105 | -51.071398 | 15.692693 | -51 | 4 | 17.03 | 15 | 41 | 33.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-106 | -51.064598 | 15.700312 | -51 | 3 | 52.55 | 15 | 42 | 1.12 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-107 | -51.057757 | 15.707838 | -51 | 3 | 27.93 | 15 | 42 | 28.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-108 | -51.050877 | 15.715271 | -51 | 3 | 3.16 | 15 | 42 | 54.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-109 | -51.043958 | 15.722611 | -51 | 2 | 38.25 | 15 | 43 | 21.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \end{gathered}$ | meters |
| BO-110 | -51.037000 | 15.729857 | -51 | 2 | 13.20 | 15 | 43 | 47.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-111 | -51.030003 | 15.737009 | -51 | 1 | 48.01 | 15 | 44 | 13.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-112 | -51.022969 | 15.744065 | -51 | 1 | 22.69 | 15 | 44 | 38.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-113 | -51.015898 | 15.751027 | -51 | 0 | 57.23 | 15 | 45 | 3.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-114 | -51.008790 | 15.757892 | -51 | 0 | 31.64 | 15 | 45 | 28.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-115 | -51.001645 | 15.764662 | -51 | 0 | 5.92 | 15 | 45 | 52.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-116 | -50.994465 | 15.771334 | -50 | 59 | 40.07 | 15 | 46 | 16.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-117 | -50.987250 | 15.777910 | -50 | 59 | 14.10 | 15 | 46 | 40.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-118 | -50.980000 | 15.784388 | -50 | 58 | 48.00 | 15 | 47 | 3.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-119 | -50.972715 | 15.790768 | -50 | 58 | 21.78 | 15 | 47 | 26.77 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-120 | -50.965397 | 15.797050 | -50 | 57 | 55.43 | 15 | 47 | 49.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-121 | -50.958046 | 15.803233 | -50 | 57 | 28.97 | 15 | 48 | 11.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| $\mathrm{BO}-122$ | -50.950663 | 15.809317 | -50 | 57 | 2.39 | 15 | 48 | 33.54 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-123 | -50.943247 | 15.815302 | -50 | 56 | 35.69 | 15 | 48 | 55.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-124 | -50.935800 | 15.821186 | -50 | 56 | 8.88 | 15 | 49 | 16.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-125 | -50.928321 | 15.826971 | -50 | 55 | 41.96 | 15 | 49 | 37.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-126 | -50.920813 | 15.832654 | -50 | 55 | 14.93 | 15 | 49 | 57.56 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-127 | -50.913274 | 15.838237 | -50 | 54 | 47.79 | 15 | 50 | 17.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-128 | -50.905706 | 15.843718 | -50 | 54 | 20.54 | 15 | 50 | 37.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-129 | -50.898109 | 15.849098 | -50 | 53 | 53.19 | 15 | 50 | 56.75 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-130 | -50.890483 | 15.854376 | -50 | 53 | 25.74 | 15 | 51 | 15.75 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-131 | -50.882830 | 15.859551 | -50 | 52 | 58.19 | 15 | 51 | 34.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-132 | -50.875150 | 15.864623 | -50 | 52 | 30.54 | 15 | 51 | 52.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-133 | -50.867443 | 15.869593 | -50 | 52 | 2.79 | 15 | 52 | 10.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-134 | -50.859709 | 15.874459 | -50 | 51 | 34.95 | 15 | 52 | 28.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-135 | -50.851951 | 15.879222 | -50 | 51 | 7.02 | 15 | 52 | 45.20 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-136 | -50.844167 | 15.883881 | -50 | 50 | 39.00 | 15 | 53 | 1.97 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-137 | -50.836358 | 15.888435 | -50 | 50 | 10.89 | 15 | 53 | 18.37 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-138 | -50.828526 | 15.892886 | -50 | 49 | 42.69 | 15 | 53 | 34.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-139 | -50.820670 | 15.897231 | -50 | 49 | 14.41 | 15 | 53 | 50.03 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-140 | -50.812792 | 15.901472 | -50 | 48 | 46.05 | 15 | 54 | 5.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-141 | -50.804891 | 15.905608 | -50 | 48 | 17.61 | 15 | 54 | 20.19 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-142 | -50.796968 | 15.909638 | -50 | 47 | 49.09 | 15 | 54 | 34.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-143 | -50.789025 | 15.913562 | -50 | 47 | 20.49 | 15 | 54 | 48.82 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-144 | -50.781060 | 15.917381 | -50 | 46 | 51.82 | 15 | 55 | 2.57 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \end{gathered}$ | meters |
| BO-145 | -50.773076 | 15.921093 | -50 | 46 | 23.07 | 15 | 55 | 15.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-146 | -50.765072 | 15.924700 | -50 | 45 | 54.26 | 15 | 55 | 28.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-147 | -50.757050 | 15.928199 | -50 | 45 | 25.38 | 15 | 55 | 41.52 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-148 | -50.749009 | 15.931592 | -50 | 44 | 56.43 | 15 | 55 | 53.73 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-149 | -50.740950 | 15.934878 | -50 | 44 | 27.42 | 15 | 56 | 5.56 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-150 | -50.732874 | 15.938058 | -50 | 43 | 58.35 | 15 | 56 | 17.01 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-151 | -50.724782 | 15.941129 | -50 | 43 | 29.21 | 15 | 56 | 28.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-152 | -50.716673 | 15.944094 | -50 | 43 | 0.02 | 15 | 56 | 38.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-153 | -50.708549 | 15.946951 | -50 | 42 | 30.78 | 15 | 56 | 49.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-154 | -50.700410 | 15.949700 | -50 | 42 | 1.48 | 15 | 56 | 58.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-155 | -50.692257 | 15.952342 | -50 | 41 | 32.12 | 15 | 57 | 8.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-156 | -50.684089 | 15.954875 | -50 | 41 | 2.72 | 15 | 57 | 17.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-157 | -50.675909 | 15.957301 | -50 | 40 | 33.27 | 15 | 57 | 26.28 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-158 | -50.667716 | 15.959618 | -50 | 40 | 3.78 | 15 | 57 | 34.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-159 | -50.659511 | 15.961827 | -50 | 39 | 34.24 | 15 | 57 | 42.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-160 | -50.651295 | 15.963928 | -50 | 39 | 4.66 | 15 | 57 | 50.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-161 | -50.643068 | 15.965920 | -50 | 38 | 35.04 | 15 | 57 | 57.31 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-162 | -50.634830 | 15.967804 | -50 | 38 | 5.39 | 15 | 58 | 4.