Area Notice Message Version: 2.3

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Please post any suggested changes to the working version on the AIS SharePoint Site located at:

https://km3.alionscience.com/sites/ais/default.aspx

For access to the SharePoint Site contact: gwjohnson@alionscience.com

Summary of changes from previous version:

- **added precision field to Site Location Report**
- **Corrected Vertical Current Profile (3D) Report (negative rates needed)**
- **Corrected text in Air Gap Report description fields**

1.1 Area Notice

The purpose of the Area Notice is to transmit information that pertains to a region or area, for example a security zone, an area of fog, or dredging operations. The areas that are being defined can be circles, rectangles, polygons, or sectors. They can also be defined as a simple point or series of points (polyline). The Area Notice message can be made up of multiple subareas in which case the total area is the union of the subareas. This message can also be used to convey advisory lines or tracks (using the polyline subarea); however, the Route Information message should be used for recommended or directed routes.

An Area Notice should be used to broadcast dynamic information (i.e., information that is time- dependent). These messages are to be used for a specific time period, and will automatically timeout at the end of the period. If the Area Notice must be in place longer, then a new Area Notice must be transmitted with a new start and end time. It should be only used to convey pertinent time-critical navigation-safety information to mariners or authorities, and not as a means to convey information already provided by official nautical charts or publications.

1.1.1 Usage notes

1. The information is time-dependent (i.e., has start date/time and duration). If an Area Notice (except for a cancellation message – Area Type 126) is received without a valid start date/time and duration then it should be discarded.

2. When the current month is December and the notice start month is January, the notice start year shall be the current year plus one; the notice start year shall be the current year in all other cases.
3. The message may be transmitted prior to the start time/date to allow for advance notice. To avoid confusion, it should not be transmitted more than one day in advance.
4. The message should not be transmitted beyond the designated end date/time except for a cancellation message. A cancellation message can be transmitted before the designated end date/time using the same Message Linkage ID with an Area Type of 126 (cancellation), a Duration = 0, and start time fields all set to “not available.”
5. Presentation software should automatically remove the area notice from the display after the end date/time or upon receipt of a cancellation message.
6. Up to 5-slot messages can be created, but messages with more than three slots should be avoided. Messages with more slots are less likely to be received due to RF noise or packet collision.
7. A circular sub-area (Type 0) with a zero radius (scale factor should also be set to 0) is a point that can be used as a node in a polygon. This is used when more precision is needed than is possible using the points in the **polygon** subarea (the trade-off is more subareas and a longer message).
8. Polygon sub-areas (Type 4) must follow immediately after a circle/point sub-area (Type 0 sub-area with 0 radius) in the same Area Notice message. The point defines the start of the line segments. If more than five points are needed for a polygon, then additional polygon sub-areas can be used. However, they must follow immediately after the first polygon sub-area and be contained in the same Area Notice message.
9. A rectangular sub-area (Type 1) with a zero for both North and East dimensions (scale factor and orientation should also be set to 0) is a point that can be used as a waypoint or to define a line. This is used when more precision is needed than is possible using the points in the **polyline** subarea (the trade-off is more subareas and a longer message).
10. Waypoints can be specified using the polyline/waypoint sub-area (Type 3). If more precision is needed then multiple rectangle/point sub-areas (Type 1 sub-area with 0 North and East dimensions) can be used (e.g., one for each waypoint).
11. When waypoints are specified using polyline or rectangle/point sub-areas, they should be numbered/used in the order that they appear in the message.
12. Polyline sub-areas (Type 3) must follow immediately after a rectangle/point sub-area (Type 1 sub-area with 0 for North and East dimensions) in the same Area Notice message. The point defines the start of the line segments. If more than five points are needed for a polyline, then additional

polyline sub-areas can be used. However, they must follow immediately after the first polyline sub-area and be contained in the same Area Notice message.

