RESOLUTION A.893(21)
adopted on 25 November 1999

GUIDELINES FOR VOYAGE PLANNING

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO section A-VIII/2, Part 2 (Voyage planning) of the Seafarers' Training, Certification and Watchkeeping Code,

RECALLING FURTHER the essential requirements contained in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers and the International Convention for the Safety of Life at Sea concerning voyage planning, including those relating to officers and crew, shipborne equipment, and safety management systems,

RECOGNIZING the essential importance for safety of life at sea, safety of navigation and protection of the marine environment of a well planned voyage, and therefore the need to update the 1978 Guidance on voyage planning issued as SN/Circ.92,

NOTING the request of the Assembly in resolution A.790(19) that the Maritime Safety Committee consider the issue of voyage planning in conjunction with its review of the Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships (INF Code), and the Committee's decision that consideration of the issue of voyage planning should not be restricted to vessels carrying materials subject to the INF Code but should apply to all ships engaged on international voyages,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Safety of Navigation at its forty-fifth session:

1. ADOPTS the Guidelines for voyage planning set out in the Annex to the present resolution;

2. INVITES Governments to bring the annexed Guidelines to the attention of masters of vessels flying their countries' flag, shipowners, ship operators, shipping companies, maritime pilots, training institutions and all other parties concerned, for information and action as appropriate;

3. REQUESTS the Maritime Safety Committee to keep the said Guidelines under review and to amend them as appropriate.
ANNEX

DRAFT GUIDELINES FOR VOYAGE PLANNING

1 Objectives

1.1 The development of a plan for voyage or passage, as well as the close and continuous monitoring of the vessel's progress and position during the execution of such a plan, are of essential importance for safety of life at sea, safety and efficiency of navigation and protection of the marine environment.

1.2 The need for voyage and passage planning applies to all vessels. There are several factors that may impede the safe navigation of all vessels and additional factors that may impede the navigation of large vessels or vessels carrying hazardous cargoes. These factors will need to be taken into account in the preparation of the plan and in the subsequent monitoring of the execution of the plan.

1.3 Voyage and passage planning includes appraisal, i.e. gathering all information relevant to the contemplated voyage or passage; detailed planning of the whole voyage or passage from berth to berth, including those areas necessitating the presence of a pilot; execution of the plan; and the monitoring of the progress of the vessel in the implementation of the plan. These components of voyage/passage planning are analysed below.

2 Appraisal

2.1 All information relevant to the contemplated voyage or passage should be considered. The following items should be taken into account in voyage and passage planning:

   .1 the condition and state of the vessel, its stability, and its equipment; any operational limitations; its permissible draught at sea in fairways and in ports; its manoeuvring data, including any restrictions;

   .2 any special characteristics of the cargo (especially if hazardous), and its distribution, stowage and securing on board the vessel;

   .3 the provision of a competent and well-rested crew to undertake the voyage or passage;

   .4 requirements for up-to-date certificates and documents concerning the vessel, its equipment, crew, passengers or cargo;

   .5 appropriate scale, accurate and up-to-date charts to be used for the intended voyage or passage, as well as any relevant permanent or temporary notices to mariners and existing radio navigational warnings;

   .6 accurate and up-to-date sailing directions, lists of lights and lists of radio aids to navigation; and

   .7 any relevant up-to-date additional information, including:

       .1 mariners' routeing guides and passage planning charts, published by competent authorities;
.2 current and tidal atlases and tide tables;

.3 climatological, hydrographical, and oceanographic data as well as other appropriate meteorological information;

.4 availability of services for weather routeing (such as that contained in Volume D of the World Meteorological Organization's Publication No. 9);

.5 existing ships' routeing and reporting systems, vessel traffic services, and marine environmental protection measures;

.6 volume of traffic likely to be encountered throughout the voyage or passage;

.7 if a pilot is to be used, information relating to pilotage and embarkation and disembarkation including the exchange of information between master and pilot;

.8 available port information, including information pertaining to the availability of shore-based emergency response arrangements and equipment; and

.9 any additional items pertinent to the type of the vessel or its cargo, the particular areas the vessel will traverse, and the type of voyage or passage to be undertaken.

2.2 On the basis of the above information, an overall appraisal of the intended voyage or passage should be made. This appraisal should provide a clear indication of all areas of danger; those areas where it will be possible to navigate safely, including any existing routeing or reporting systems and vessel traffic services; and any areas where marine environmental protection considerations apply.

3 Planning

3.1 On the basis of the fullest possible appraisal, a detailed voyage or passage plan should be prepared which should cover the entire voyage or passage from berth to berth, including those areas where the services of a pilot will be used.