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-163 | -50.626583 | 15.969578 | -50 | 37 | 35.70 | 15 | 58 | 10.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-164 | -50.618326 | 15.971245 | -50 | 37 | 5.97 | 15 | 58 | 16.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-165 | -50.610061 | 15.972802 | -50 | 36 | 36.22 | 15 | 58 | 22.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-166 | -50.601788 | 15.974251 | -50 | 36 | 6.44 | 15 | 58 | 27.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-167 | -50.593507 | 15.975591 | -50 | 35 | 36.63 | 15 | 58 | 32.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-168 | -50.585220 | 15.976822 | -50 | 35 | 6.79 | 15 | 58 | 36.56 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-169 | -50.576927 | 15.977944 | -50 | 34 | 36.94 | 15 | 58 | 40.60 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-170 | -50.568627 | 15.978957 | -50 | 34 | 7.06 | 15 | 58 | 44.24 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-171 | -50.560323 | 15.979861 | -50 | 33 | 37.16 | 15 | 58 | 47.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-172 | -50.552014 | 15.980656 | -50 | 33 | 7.25 | 15 | 58 | 50.36 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-173 | -50.543701 | 15.981342 | -50 | 32 | 37.32 | 15 | 58 | 52.83 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-174 | -50.535385 | 15.981920 | -50 | 32 | 7.39 | 15 | 58 | 54.91 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-175 | -50.527066 | 15.982388 | -50 | 31 | 37.44 | 15 | 58 | 56.60 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-176 | -50.518744 | 15.982748 | -50 | 31 | 7.48 | 15 | 58 | 57.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-177 | -50.510422 | 15.982998 | -50 | 30 | 37.52 | 15 | 58 | 58.79 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-178 | -50.502098 | 15.983140 | -50 | 30 | 7.55 | 15 | 58 | 59.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-179 | -50.493773 | 15.983173 | -50 | 29 | 37.58 | 15 | 58 | 59.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \\ \hline \end{gathered}$ | meters |
| BO-180 | -50.485449 | 15.983097 | -50 | 29 | 7.62 | 15 | 58 | 59.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-181 | -50.477125 | 15.982913 | -50 | 28 | 37.65 | 15 | 58 | 58.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-182 | -50.468803 | 15.982620 | -50 | 28 | 7.69 | 15 | 58 | 57.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-183 | -50.460482 | 15.982218 | -50 | 27 | 37.74 | 15 | 58 | 55.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-184 | -50.452164 | 15.981708 | -50 | 27 | 7.79 | 15 | 58 | 54.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-185 | -50.443849 | 15.981090 | -50 | 26 | 37.86 | 15 | 58 | 51.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-186 | -50.435537 | 15.980363 | -50 | 26 | 7.93 | 15 | 58 | 49.31 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-187 | -50.427230 | 15.979528 | -50 | 25 | 38.03 | 15 | 58 | 46.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-188 | -50.418927 | 15.978586 | -50 | 25 | 8.14 | 15 | 58 | 42.91 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-189 | -50.410630 | 15.977535 | -50 | 24 | 38.27 | 15 | 58 | 39.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-190 | -50.402338 | 15.976377 | -50 | 24 | 8.42 | 15 | 58 | 34.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-191 | -50.394053 | 15.975110 | -50 | 23 | 38.59 | 15 | 58 | 30.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-192 | -50.385775 | 15.973737 | -50 | 23 | 8.79 | 15 | 58 | 25.45 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-193 | -50.377504 | 15.972256 | -50 | 22 | 39.02 | 15 | 58 | 20.12 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-194 | -50.369242 | 15.970668 | -50 | 22 | 9.27 | 15 | 58 | 14.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-195 | -50.360988 | 15.968973 | -50 | 21 | 39.56 | 15 | 58 | 8.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-196 | -50.352744 | 15.967171 | -50 | 21 | 9.88 | 15 | 58 | 1.82 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-197 | -50.344509 | 15.965262 | -50 | 20 | 40.23 | 15 | 57 | 54.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-198 | -50.336285 | 15.963247 | -50 | 20 | 10.63 | 15 | 57 | 47.69 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-199 | -50.328072 | 15.961126 | -50 | 19 | 41.06 | 15 | 57 | 40.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-200 | -50.319870 | 15.958899 | -50 | 19 | 11.53 | 15 | 57 | 32.03 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-201 | -50.311681 | 15.956565 | -50 | 18 | 42.05 | 15 | 57 | 23.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-202 | -50.303504 | 15.954126 | -50 | 18 | 12.61 | 15 | 57 | 14.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-203 | -50.295340 | 15.951582 | -50 | 17 | 43.22 | 15 | 57 | 5.69 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-204 | -50.287190 | 15.948932 | -50 | 17 | 13.88 | 15 | 56 | 56.16 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-205 | -50.279055 | 15.946178 | -50 | 16 | 44.60 | 15 | 56 | 46.24 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-206 | -50.270934 | 15.943318 | -50 | 16 | 15.36 | 15 | 56 | 35.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-207 | -50.262829 | 15.940355 | -50 | 15 | 46.18 | 15 | 56 | 25.28 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-208 | -50.254740 | 15.937286 | -50 | 15 | 17.06 | 15 | 56 | 14.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-209 | -50.246667 | 15.934114 | -50 | 14 | 48.00 | 15 | 56 | 2.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-210 | -50.238612 | 15.930839 | -50 | 14 | 19.00 | 15 | 55 | 51.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-211 | -50.230574 | 15.927460 | -50 | 13 | 50.07 | 15 | 55 | 38.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-212 | -50.222555 | 15.923977 | -50 | 13 | 21.20 | 15 | 55 | 26.32 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-213 | -50.214554 | 15.920392 | -50 | 12 | 52.39 | 15 | 55 | 13.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-214 | -50.206573 | 15.916705 | -50 | 12 | 23.66 | 15 | 55 | 0.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \end{gathered}$ | meters |