13. The polygon sub-area (Area Shape 4) should be used to create polygon areas. However, if more precision is needed to specify the points in the polygon then the circle/point sub-area (Type 0 with radius set to zero) can be used, one sub-area per point. All points (sub-areas of Type 0) must occur in sequence and be contained within the same message. The polgon is formed by connecting the points and closing the shape from the last point back to the first.
14. Distances and bearings between points in the Area Notice should be calculated using Rhumb lines not Great Circles.
15. The Message Linkage ID and the first six digits of the source MMSI can be used to link additional text (e.g., a separate Text Description message). This information must be included in both the Area Notice and additional Text Description message.
16. The total area defined by one Area Notice (one Message Linkage ID) is the union of all of the sub-areas contained in the message.
17. If the same Message Linkage ID is retransmitted with different sub-areas and/or times the presentation software should replace the old Area with the new.
18. The Message Linkage ID must be unique across all ASMs to which it applies. In this way, the Message Linkage ID and Source MMSI are connected to the same text message.

Table 1: Area Notice – Broadcast

	Parameter			# of bits	Description
Standard Message Header			Message ID	6	Identifier for Message 8; always 8.
			Repeat Indicator	2	Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, Annex 2, § 4.6.1). 0 – 3; 0 = default; 3 = do not repeat any more. Set to 0 (default).
			Source MMSI	30	MMSI number of source station. This varies according to the transmitter ID.
			Spare	2	Not used. Set to zero
Binary Data			Designated Area Code	10	Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5). Set to 366? (US).
			Function Identifier	6	Function identifier. Set to 22?
	Application Data		Message Linkage ID	10	A source specific running number, unique across all binary messages equipped with Message Linkage ID. Used to link additional information to the message by a Text Description message. The Message Linkage ID and the first six digits of the source MMSI uniquely identify the sent message. 1 – 1,023; 0 = not available = default.
			Notice Description	7	Notice Description as per Table 11. Set to 0 – 127 according to description. If 127, there must be associated text (see Table 10).
		Start time of Area	UTC month	4	UTC month of the Area start. 1 – 12; 0 = UTC month not available = default; 13 – 15 (reserved for future use).
			UTC day	5	UTC day of the Area start. 1 – 31; 0 = UTC day not available = default.
			UTC hour	5	UTC hour of the Area start. 0 – 23; 24 = UTC hour not available = default; 25 – 31 (reserved for future use).
			UTC minute	6	UTC minute of the Area start. 0 – 59; 60 = UTC minute not available = default; 61 – 63 (reserved for future use.)
			Duration	18	Minutes until end of Area Notice, measured from start time of Area Notice. Maximum duration is 262,142 minutes (182.04 days). 0 = cancel Area Notice; 1 – 262,142; 262,143 = undefined = default.
			Sub-area 1	90	Area description, structured as in Table 5 - Table 10. A short text description may be associated

	Parameter		# of bits	Description
				with the areas using Sub-area 5: Associated text. 2-slot message.
		Sub-area 2	90	Optional additional area, structured as in Table 5 - Table 10. 2-slot message.
		Sub-area 3	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 4	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 5	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 6	90	Optional additional area, structured as in Table 5 - Table 10. 4-slot message.
		Sub-area 7	90	Optional additional area, structured as in Table 5 - Table 10. 4-slot message.
		Sub-area 8	90	Optional additional area, structured as in Table 5 - Table 10. 5-slot message.
		Sub-area 9	90	Optional additional area, structured as in Table 5 - Table 10. 5-slot message.
		Sub-area 10	90	Optional additional area, structured as in Table 5 - Table 10. 5-slot message.
		Spare	1-7	From 1 to 7 spare bits, added to make the total message length an even number of bytes. Set all spare bits to 0.
Total			**208 – 1016**	**2-5 slot message**

Table 2: Area Notice – Addressed

	Parameter	# of bits	Description
Message	Message ID	6	Identifier for Message 6; Set to 6 addressed, acknowledgement needed.

	Parameter			# of bits	Description
			Repeat Indicator	2	Used by the repeater to indicate how many times a message has been repeated. (See ITU-R M.1371-3, Annex 2, § 4.6.1). 0-3; 0 = default; 3 = do not repeat any more. Set to 0 (default).
			Source MMSI	30	MMSI number of source station. Varies according to the transmitter ID.
			Sequence number	2	0 – 3; refer to ITU-R M.1371-3, Annex 2, § 5.3.1.
			Destination MMSI	30	MMSI number of destination station.
			Retransmit Flag	1	Retransmit Flag. 0 = no retransmission = default; 1 = retransmitted.
			Spare	1	Not used. Set to zero.
Binary Data			Designated Area Code	10	Designated area code (DAC). (See Rec. ITU-R M.1371-3 § 2.1, Annex 5). Set to 366? (US).
			Function Identifier	6	Function identifier. Set to 23?
	Application Data		Message Linkage ID	10	Used to link additional information to the message by a Text Description message. The Message Linkage ID and the first six digits of the source MMSI uniquely identify the sent message. 1 – 1,023; 0 = not available = default.
			Notice Description	7	Notice Description as per Table 11. Set to 0 – 127 according to description. If 127, there must be associated text (see Table 10).
		Start time of Area	UTC month	4	UTC month of the Area start. 1 – 12; 0 = UTC month not available = default; 13 – 15 (reserved for future use).
			UTC day	5	UTC day of the Area start. 1 – 31; 0 = UTC day not available = default.
			UTC hour	5	UTC hour of the Area start. 0 – 23; 24 = UTC hour not available = default; 25 – 31 (reserved for future use).
			UTC minute	6	UTC minute of the Area start. 0 – 59; 60 = UTC minute not available = default; 61 – 63 (reserved for future use.)
			Duration	18	Minutes until end of Area Notice, measured from start time of Area Notice. Maximum duration is 262,142 minutes (182.04 days). 0 = cancel Area Notice; 1 – 262,142; 262,143 = undefined = default.
			Sub-area 1	90	Area description, structured as in Table 5 - Table 10. A short text description may be associated

	Parameter		# of bits	Description
				with the areas using Sub-area 5: Associated text. 2-slot message.
		Sub-area 2	90	Optional additional area, structured as in Table 5 - Table 10. 2-slot message.
		Sub-area 3	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 4	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 5	90	Optional additional area, structured as in Table 5 - Table 10. 3-slot message.
		Sub-area 6	90	Optional additional area, structured as in Table 5 - Table 10. 4-slot message.
		Sub-area 7	90	Optional additional area, structured as in Table 5 - Table 10. 4-slot message.
		Sub-area 8	90	Optional additional area, structured as in Table 5 - Table 10. 5-slot message.
		Sub-area 9	90	Optional additional area, structured as in Table 5 - Table 10. 5-slot message.
		Spare	1-7	From 1 to 7 spare bits (0) are added to make the total message length an even number of bytes.
		Total	**234 – 960**	**2-5 slot message**

Table 3: Area Notice – Number of Slots

Number of sub-areas transmitted	1	2	3	4	5	6	7	8	9	10
Number of bits used for a broadcast message	208	296	384	472	568	656	744	832	928	1016
Number of slots used for a broadcast message	2	2	3	3	3	4	4	5	5	5
Number of bits used for an addresses message	234	328	416	504	600	688	776	864	960	N/A

Number of slots used for an addressed message	2	2	3	3	3	4	4	5	5	N/A

Table 4: Area Notice Sub-Areas

Number	Area Shape	Table for Definition
0	Circle or point	5
1	Rectangle	6
2	Sector	7
3	Polyline	8
4	Polygon	9
5	Associated text	10
6-7	Reserved	--

Table 5: Circle or Polygon Point

	Parameter	# of bits	Description
Area Notice: Sub-area	Area Shape	3	Defines the shape of the area. Set to 0 for Circle.
	Scale Factor	2	Scale factor. This is a multiplier for the dimensions of the shape. 1 (default), 10, 100, & 1,000 (scale factor = 10^n where n=decimal value of scale factor). 0 = 1x (default), 1 = 10x; 2 = 100x, 3 = 1000x.
	Longitude	28	Longitude of the center in 1/10,000 minute (±180°). East = positive, West = negative (as per 2's complement); 181° (6791AC0h) = not available = default.
	Latitude	27	Latitude of the center in 1/10,000 minute (±90°). North = positive, South = negative (as per 2's complement); 91° (3412140h) = not available = default.
	Precision	3	Precision of the Lat/Long. Data to be truncated to the number of decimal places specified in this parameter. 0-4 decimal places. Default = 4 (no truncation). 5-6 = Reserved. 7 = Do not use.
	Radius	12	Defines the size of the circular area. This is the radius of the circle in meter increments. 0 = point (default); (scale factor should also be set to 0 in this case) 1 – 4,095m. This is multiplied by the scale factor to give a maximum size of 4,095,000m (4,095km).
	Spare	15	Spare. Do not use. Set to 0.
	Total	**90**	**90 bit subarea**