| BO-215 | -50.198611 | 15.912915 | -50 | 11 | 55.00 | 15 | 54 | 46.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-216 | -50.190670 | 15.909023 | -50 | 11 | 26.41 | 15 | 54 | 32.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-217 | -50.182750 | 15.905029 | -50 | 10 | 57.90 | 15 | 54 | 18.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-218 | -50.174851 | 15.900934 | -50 | 10 | 29.46 | 15 | 54 | 3.36 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-219 | -50.166974 | 15.896739 | -50 | 10 | 1.11 | 15 | 53 | 48.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-220 | -50.159120 | 15.892442 | -50 | 9 | 32.83 | 15 | 53 | 32.79 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-221 | -50.151289 | 15.888045 | -50 | 9 | 4.64 | 15 | 53 | 16.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-222 | -50.143482 | 15.883549 | -50 | 8 | 36.53 | 15 | 53 | 0.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-223 | -50.135699 | 15.878953 | -50 | 8 | 8.51 | 15 | 52 | 44.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-224 | -50.127940 | 15.874257 | -50 | 7 | 40.58 | 15 | 52 | 27.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-225 | -50.120207 | 15.869463 | -50 | 7 | 12.74 | 15 | 52 | 10.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-226 | -50.112499 | 15.864570 | -50 | 6 | 45.00 | 15 | 51 | 52.45 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-227 | -50.104818 | 15.859579 | -50 | 6 | 17.34 | 15 | 51 | 34.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-228 | -50.097163 | 15.854490 | -50 | 5 | 49.79 | 15 | 51 | 16.16 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-229 | -50.089536 | 15.849304 | -50 | 5 | 22.33 | 15 | 50 | 57.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-230 | -50.081936 | 15.844021 | -50 | 4 | 54.97 | 15 | 50 | 38.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-231 | -50.074365 | 15.838641 | -50 | 4 | 27.71 | 15 | 50 | 19.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-232 | -50.066823 | 15.833166 | -50 | 4 | 0.56 | 15 | 49 | 59.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-233 | -50.059310 | 15.827594 | -50 | 3 | 33.52 | 15 | 49 | 39.34 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-234 | -50.051827 | 15.821928 | -50 | 3 | 6.58 | 15 | 49 | 18.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-235 | -50.044374 | 15.816166 | -50 | 2 | 39.75 | 15 | 48 | 58.20 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-236 | -50.036952 | 15.810310 | -50 | 2 | 13.03 | 15 | 48 | 37.12 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-237 | -50.029562 | 15.804360 | -50 | 1 | 46.42 | 15 | 48 | 15.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-238 | -50.022203 | 15.798317 | -50 | 1 | 19.93 | 15 | 47 | 53.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-239 | -50.014877 | 15.792180 | -50 | 0 | 53.56 | 15 | 47 | 31.85 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-240 | -50.007584 | 15.785951 | -50 | 0 | 27.30 | 15 | 47 | 9.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-241 | -50.000324 | 15.779629 | -50 | 0 | 1.17 | 15 | 46 | 46.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-242 | -49.993098 | 15.773216 | -49 | 59 | 35.15 | 15 | 46 | 23.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-243 | -49.985906 | 15.766711 | -49 | 59 | 9.26 | 15 | 46 | 0.16 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-244 | -49.978749 | 15.760116 | -49 | 58 | 43.50 | 15 | 45 | 36.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-245 | -49.971627 | 15.753431 | -49 | 58 | 17.86 | 15 | 45 | 12.35 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-246 | -49.964541 | 15.746655 | -49 | 57 | 52.35 | 15 | 44 | 47.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-247 | -49.957491 | 15.739791 | -49 | 57 | 26.97 | 15 | 44 | 23.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-248 | -49.950478 | 15.732837 | -49 | 57 | 1.72 | 15 | 43 | 58.21 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-249 | -49.943502 | 15.725795 | -49 | 56 | 36.61 | 15 | 43 | 32.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \\ \hline \end{gathered}$ | meters |
| BO-250 | -49.936564 | 15.718666 | -49 | 56 | 11.63 | 15 | 43 | 7.20 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-251 | -49.929664 | 15.711449 | -49 | 55 | 46.79 | 15 | 42 | 41.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-252 | -49.922803 | 15.704146 | -49 | 55 | 22.09 | 15 | 42 | 14.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-253 | -49.915980 | 15.696756 | -49 | 54 | 57.53 | 15 | 41 | 48.32 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-254 | -49.909198 | 15.689280 | -49 | 54 | 33.11 | 15 | 41 | 21.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-255 | -49.902455 | 15.681720 | -49 | 54 | 8.84 | 15 | 40 | 54.19 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-256 | -49.895752 | 15.674075 | -49 | 53 | 44.71 | 15 | 40 | 26.67 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-257 | -49.889091 | 15.666345 | -49 | 53 | 20.73 | 15 | 39 | 58.84 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-258 | -49.882470 | 15.658532 | -49 | 52 | 56.89 | 15 | 39 | 30.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-259 | -49.875892 | 15.650637 | -49 | 52 | 33.21 | 15 | 39 | 2.29 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-260 | -49.869355 | 15.642659 | -49 | 52 | 9.68 | 15 | 38 | 33.57 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-261 | -49.862861 | 15.634599 | -49 | 51 | 46.30 | 15 | 38 | 4.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-262 | -49.856411 | 15.626457 | -49 | 51 | 23.08 | 15 | 37 | 35.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-263 | -49.850003 | 15.618235 | -49 | 51 | 0.01 | 15 | 37 | 5.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-264 | -49.843640 | 15.609933 | -49 | 50 | 37.10 | 15 | 36 | 35.76 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-265 | -49.837321 | 15.601552 | -49 | 50 | 14.36 | 15 | 36 | 5.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-266 | -49.831047 | 15.593091 | -49 | 49 | 51.77 | 15 | 35 | 35.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-267 | -49.824818 | 15.584552 | -49 | 49 | 29.34 | 15 | 35 | 4.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-268 | -49.818635 | 15.575936 | -49 | 49 | 7.08 | 15 | 34 | 33.37 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-269 | -49.812497 | 15.567242 | -49 | 48 | 44.99 | 15 | 34 | 2.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-270 | -49.806406 | 15.558472 | -49 | 48 | 23.06 | 15 | 33 | 30.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-271 | -49.800362 | 15.549625 | -49 | 48 | 1.30 | 15 | 32 | 58.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-272 | -49.794365 | 15.540704 | -49 | 47 | 39.71 | 15 | 32 | 26.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-273 | -49.788416 | 15.531708 | -49 | 47 | 18.30 | 15 | 31 | 54.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-274 | -49.782514 | 15.522637 | -49 | 46 | 57.05 | 15 | 31 | 21.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-275 | -49.776662 | 15.513494 | -49 | 46 | 35.98 | 15 | 30 | 48.