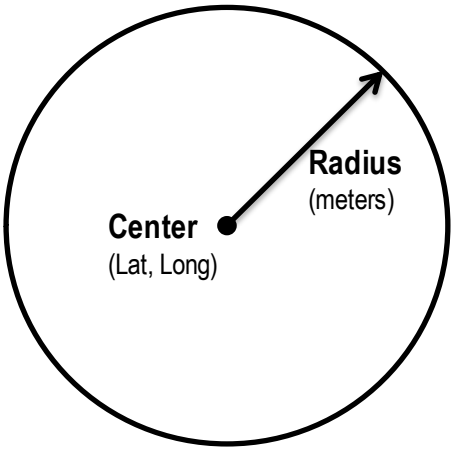

Figure 1: Circle diagram.

Table 6: Rectangle or Line or Line Point

	Parameter	# of bits	Description
Area Notice: Sub-area	Area Shape	3	Defines the shape of the area. Set to 1 for Rectangle.
	Scale Factor	2	Scale factor. This is a multiplier for the dimensions of the shape. 1 (default), 10, 100, & 1,000 (scale factor = 10^n where n=decimal value of scale factor). 0 = 1x (default), 1 = 10x; 2 = 100x, 3 = 1000x.
	Longitude	28	Longitude of the corner point[1] in 1/10,000 minute. (±180°). East = positive, West = negative (as per 2's complement); 181° (6791AC0h) = not available = default.
	Latitude	27	Latitude of the corner point[1] in 1/1,000 minute (±90°). North = positive, South = negative (as per 2's complement); 91° (3412140h) = not available = default.
	E dimension	8	Box dimension East from the corner point in meter increments. This is multiplied by the scale factor to give a maximum dimension of 255,000m (255 km). 0=line North-South (default)[2]; 1 – 255 * scale factor meters.
	N dimension	8	Box dimension North from the corner point in meter steps. This is multiplied by the scale factor to give a maximum dimension of 255,000m (255 km). 0=line East-West (default); 1 - 255 * scale factor meters.
	Orientation	9	Rotation of area in degree steps. Area is rotated clockwise this number of degrees about the position above. 0 = no rotation = default; 1 - 359 = rotation in degrees; 360 – 511 (reserved for future use).
	Spare	5	Spare. Do not use. Set to 0.
Total		**90**	**90 bit subarea**

[1] Corner point is the SouthWest corner – prior to any rotation.

[2] If both North and East Dimensions are 0 then the shape collapses to a point to be used as a waypoint or in a line.

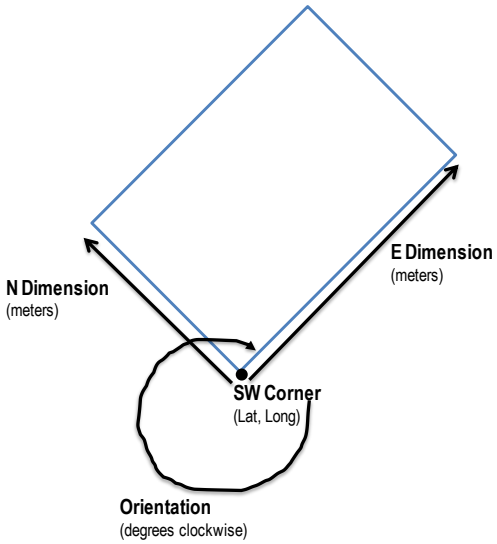

Figure 2: Description of the process required to define a "rectangle" area.

Table 7: Sector

	Parameter	# of bits	Description
Area Notice: Sub-area	Area Shape	3	Defines the shape of the area. Set to 2 for Sector.
	Scale Factor	2	Scale factor. This is a multiplier for the dimensions of the shape. 1 (default), 10, 100, & 1,000 (scale factor = 10^n where n=decimal value of scale factor). 0 = 1x (default), 1 = 10x; 2 = 100x, 3 = 1000x.
	Longitude	28	Longitude of the center in 1/10 000 minute (±180°). East = positive, West = negative (as per 2's complement); 181° (6791AC0h) = not available = default.
	Latitude	27	Latitude of the center in 1/10,000 minute (±90°). North = positive, South = negative (as per 2's complement); 91° (3412140h) = not available = default.
	Radius	12	Defines the size of the sector. This is the radius of the sector in meter steps. This is multiplied by the scale factor to give a maximum size of 4,095,000 m (4095 km). 0 = point = default; 1 – 4,095 * scale factor meters.
	Left Boundary	9	Orientation of the left boundary edge of the sector. This is in degree steps measured clockwise from true North about the center point. 0 = no rotation = default; 1-359 = rotation in degrees; 360-511 (not for use).
	Right Boundary	9	Orientation of the right boundary edge of the sector. This is in degree steps measured clockwise from true North about the centre point. Total sector area is the area measured from the left boundary clockwise to the right boundary. 0 = no rotation = default;

			1-359 = rotation in degrees; 360-511 (not used)
Total		**90**	**90 bit subarea**

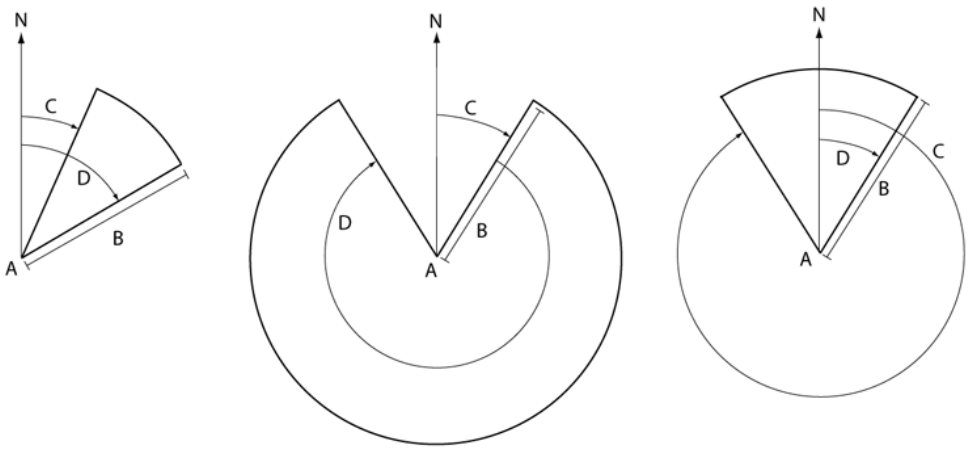

Figure 3- Sector description. a) Centre point, b) Sector radius, c) Sector bearings from centre point, left boundary, d) Sector bearings from centre point, right boundary.

Table 8: Polyline

	Parameter	# of bits	Description
Area Notice: Sub-area	Area Shape	3	Defines the shape of the area. Set to 3 for Polyline (open area or line). The initial point (point 0) is defined by an Area Shape = 0 (circle/point)
	Scale Factor	2	Scale factor. This is a multiplier for the dimensions of the shape. 1 (default), 10, 100, & 1,000 (scale factor = 10^n where n=decimal value of scale factor). 0 = 1x (default), 1 = 10x; 2 = 100x, 3 = 1000x.
	Point 1 Angle	10	True bearing (in half-degree steps) from Point 0 to Point 1 or from the last Point in a Polyline directly preceding this Polyline to Point 1 in this Polyline. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 1 Distance	11	Distance (in meters) from Point 0 or from the last Point in a Polyline directly preceding this Polyline to Point 1 in this Polyline. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 2 Angle	10	True bearing (in half-degree steps) from Point 1 to Point 2. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 2 Distance	11	Distance (in meters) from Point 1 to Point 2. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 3 Angle	10	This is the true bearing (in half-degree steps) from Point 2 to Point 3. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 3 Distance	11	This is the distance (in meters) from Point 2 to Point 3.. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 4 Angle	10	This is the true bearing (in half-degree steps) from Point 3 to Point 4. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 4 Distance	11	This is the distance (in meters) from Point 3 to Point 4. . Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Spare	1	Not used. Set to 0.
	Total	**90**	**90 bit subarea**