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-276 | -49.770857 | 15.504277 | -49 | 46 | 15.09 | 15 | 30 | 15.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-277 | -49.765103 | 15.494989 | -49 | 45 | 54.37 | 15 | 29 | 41.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-278 | -49.759397 | 15.485629 | -49 | 45 | 33.83 | 15 | 29 | 8.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-279 | -49.753742 | 15.476198 | -49 | 45 | 13.47 | 15 | 28 | 34.31 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-280 | -49.748137 | 15.466696 | -49 | 44 | 53.29 | 15 | 28 | 0.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-281 | -49.742582 | 15.457126 | -49 | 44 | 33.30 | 15 | 27 | 25.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-282 | -49.737079 | 15.447486 | -49 | 44 | 13.49 | 15 | 26 | 50.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-283 | -49.731627 | 15.437778 | -49 | 43 | 53.86 | 15 | 26 | 16.00 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-284 | -49.726227 | 15.428002 | -49 | 43 | 34.42 | 15 | 25 | 40.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-285 | -49.720879 | 15.418160 | -49 | 43 | 15.17 | 15 | 25 | 5.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-286 | -49.715584 | 15.408251 | -49 | 42 | 56.10 | 15 | 24 | 29.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-287 | -49.710341 | 15.398277 | -49 | 42 | 37.23 | 15 | 23 | 53.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-288 | -49.705152 | 15.388238 | -49 | 42 | 18.55 | 15 | 23 | 17.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-289 | -49.700016 | 15.378135 | -49 | 42 | 0.06 | 15 | 22 | 41.28 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-290 | -49.694934 | 15.367968 | -49 | 41 | 41.76 | 15 | 22 | 4.68 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-291 | -49.689907 | 15.357738 | -49 | 41 | 23.66 | 15 | 21 | 27.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-292 | -49.684933 | 15.347447 | -49 | 41 | 5.76 | 15 | 20 | 50.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-293 | -49.680015 | 15.337093 | -49 | 40 | 48.05 | 15 | 20 | 13.54 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-294 | -49.675152 | 15.326679 | -49 | 40 | 30.55 | 15 | 19 | 36.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-295 | -49.670345 | 15.316206 | -49 | 40 | 13.24 | 15 | 18 | 58.34 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-296 | -49.665593 | 15.305672 | -49 | 39 | 56.13 | 15 | 18 | 20.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-297 | -49.660897 | 15.295081 | -49 | 39 | 39.23 | 15 | 17 | 42.29 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-298 | -49.656258 | 15.284431 | -49 | 39 | 22.53 | 15 | 17 | 3.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-299 | -49.651676 | 15.273724 | -49 | 39 | 6.03 | 15 | 16 | 25.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-300 | -49.647151 | 15.262961 | -49 | 38 | 49.74 | 15 | 15 | 46.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-301 | -49.642683 | 15.252142 | -49 | 38 | 33.66 | 15 | 15 | 7.71 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-302 | -49.638273 | 15.241268 | -49 | 38 | 17.78 | 15 | 14 | 28.56 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-303 | -49.633921 | 15.230340 | -49 | 38 | 2.11 | 15 | 13 | 49.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-304 | -49.629627 | 15.219358 | -49 | 37 | 46.66 | 15 | 13 | 9.69 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-305 | -49.625391 | 15.208323 | -49 | 37 | 31.41 | 15 | 12 | 29.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-306 | -49.621215 | 15.197237 | -49 | 37 | 16.37 | 15 | 11 | 50.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-307 | -49.617097 | 15.186099 | -49 | 37 | 1.55 | 15 | 11 | 9.96 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-308 | -49.613039 | 15.174910 | -49 | 36 | 46.94 | 15 | 10 | 29.68 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-309 | -49.609041 | 15.163672 | -49 | 36 | 32.55 | 15 | 9 | 49.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-310 | -49.605102 | 15.152385 | -49 | 36 | 18.37 | 15 | 9 | 8.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-311 | -49.601223 | 15.141049 | -49 | 36 | 4.40 | 15 | 8 | 27.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-312 | -49.597405 | 15.129666 | -49 | 35 | 50.66 | 15 | 7 | 46.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-313 | -49.371613 | 14.456598 | -49 | 22 | 17.81 | 14 | 27 | 23.75 | Art. 76.4(a)(ii):FOS+60 M | 29.62 | 54856 |
| BO-314 | -49.367801 | 14.445263 | -49 | 22 | 4.08 | 14 | 26 | 42.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-315 | -49.364049 | 14.433882 | -49 | 21 | 50.58 | 14 | 26 | 1.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-316 | -49.360358 | 14.422455 | -49 | 21 | 37.29 | 14 | 25 | 20.84 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-317 | -49.356729 | 14.410983 | -49 | 21 | 24.22 | 14 | 24 | 39.54 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-318 | -49.353161 | 14.399467 | -49 | 21 | 11.38 | 14 | 23 | 58.08 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-319 | -49.349654 | 14.387907 | -49 | 20 | 58.76 | 14 | 23 | 16.47 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-320 | -49.346210 | 14.376305 | -49 | 20 | 46.35 | 14 | 22 | 34.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-321 | -49.342827 | 14.364661 | -49 | 20 | 34.18 | 14 | 21 | 52.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-322 | -49.339507 | 14.352975 | -49 | 20 | 22.23 | 14 | 21 | 10.71 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-323 | -49.336249 | 14.341249 | -49 | 20 | 10.50 | 14 | 20 | 28.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-324 | -49.333054 | 14.329484 | -49 | 19 | 59.00 | 14 | 19 | 46.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-325 | -49.329923 | 14.317680 | -49 | 19 | 47.72 | 14 | 19 | 3.65 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-326 | -49.326854 | 14.305837 | -49 | 19 | 36.67 | 14 | 18 | 21.01 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-327 | -49.323849 | 14.293958 | -49 | 19 | 25.85 | 14 | 17 | 38.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-328 | -49.320907 | 14.282042 | -49 | 19 | 15.26 | 14 | 16 | 55.35 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-329 | -49.318029 | 14.270090 | -49 | 19 | 4.90 | 14 | 16 | 12.32 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-330 | -49.315215 | 14.258103 | -49 | 18 | 54.77 | 14 | 15 | 29.17 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-331 | -49.312465 | 14.246083 | -49 | 18 | 44.87 | 14 | 14 | 45.90 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-332 | -49.309779 | 14.234029 | -49 | 18 | 35.21 | 14 | 14 | 2.50 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-333 | -49.307158 | 14.221942 | -49 | 18 | 25.77 | 14 | 13 | 18.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-334 | -49.304602 | 14.209824 | -49 | 18 | 16.57 | 14 | 12 | 35.37 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-335 | -49.302110 | 14.197675 | -49 | 18 | 7.60 | 14 | 11 | 51.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-336 | -49.299684 | 14.185495 | -49 | 17 | 58.86 | 14 | 11 | 7.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-337 | -49.297322 | 14.173287 | -49 | 17 | 50.36 | 14 | 10 | 23.83 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-338 | -49.295026 | 14.161049 | -49 | 17 | 42.09 | 14 | 9 | 39.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-339 | -49.292796 | 14.148785 | -49 | 17 | 34.06 | 14 | 8 | 55.62 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-340 | -49.290631 | 14.136493 | -49 | 17 | 26.27 | 14 | 8 | 11.37 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-341 | -49.288531 | 14.124175 | -49 | 17 | 18.71 | 14 | 7 | 27.03 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-342 | -49.286498 | 14.111832 | -49 | 17 | 11.39 | 14 | 6 | 42.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-343 | -49.284531 | 14.099464 | -49 | 17 | 4.31 | 14 | 5 | 58.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-344 | -49.282629 | 14.087073 | -49 | 16 | 57.47 | 14 | 5 | 13.46 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-345 | -49.280795 | 14.074659 | -49 | 16 | 50.86 | 14 | 4 | 28.77 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-346 | -49.279026 | 14.062222 | -49 | 16 | 44.49 | 14 | 3 | 44.00 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-347 | -49.277324 | 14.049765 | -49 | 16 | 38.37 | 14 | 2 | 59.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-348 | -49.275689 | 14.037287 | -49 | 16 | 32.48 | 14 | 2 | 14.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-349 | -49.274120 | 14.024790 | -49 | 16 | 26.83 | 14 | 1 | 29.24 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-350 | -49.272618 | 14.012273 | -49 | 16 | 21.43 | 14 | 0 | 44.18 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-351 | -49.271183 | 13.999739 | -49 | 16 | 16.26 | 13 | 59 | 59.06 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-352 | -49.269815 | 13.987188 | -49 | 16 | 11.34 | 13 | 59 | 13.88 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-353 | -49.268515 | 13.974620 | -49 | 16 | 6.65 | 13 | 58 | 28.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-354 | -49.267281 | 13.962037 | -49 | 16 | 2.21 | 13 | 57 | 43.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \\ \hline \end{gathered}$ | meters |
| BO-355 | -49.266115 | 13.949439 | -49 | 15 | 58.01 | 13 | 56 | 57.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-356 | -49.265016 | 13.936828 | -49 | 15 | 54.06 | 13 | 56 | 12.58 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-357 | -49.263985 | 13.924203 | -49 | 15 | 50.34 | 13 | 55 | 27.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-358 | -49.263021 | 13.911566 | -49 | 15 | 46.87 | 13 | 54 | 41.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-359 | -49.262124 | 13.898918 | -49 | 15 | 43.65 | 13 | 53 | 56.10 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-360 | -49.261295 | 13.886259 | -49 | 15 | 40.66 | 13 | 53 | 10.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-361 | -49.260534 | 13.873591 | -49 | 15 | 37.92 | 13 | 52 | 24.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-362 | -49.259841 | 13.860913 | -49 | 15 | 35.43 | 13 | 51 | 39.29 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-363 | -49.259215 | 13.848228 | -49 | 15 | 33.18 | 13 | 50 | 53.62 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-364 | -49.258658 | 13.835535 | -49 | 15 | 31.17 | 13 | 50 | 7.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-365 | -49.258168 | 13.822836 | -49 | 15 | 29.40 | 13 | 49 | 22.21 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-366 | -49.257746 | 13.810132 | -49 | 15 | 27.88 | 13 | 48 | 36.47 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-367 | -49.257391 | 13.797422 | -49 | 15 | 26.61 | 13 | 47 | 50.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-368 | -49.257105 | 13.784709 | -49 | 15 | 25.58 | 13 | 47 | 4.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-369 | -49.256887 | 13.771993 | -49 | 15 | 24.79 | 13 | 46 | 19.17 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-370 | -49.256736 | 13.759274 | -49 | 15 | 24.25 | 13 | 45 | 33.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-371 | -49.256654 | 13.746554 | -49 | 15 | 23.95 | 13 | 44 | 47.59 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-372 | -49.256640 | 13.733833 | -49 | 15 | 23.90 | 13 | 44 | 1.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-373 | -49.256693 | 13.721113 | -49 | 15 | 24.10 | 13 | 43 | 16.01 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-374 | -49.256815 | 13.708394 | -49 | 15 | 24.53 | 13 | 42 | 30.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-375 | -49.257004 | 13.695676 | -49 | 15 | 25.22 | 13 | 41 | 44.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-376 | -49.257262 | 13.682962 | -49 | 15 | 26.14 | 13 | 40 | 58.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-377 | -49.257587 | 13.670251 | -49 | 15 | 27.31 | 13 | 40 | 12.90 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-378 | -49.257981 | 13.657544 | -49 | 15 | 28.73 | 13 | 39 | 27.16 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-379 | -49.258442 | 13.644842 | -49 | 15 | 30.39 | 13 | 38 | 41.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-380 | -49.258971 | 13.632147 | -49 | 15 | 32.29 | 13 | 37 | 55.73 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-381 | -49.259568 | 13.619458 | -49 | 15 | 34.44 | 13 | 37 | 10.05 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-382 | -49.260232 | 13.606777 | -49 | 15 | 36.84 | 13 | 36 | 24.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-383 | -49.260965 | 13.594105 | -49 | 15 | 39.47 | 13 | 35 | 38.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-384 | -49.261765 | 13.581442 | -49 | 15 | 42.35 | 13 | 34 | 53.19 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-385 | -49.262633 | 13.568789 | -49 | 15 | 45.48 | 13 | 34 | 7.64 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-386 | -49.263568 | 13.556148 | -49 | 15 | 48.85 | 13 | 33 | 22.13 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-387 | -49.264571 | 13.543518 | -49 | 15 | 52.46 | 13 | 32 | 36.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-388 | -49.265641 | 13.530900 | -49 | 15 | 56.31 | 13 | 31 | 51.24 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-389 | -49.266779 | 13.518297 | -49 | 16 | 0.40 | 13 | 31 | 5.87 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-390 | -49.267984 | 13.505707 | -49 | 16 | 4.74 | 13 | 30 | 20.