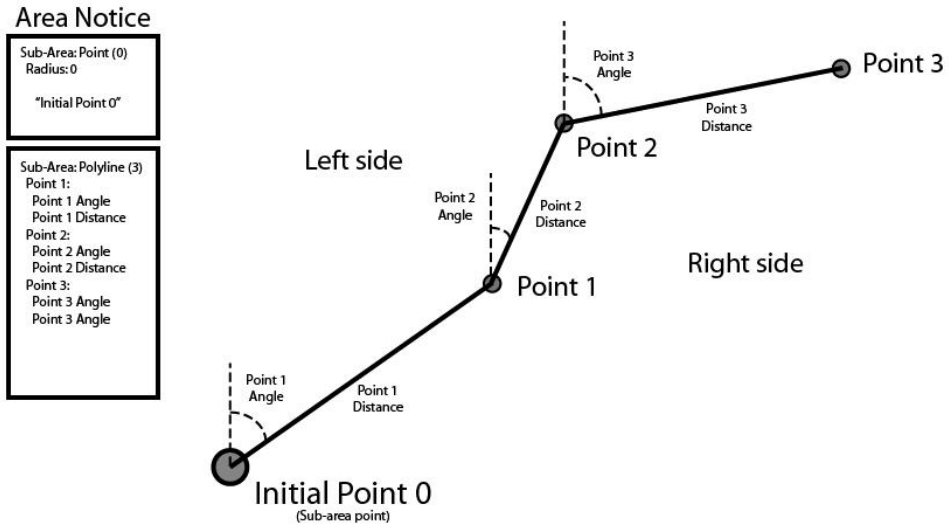

Figure 4 - Graphic description of a waypoint/polyline, showing angle and distance between points. If one side of a polyline is to be a boundary (e.g., edge of ice area), this is defined by the left side of the line in order of sequence from the initial sub-area point (Point 0).

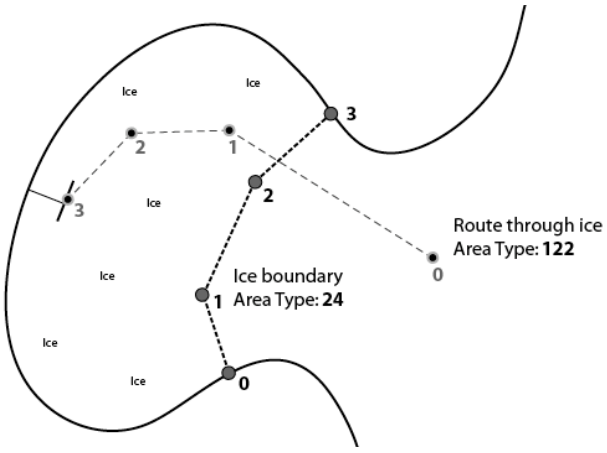

Figure 5 - Graphic depiction of: 1) ice boundary between sea ice and open water, and 2) recommended route through the sea ice area.

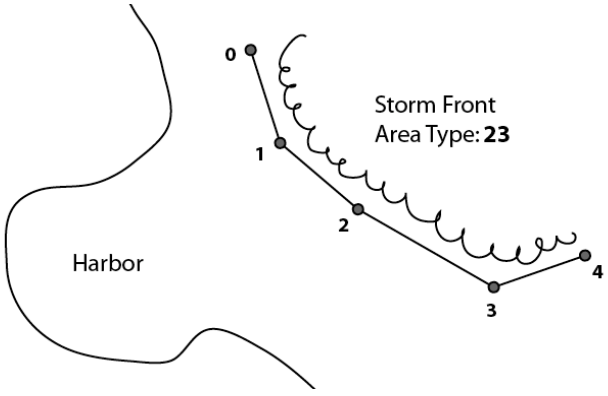

Figure 6 - A graphic depiction of a storm front message.