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-391 | -49.269256 | 13.493133 | -49 | 16 | 9.32 | 13 | 29 | 35.28 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-392 | -49.270596 | 13.480575 | -49 | 16 | 14.14 | 13 | 28 | 50.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-393 | -49.272002 | 13.468033 | -49 | 16 | 19.21 | 13 | 28 | 4.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-394 | -49.273476 | 13.455509 | -49 | 16 | 24.51 | 13 | 27 | 19.83 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-395 | -49.275016 | 13.443004 | -49 | 16 | 30.06 | 13 | 26 | 34.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-396 | -49.276623 | 13.430517 | -49 | 16 | 35.84 | 13 | 25 | 49.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-397 | -49.278297 | 13.418051 | -49 | 16 | 41.87 | 13 | 25 | 4.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-398 | -49.280037 | 13.405606 | -49 | 16 | 48.13 | 13 | 24 | 20.18 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-399 | -49.281844 | 13.393182 | -49 | 16 | 54.64 | 13 | 23 | 35.46 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-400 | -49.283717 | 13.380781 | -49 | 17 | 1.38 | 13 | 22 | 50.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-401 | -49.285657 | 13.368403 | -49 | 17 | 8.36 | 13 | 22 | 6.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-402 | -49.287662 | 13.356050 | -49 | 17 | 15.58 | 13 | 21 | 21.78 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-403 | -49.289733 | 13.343721 | -49 | 17 | 23.04 | 13 | 20 | 37.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-404 | -49.291871 | 13.331418 | -49 | 17 | 30.73 | 13 | 19 | 53.10 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-405 | -49.294073 | 13.319142 | -49 | 17 | 38.66 | 13 | 19 | 8.91 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-406 | -49.296342 | 13.306893 | -49 | 17 | 46.83 | 13 | 18 | 24.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-407 | -49.298676 | 13.294672 | -49 | 17 | 55.23 | 13 | 17 | 40.82 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-408 | -49.301075 | 13.282480 | -49 | 18 | 3.87 | 13 | 16 | 56.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-409 | -49.303539 | 13.270318 | -49 | 18 | 12.74 | 13 | 16 | 13.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-410 | -49.306068 | 13.258186 | -49 | 18 | 21.84 | 13 | 15 | 29.47 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-411 | -49.308661 | 13.246086 | -49 | 18 | 31.18 | 13 | 14 | 45.91 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-412 | -49.311319 | 13.234018 | -49 | 18 | 40.75 | 13 | 14 | 2.47 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-413 | -49.314042 | 13.221984 | -49 | 18 | 50.55 | 13 | 13 | 19.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-414 | -49.316829 | 13.209982 | -49 | 19 | 0.58 | 13 | 12 | 35.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-415 | -49.319680 | 13.198016 | -49 | 19 | 10.85 | 13 | 11 | 52.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-416 | -49.322595 | 13.186085 | -49 | 19 | 21.34 | 13 | 11 | 9.90 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-417 | -49.325573 | 13.174189 | -49 | 19 | 32.06 | 13 | 10 | 27.08 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-418 | -49.328615 | 13.162331 | -49 | 19 | 43.01 | 13 | 9 | 44.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-419 | -49.331720 | 13.150511 | -49 | 19 | 54.19 | 13 | 9 | 1.84 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-420 | -49.334888 | 13.138729 | -49 | 20 | 5.60 | 13 | 8 | 19.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-421 | -49.338120 | 13.126986 | -49 | 20 | 17.23 | 13 | 7 | 37.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-422 | -49.341413 | 13.115283 | -49 | 20 | 29.09 | 13 | 6 | 55.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-423 | -49.344769 | 13.103622 | -49 | 20 | 41.17 | 13 | 6 | 13.04 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-424 | -49.348188 | 13.092001 | -49 | 20 | 53.48 | 13 | 5 | 31.20 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | $\begin{gathered} \text { Naut. } \\ \text { miles (M) } \end{gathered}$ | meters |
| BO-425 | -49.351668 | 13.080423 | -49 | 21 | 6.00 | 13 | 4 | 49.52 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-426 | -49.355210 | 13.068889 | -49 | 21 | 18.76 | 13 | 4 | 8.00 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-427 | -49.358814 | 13.057398 | -49 | 21 | 31.73 | 13 | 3 | 26.63 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-428 | -49.362478 | 13.045952 | -49 | 21 | 44.92 | 13 | 2 | 45.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-429 | -49.366204 | 13.034551 | -49 | 21 | 58.34 | 13 | 2 | 4.38 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-430 | -49.369991 | 13.023197 | -49 | 22 | 11.97 | 13 | 1 | 23.51 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-431 | -49.373838 | 13.011889 | -49 | 22 | 25.82 | 13 | 0 | 42.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-432 | -49.377746 | 13.000629 | -49 | 22 | 39.88 | 13 | 0 | 2.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-433 | -49.381713 | 12.989418 | -49 | 22 | 54.17 | 12 | 59 | 21.90 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-434 | -49.385741 | 12.978256 | -49 | 23 | 8.67 | 12 | 58 | 41.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-435 | -49.389828 | 12.967143 | -49 | 23 | 23.38 | 12 | 58 | 1.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-436 | -49.393974 | 12.956082 | -49 | 23 | 38.30 | 12 | 57 | 21.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-437 | -49.398179 | 12.945072 | -49 | 23 | 53.44 | 12 | 56 | 42.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-438 | -49.402442 | 12.934114 | -49 | 24 | 8.79 | 12 | 56 | 2.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-439 | -49.406764 | 12.923209 | -49 | 24 | 24.35 | 12 | 55 | 23.55 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-440 | -49.411145 | 12.912357 | -49 | 24 | 40.12 | 12 | 54 | 44.49 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-441 | -49.415583 | 12.901560 | -49 | 24 | 56.10 | 12 | 54 | 5.62 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-442 | -49.420078 | 12.890818 | -49 | 25 | 12.28 | 12 | 53 | 26.95 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-443 | -49.424631 | 12.880132 | -49 | 25 | 28.67 | 12 | 52 | 48.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-444 | -49.429241 | 12.869503 | -49 | 25 | 45.27 | 12 | 52 | 10.21 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-445 | -49.433908 | 12.858930 | -49 | 26 | 2.07 | 12 | 51 | 32.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-446 | -49.438630 | 12.848416 | -49 | 26 | 19.07 | 12 | 50 | 54.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-447 | -49.443409 | 12.837960 | -49 | 26 | 36.27 | 12 | 50 | 16.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-448 | -49.448244 | 12.827564 | -49 | 26 | 53.68 | 12 | 49 | 39.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-449 | -49.453134 | 12.817228 | -49 | 27 | 11.28 | 12 | 49 | 2.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-450 | -49.458078 | 12.806952 | -49 | 27 | 29.08 | 12 | 48 | 25.03 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-451 | -49.463078 | 12.796738 | -49 | 27 | 47.08 | 12 | 47 | 48.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-452 | -49.468132 | 12.786587 | -49 | 28 | 5.28 | 12 | 47 | 11.71 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-453 | -49.473240 | 12.776498 | -49 | 28 | 23.67 | 12 | 46 | 35.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-454 | -49.478402 | 12.766472 | -49 | 28 | 42.25 | 12 | 45 | 59.30 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-455 | -49.483618 | 12.756511 | -49 | 29 | 1.02 | 12 | 45 | 23.44 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-456 | -49.488886 | 12.746615 | -49 | 29 | 19.99 | 12 | 44 | 47.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-457 | -49.494207 | 12.736784 | -49 | 29 | 39.14 | 12 | 44 | 12.42 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-458 | -49.499580 | 12.727020 | -49 | 29 | 58.49 | 12 | 43 | 37.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-459 | -49.505006 | 12.717323 | -49 | 30 | 18.02 | 12 | 43 | 2.36 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS <br> Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-460 | -49.510483 | 12.707693 | -49 | 30 | 37.74 | 12 | 42 | 27.70 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-461 | -49.516011 | 12.698132 | -49 | 30 | 57.64 | 12 | 41 | 53.27 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-462 | -49.521590 | 12.688639 | -49 | 31 | 17.72 | 12 | 41 | 19.10 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-463 | -49.527220 | 12.679216 | -49 | 31 | 37.99 | 12 | 40 | 45.18 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-464 | -49.532899 | 12.669863 | -49 | 31 | 58.44 | 12 | 40 | 11.51 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-465 | -49.538629 | 12.660581 | -49 | 32 | 19.06 | 12 | 39 | 38.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-466 | -49.544408 | 12.651371 | -49 | 32 | 39.87 | 12 | 39 | 4.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-467 | -49.550236 | 12.642233 | -49 | 33 | 0.85 | 12 | 38 | 32.04 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-468 | -49.556112 | 12.633167 | -49 | 33 | 22.00 | 12 | 37 | 59.40 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-469 | -49.562037 | 12.624175 | -49 | 33 | 43.33 | 12 | 37 | 27.03 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-470 | -49.568010 | 12.615257 | -49 | 34 | 4.84 | 12 | 36 | 54.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-471 | -49.574030 | 12.606414 | -49 | 34 | 26.51 | 12 | 36 | 23.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-472 | -49.580097 | 12.597645 | -49 | 34 | 48.35 | 12 | 35 | 51.52 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-473 | -49.586211 | 12.588953 | -49 | 35 | 10.36 | 12 | 35 | 20.23 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-474 | -49.592371 | 12.580337 | -49 | 35 | 32.54 | 12 | 34 | 49.21 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-475 | -49.598577 | 12.571799 | -49 | 35 | 54.88 | 12 | 34 | 18.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-476 | -49.604828 | 12.563338 | -49 | 36 | 17.38 | 12 | 33 | 48.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-477 | -49.611124 | 12.554955 | -49 | 36 | 40.05 | 12 | 33 | 17.84 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-478 | -49.617465 | 12.546651 | -49 | 37 | 2.87 | 12 | 32 | 47.94 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-479 | -49.623850 | 12.538427 | -49 | 37 | 25.86 | 12 | 32 | 18.34 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-480 | -49.630279 | 12.530282 | -49 | 37 | 49.00 | 12 | 31 | 49.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-481 | -49.636751 | 12.522218 | -49 | 38 | 12.30 | 12 | 31 | 19.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-482 | -49.643265 | 12.514236 | -49 | 38 | 35.76 | 12 | 30 | 51.25 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-483 | -49.649823 | 12.506335 | -49 | 38 | 59.36 | 12 | 30 | 22.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-484 | -49.656422 | 12.498516 | -49 | 39 | 23.12 | 12 | 29 | 54.66 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-485 | -49.663063 | 12.490781 | -49 | 39 | 47.03 | 12 | 29 | 26.81 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-486 | -49.669744 | 12.483128 | -49 | 40 | 11.08 | 12 | 28 | 59.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-487 | -49.676467 | 12.475560 | -49 | 40 | 35.28 | 12 | 28 | 32.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-488 | -49.683230 | 12.468076 | -49 | 40 | 59.63 | 12 | 28 | 5.07 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-489 | -49.690032 | 12.460677 | -49 | 41 | 24.12 | 12 | 27 | 38.44 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-490 | -49.696874 | 12.453364 | -49 | 41 | 48.75 | 12 | 27 | 12.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-491 | -49.703754 | 12.446137 | -49 | 42 | 13.52 | 12 | 26 | 46.09 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-492 | -49.710673 | 12.438996 | -49 | 42 | 38.42 | 12 | 26 | 20.39 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-493 | -49.717630 | 12.431943 | -49 | 43 | 3.47 | 12 | 25 | 54.99 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-494 | -49.724624 | 12.424977 | -49 | 43 | 28.65 | 12 | 25 | 29.92 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-495 | -49.731655 | 12.418099 | -49 | 43 | 53.96 | 12 | 25 | 5.16 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-496 | -49.738723 | 12.411310 | -49 | 44 | 19.40 | 12 | 24 | 40.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-497 | -49.745827 | 12.404611 | -49 | 44 | 44.98 | 12 | 24 | 16.60 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-498 | -49.752966 | 12.398000 | -49 | 45 | 10.68 | 12 | 23 | 52.80 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-499 | -49.760141 | 12.391480 | -49 | 45 | 36.51 | 12 | 23 | 29.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-500 | -49.767350 | 12.385051 | -49 | 46 | 2.46 | 12 | 23 | 6.18 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-501 | -50.495199 | 11.321267 | -50 | 29 | 42.72 | 11 | 19 | 16.56 | Art. 76.4(a)(ii):FOS+60 M | 59.98 | 111083 |