Table 9: Polygon

	Parameter	# of bits	Description
Area Notice: Sub-area	Area Shape	3	Defines the shape of the area. Set to 4 for Polygon (closed area). The polygon shape is closed by connecting the last defined point back to the initial point (Point 0). To be preceded by an Area Shape = 0 (circle).
	Scale Factor	2	Scale factor. This is a multiplier for the dimensions of the shape. 1 (default), 10, 100, & 1,000 (scale factor = 10^n where n=decimal value of scale factor). 0 = 1x (default), 1 = 10x; 2 = 100x, 3 = 1000x.
	Point 1 Angle	10	True bearing (in half-degree steps) from Point 0 to Point 1 or from the last Point in a Polyline directly preceding this Polyline to Point 1 in this Polyline. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 1 Distance	11	Distance (in meters) from Point 0 or from the last Point in a Polyline directly preceding this Polyline to Point 1 in this Polyline. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 2 Angle	10	True bearing (in half-degree steps) from Point 1 to Point 2. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 2 Distance	11	Distance (in meters) from Point 1 to Point 2. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 3 Angle	10	True bearing (in half-degree steps) from Point 2 to Point 3. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 3 Distance	11	Distance (in meters) from Point 2 to Point 3. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Point 4 Angle	10	True bearing (in half-degree steps) from Point 3 to Point 4. Degrees bearing = decimal value (0-719)/2; 720 = not available (no point) = default; 721 – 1,023 (not for use).
	Point 4 Distance	11	Distance (in meters) from Point 3 to Point 4. Multiply by the scale factor to give a maximum of 2,047,000m (2,047 km). 0 = default (no point); 1- 2,047 * scale factor meters.
	Spare	1	Not used. Set to 0.
	Total	**90**	**90 bit subarea**

Table 10: Associated Text

	Parameter	# of bits	Description
Area Notice Sub-area	Area Shape	3	Defines the shape of the area. Set to 5 for Associated text. This text is associated with the area defined in this binary message. Multiple Associated Text sub-areas are glued together in the order they appear in the message.
	Text	84	Fourteen 6-bit ASCII characters, 6 bit ASCII characters as per Table 44 in ITU 1371-3. If less than 14 characters are required, then the remainder of the field should be filled with "@" characters (set bits to 0). On the ECS the @ characters at the end should not be displayed.
	Spare	3	Not used. Set to 0.
Total		**90**	**90 bit subarea**

Table 11: Notice Description

0	Caution Area: Marine mammal habitat	**32**	Restricted Area: Fishing prohibited	**64**	Distress Area: Vessel disabled and adrift	**96**	Chart Feature: Sunken vessel
1	Caution Area: Marine mammals in area - reduce speed	**33**	Restricted Area: No anchoring	**65**	Distress Area: Vessel sinking	**97**	Chart Feature: Submerged object
2	Caution Area: Marine mammals in area - stay clear	**34**	Restricted Area: Entry approval required prior to transit	**66**	Distress Area: Vessel abandoning ship	**98**	Chart Feature: Semi-submerged object
3	Caution Area: Marine mammals in area - report sightings	**35**	Restricted Area: Entry prohibited	**67**	Distress Area: Vessel requests medical assistance	**99**	Chart Feature: Shoal area
4	Caution Area: Protected Habitat - reduce speed	**36**	Restricted Area: Active military OPAREA	**68**	Distress Area: Vessel flooding	**100**	Chart Feature: Shoal area due north
5	Caution Area: Protected habitat - stay clear	**37**	Restricted Area: Firing - danger area	**69**	Distress Area: Vessel fire/explosion	**101**	Chart Feature: Shoal area due east

6	Caution Area: Protected habitat - no fishing or anchoring	**38**	Restricted Area: Drifting mines	**70**	Distress Area: Vessel grounding	**102**	Chart Feature: Shoal area due south
7	Caution Area: Derelicts (drifting objects)	**39**	(reserved for future use)	**71**	Distress Area: Vessel collision	**103**	Chart Feature: Shoal area due west
8	Caution Area: Traffic congestion	**40**	Anchorage Area: Anchorage open	**72**	Distress Area: Vessel listing/capsizing	**104**	Chart Feature: Channel obstruction
9	Caution Area: Marine event	**41**	Anchorage Area: Anchorage closed	**73**	Distress Area: Vessel under assault	**105**	Chart Feature: Reduced vertical clearance
10	Caution Area: Divers down	**42**	Anchorage Area: Anchoring prohibited	**74**	Distress Area: Person overboard	**106**	Chart Feature: Bridge closed
11	Caution Area: Swim area	**43**	Anchorage Area: Deep draft anchorage	**75**	Distress Area: SAR area	**107**	Chart Feature: Bridge partially open
12	Caution Area: Dredge operations	**44**	Anchorage Area: Shallow draft anchorage	**76**	Distress Area: Pollution response area	**108**	Chart Feature: Bridge fully open
13	Caution Area: Survey operations	**45**	Anchorage Area: Vessel transfer operations	**77**	(reserved for future use)	**109**	(reserved for future use)
14	Caution Area: Underwater operation	**46**	(reserved for future use)	**78**	(reserved for future use)	**110**	(reserved for future use)
15	Caution Area: Seaplane operations	**47**	(reserved for future use)	**79**	(reserved for future use)	**111**	(reserved for future use)
16	Caution Area: Fishery - nets in water	**48**	(reserved for future use)	**80**	Instruction: Contact VTS at this point/juncture	**112**	Report from ship: Icing info
17	Caution Area: Cluster of fishing vessels	**49**	(reserved for future use)	**81**	Instruction: Contact Port Administration at this point/juncture	**113**	Report from ship: Intended route
18	Caution Area: Fairway closed	**50**	(reserved for future use)	**82**	Instruction: Do not proceed beyond this point/juncture	**114**	Report from ship: Miscellaneous information – define in Associated text field

19	Caution Area: Harbor closed	**51**	(reserved for future use)	**83**	Instruction: Await instructions prior to proceeding beyond this point/juncture	**115**	(reserved for future use)
20	Caution Area: Risk (define in associated text field)	**52**	(reserved for future use)	**84**	Proceed to this location – await instructions	**116**	Reserved for Future Use
21	Caution Area: Underwater vehicle operation	**53**	(reserved for future use)	**85**	Clearance granted – proceed to berth	**117**	(reserved for future use)
22	(reserved for future use)	**54**	(reserved for future use)	**86**	(reserved for future use)	**118**	(reserved for future use)
23	Environmental Caution Area: Storm front (line squall)	**55**	(reserved for future use)	**87**	(reserved for future use)	**119**	(reserved for future use)
24	Environmental Caution Area: Hazardous sea ice	**56**	Security Alert - Implement USA MARSEC Level 1	**88**	Information: Pilot boarding position	**120**	Route: Recommended Route
25	Environmental Caution Area: Storm warning (storm cell or line of storms)	**57**	Security Alert - Implement USA MARSEC Level 2	**89**	Information: Icebreaker waiting area	**121**	Route: Alternative Route
26	Environmental Caution Area: High wind	**58**	Security Alert - Implement USA MARSEC Level 3	**90**	Information: Places of refuge	**122**	Route: Recommended Route through ice
27	Environmental Caution Area: High waves	**59**	(reserved for future use)	**91**	Information: Position of icebreakers	**123**	(reserved for future use)
28	Environmental Caution Area: Restricted visibility (fog, rain, etc)	**60**	(reserved for future use)	**92**	Information: Location of response units	**124**	(reserved for future use)
29	Environmental Caution Area: Strong currents	**61**	(reserved for future use)	**93**	Information: VTS active target	**125**	Other – Define in associated text field
30	Environmental Caution Area: Heavy icing	**62**	(reserved for future use)	**94**	Information: Rogue or suspicious vessel	**126**	Cancellation – cancel area as identified by Message Linkage ID
31	Environmental Caution Area: Oil or other hazardous substance in area	**63**	(reserved for future use)	**95**	Information: Vessel requesting non-distress assistance	**127**	Undefined (default)