| BO-502 | -50.988039 | 10.283077 | -50 | 59 | 16.94 | 10 | 16 | 59.08 | Art. 76.4(a)(ii):FOS+60 M | 49.417 | 91520 |
| BO-503 | -51.334287 | 8.905876 | -51 | 20 | 3.43 | 8 | 54 | 21.15 | Art. 76.4(a)(ii):FOS+60 M | 56.023 | 103755 |
| BO-504 | -51.374514 | 7.943798 | -51 | 22 | 28.25 | 7 | 56 | 37.67 | Art. 76.4(a)(ii):FOS+60 M | 36.268 | 67168 |
| BO-505 | -51.396239 | 7.000581 | -51 | 23 | 46.46 | 7 | 0 | 2.09 | Art. 76.4(a)(ii):FOS+60 M | 35.478 | 65705 |
| BO-506 | -51.396532 | 6.987284 | -51 | 23 | 47.52 | 6 | 59 | 14.22 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-507 | -51.396894 | 6.973991 | -51 | 23 | 48.82 | 6 | 58 | 26.37 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-508 | -51.397323 | 6.960704 | -51 | 23 | 50.36 | 6 | 57 | 38.53 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-509 | -51.397820 | 6.947422 | -51 | 23 | 52.15 | 6 | 56 | 50.72 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-510 | -51.398384 | 6.934147 | -51 | 23 | 54.18 | 6 | 56 | 2.93 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-511 | -51.399016 | 6.920880 | -51 | 23 | 56.46 | 6 | 55 | 15.17 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-512 | -51.399716 | 6.907621 | -51 | 23 | 58.98 | 6 | 54 | 27.44 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-513 | -51.400484 | 6.894372 | -51 | 24 | 1.74 | 6 | 53 | 39.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-514 | -51.401319 | 6.881133 | -51 | 24 | 4.75 | 6 | 52 | 52.08 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-515 | -51.402221 | 6.867905 | -51 | 24 | 8.00 | 6 | 52 | 4.46 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-516 | -51.403191 | 6.854688 | -51 | 24 | 11.49 | 6 | 51 | 16.88 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-517 | -51.404228 | 6.841485 | -51 | 24 | 15.22 | 6 | 50 | 29.35 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-518 | -51.405333 | 6.828295 | -51 | 24 | 19.20 | 6 | 49 | 41.86 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-519 | -51.406505 | 6.815120 | -51 | 24 | 23.42 | 6 | 48 | 54.43 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-520 | -51.407744 | 6.801960 | -51 | 24 | 27.88 | 6 | 48 | 7.06 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-521 | -51.409050 | 6.788817 | -51 | 24 | 32.58 | 6 | 47 | 19.74 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-522 | -51.410422 | 6.775690 | -51 | 24 | 37.52 | 6 | 46 | 32.48 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-523 | -51.411862 | 6.762581 | -51 | 24 | 42.70 | 6 | 45 | 45.29 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-524 | -51.413369 | 6.749492 | -51 | 24 | 48.13 | 6 | 44 | 58.17 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-525 | -51.414942 | 6.736421 | -51 | 24 | 53.79 | 6 | 44 | 11.12 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-526 | -51.416582 | 6.723372 | -51 | 24 | 59.70 | 6 | 43 | 24.14 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-527 | -51.418289 | 6.710343 | -51 | 25 | 5.84 | 6 | 42 | 37.24 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-528 | -51.420061 | 6.697337 | -51 | 25 | 12.22 | 6 | 41 | 50.41 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-529 | -51.421900 | 6.684354 | -51 | 25 | 18.84 | 6 | 41 | 3.67 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |


| ECS Point | Latitude | Longitude | Latitude |  |  | Longitude |  |  | Article 76 provision invoked | Distance from previous point |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Degrees | Degrees | Deg. | Min. | Sec. | Deg. | Min. | Sec. |  | Naut. miles (M) | meters |
| BO-530 | -51.423805 | 6.671395 | -51 | 25 | 25.70 | 6 | 40 | 17.02 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-531 | -51.425777 | 6.658460 | -51 | 25 | 32.80 | 6 | 39 | 30.46 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-532 | -51.427814 | 6.645551 | -51 | 25 | 40.13 | 6 | 38 | 43.98 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-533 | -51.429917 | 6.632669 | -51 | 25 | 47.70 | 6 | 37 | 57.61 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-534 | -51.432085 | 6.619814 | -51 | 25 | 55.51 | 6 | 37 | 11.33 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-535 | -51.434319 | 6.606986 | -51 | 26 | 3.55 | 6 | 36 | 25.15 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-536 | -51.436618 | 6.594188 | -51 | 26 | 11.83 | 6 | 35 | 39.08 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-537 | -51.438983 | 6.581420 | -51 | 26 | 20.34 | 6 | 34 | 53.11 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-538 | -51.441412 | 6.568682 | -51 | 26 | 29.08 | 6 | 34 | 7.26 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-539 | -51.443906 | 6.555976 | -51 | 26 | 38.06 | 6 | 33 | 21.51 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-540 | -51.446465 | 6.543302 | -51 | 26 | 47.28 | 6 | 32 | 35.89 | Art. 76.4(a)(ii):FOS+60 M | 0.5 | 926 |
| BO-541 | -51.491318 | 6.106961 | -51 | 29 | 28.75 | 6 | 6 | 25.06 | $\begin{aligned} & \text { Art. } 76.4(\mathrm{a})(\mathrm{ii}): \mathrm{FOS}+60 \mathrm{M} \text {, } \\ & 200 \mathrm{M} \end{aligned}$ | 16.592 | 30728 |

Points 1 and 541 are located at the intersection of a line not greater than 60 M between point 2 and the 60 M arc subtended by FOS 1 and between point 540 and the 60 M arc subtended by FOS 12 respectively

## ANNEX II: REFERENCES

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[^0]:    ${ }^{1}$ The aim of this Summary is to provide information which is not of confidential or proprietary nature in order to facilitate the function of the Secretary-General in accordance with Rule 11.3 of Annex III to the Rules of Procedure. This Summary is based on excerpts of the Recommendations and may refer to material not necessarily included either in the full Recommendations or this Summary.

[^1]:    ${ }^{1}$ On whose behalf the Submission was received by DOALOS.
    ${ }^{2}$ See Continental Shelf Notification CLCS.30.2009.LOS at http://www.un.org/depts/los/clcs new/submissions files/submission nor 30 2009.htm.
    ${ }^{3}$ Mr. Brekke was a member of the Commission from 1997 to 2002, from 2002 to 2007 and from 2007 to 2012.

[^2]:    ${ }^{4}$ See Continental Shelf Notification CLCS.30.2009.LOS.Rev. 1 at http://www.un.org/depts/los/clcs new/submissions files/submission nor 30 2009.htm

[^3]:    * The illustrative maps marked by an asterisk are prepared by the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations, upon the request of the Subcommission established to consider the Submission made by Norway in respect of Bouvetøya and Dronning Maud Land on the basis of the submitted information. The designation employed and the presentation of material on these maps does not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