3.2 The detailed voyage or passage plan should include the following factors:

.1 the plotting of the intended route or track of the voyage or passage on appropriate scale charts: the true direction of the planned route or track should be indicated, as well as all areas of danger, existing ships' routeing and reporting systems, vessel traffic services, and any areas where marine environmental protection considerations apply;

.2 the main elements to ensure safety of life at sea, safety and efficiency of navigation, and protection of the marine environment during the intended voyage or passage; such elements should include, but not be limited to:

.1 safe speed, having regard to the proximity of navigational hazards along the intended route or track, the manoeuvring characteristics of the vessel and its draught in relation to the available water depth;
necessary speed alterations en route, e.g., where there may be limitations because of night passage, tidal restrictions, or allowance for the increase of draught due to squat and heel effect when turning;

minimum clearance required under the keel in critical areas with restricted water depth;

positions where a change in machinery status is required;

course alteration points, taking into account the vessel's turning circle at the planned speed and any expected effect of tidal streams and currents;

the method and frequency of position fixing, including primary and secondary options, and the indication of areas where accuracy of position fixing is critical and where maximum reliability must be obtained;

use of ships' routeing and reporting systems and vessel traffic services;

considerations relating to the protection of the marine environment; and

contingency plans for alternative action to place the vessel in deep water or proceed to a port of refuge or safe anchorage in the event of any emergency necessitating abandonment of the plan, taking into account existing shore-based emergency response arrangements and equipment and the nature of the cargo and of the emergency itself.

3.3 The details of the voyage or passage plan should be clearly marked and recorded, as appropriate, on charts and in a voyage plan notebook or computer disk.

3.4 Each voyage or passage plan as well as the details of the plan, should be approved by the ship's master prior to the commencement of the voyage or passage.

4 Execution

4.1 Having finalized the voyage or passage plan, as soon as time of departure and estimated time of arrival can be determined with reasonable accuracy, the voyage or passage should be executed in accordance with the plan or any changes made thereto.

4.2 Factors which should be taken into account when executing the plan, or deciding on any departure therefrom include:

the reliability and condition of the vessel's navigational equipment;

estimated times of arrival at critical points for tide heights and flow;

meteorological conditions, (particularly in areas known to be affected by frequent periods of low visibility) as well as weather routeing information;

daytime versus night-time passing of danger points, and any effect this may have on position fixing accuracy; and

traffic conditions, especially at navigational focal points.
4.3 It is important for the master to consider whether any particular circumstance, such as the forecast of restricted visibility in an area where position fixing by visual means at a critical point is an essential feature of the voyage or passage plan, introduces an unacceptable hazard to the safe conduct of the passage; and thus whether that section of the passage should be attempted under the conditions prevailing or likely to prevail. The master should also consider at which specific points of the voyage or passage there may be a need to utilize additional deck or engine room personnel.

5 Monitoring

5.1 The plan should be available at all times on the bridge to allow officers of the navigational watch immediate access and reference to the details of the plan.

5.2 The progress of the vessel in accordance with the voyage and passage plan should be closely and continuously monitored. Any changes made to the plan should be made consistent with these Guidelines and clearly marked and recorded.
Passage plan printout
Voyage Plan
N 07/2020

Date: 19.03.2020

Vessel: “KAAMI”

Voyage from: Drogheda
To: Slite
Distance: Berth to berth 1325.2 nm

Remarks: SEE LIST ATTACHED FOR WPT’ Position, COURSES, DISTANCE

Charts No.: ECDIS, NaviTab
Update up to 01.04.2019 NP 14

Publications: ARLS 286(2), ASD NP 55, 18, ALL NP 76,75, ATT 202, Handbook NP 100

All courses set out in charts and checked to be satisfactory by Chief Officer:

Master:

<table>
<thead>
<tr>
<th>WP No.</th>
<th>Position</th>
<th>XTL</th>
<th>STBD</th>
<th>Arr. Off.</th>
<th>Speed [kn]</th>
<th>TGT</th>
<th>Rate-Turn-Rad</th>
<th>Time Zone</th>
<th>CRS [°]</th>
<th>DIST [NM]</th>
<th>TTG [minutes]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>53°43.232N</td>
<td>010°18.994W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>69.4</td>
<td>0.3</td>
</tr>
<tr>
<td>1</td>
<td>53°43.250N</td>
<td>010°17.734W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>59.1</td>
<td>0.4</td>
</tr>
<tr>
<td>2</td>
<td>53°43.660N</td>
<td>010°17.135W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>57.4</td>
<td>0.7</td>
</tr>
<tr>
<td>3</td>
<td>53°43.510N</td>
<td>010°16.162W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>100.0</td>
<td>0.5</td>
</tr>
<tr>
<td>4</td>
<td>53°43.517N</td>
<td>010°16.410W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>53.4</td>
<td>0.4</td>
</tr>
<tr>
<td>5</td>
<td>53°43.471N</td>
<td>010°15.009W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>131.7</td>
<td>0.1</td>
</tr>
<tr>
<td>6</td>
<td>53°43.362N</td>
<td>010°14.909W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>93.1</td>
<td>0.4</td>
</tr>
<tr>
<td>7</td>
<td>53°43.294N</td>
<td>010°14.175W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>80.0</td>
<td>2.5</td>
</tr>
<tr>
<td>8</td>
<td>53°43.299N</td>
<td>010°10.003W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>36.6</td>
<td>50.6</td>
</tr>
<tr>
<td>9</td>
<td>53°43.926N</td>
<td>010°10.003W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>303.2</td>
<td>29.8</td>
</tr>
<tr>
<td>10</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>320.6</td>
<td>36.6</td>
</tr>
<tr>
<td>11</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>351.0</td>
<td>26.7</td>
</tr>
<tr>
<td>12</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>299.5</td>
<td>2.9</td>
</tr>
<tr>
<td>13</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>345.1</td>
<td>3.2</td>
</tr>
<tr>
<td>14</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>354.8</td>
<td>2.9</td>
</tr>
<tr>
<td>15</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>17.2</td>
<td>5.3</td>
</tr>
<tr>
<td>16</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>31.3</td>
<td>7.0</td>
</tr>
<tr>
<td>17</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>11.9</td>
<td>8.7</td>
</tr>
<tr>
<td>18</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>42.5</td>
<td>12.5</td>
</tr>
<tr>
<td>19</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>12.1</td>
<td>3.8</td>
</tr>
<tr>
<td>20</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>347.0</td>
<td>2.4</td>
</tr>
<tr>
<td>21</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>306.8</td>
<td>2.5</td>
</tr>
<tr>
<td>22</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>315.7</td>
<td>1.1</td>
</tr>
<tr>
<td>23</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>288.2</td>
<td>1.3</td>
</tr>
<tr>
<td>24</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>222.5</td>
<td>1.3</td>
</tr>
<tr>
<td>25</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>311.6</td>
<td>2.7</td>
</tr>
<tr>
<td>26</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>324.8</td>
<td>5.0</td>
</tr>
<tr>
<td>27</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>299.6</td>
<td>2.7</td>
</tr>
<tr>
<td>28</td>
<td>53°43.101N</td>
<td>010°09.518W</td>
<td>0.10</td>
<td>0.10</td>
<td>8.00</td>
<td>RL</td>
<td>25.5</td>
<td>0.30</td>
<td>+01:00</td>
<td>299.6</td>
<td>2.7</td>
</tr>
</tbody>
</table>
1. Under the provisions of the STCW Convention and Code, all officers in charge of a navigational watch on ships of 500 gross tonnage or more must have a thorough knowledge and ability to use nautical charts and nautical publications (refer STCW Code, Table A-II/1);

2. masters and officers in charge of a navigational watch (both at management and operational level) serving on ships fitted with ECDIS should as a minimum, undertake appropriate generic ECDIS training, meeting the competence requirements of the 2010 Manila Amendments to the STCW Convention and Code;

3. the 2010 Manila Amendments to the STCW Convention and Code have reinforced ECDIS training requirements and introduced several additional specific competencies in the use of ECDIS for officers both at management and operational level serving on ECDIS-fitted ships (refer to STCW Code, Tables A-II/1 and A-II/2). Training in accordance with the 2010 Manila Amendments became effective from 1 July 2013;

4. masters and officers certificated under chapter II of the STCW Convention serving on board ships fitted with ECDIS are to be familiarized (in accordance with STCW Convention, regulation I/14) with the ship’s equipment including ECDIS;

5. STCW Convention, regulation I/14, paragraph 1.5, as well as section 6.3 of the International Safety Management (ISM) Code, require companies to ensure seafarers are provided with familiarization. A ship safety management system should include familiarization with the ECDIS equipment fitted, including its backup arrangements, sensors and related peripherals. ECDIS manufacturers are encouraged to provide training resources including type-specific materials. These resources may form part of the ECDIS familiarization;

6. STCW Convention, regulation I/14, paragraph 1.4, requires companies to maintain evidence of the training and ensures that it is readily accessible. For certificates of competency that have expiry dates beyond 1 January 2017, port State control authorities should accept the certificate issued as prima facie evidence that the seafarer has met the standard of 1 Training and assessment in the use of ECDIS is not required for those who serve exclusively on ships not fitted with ECDIS. This limitation shall be reflected in the endorsements issued to the seafarer concerned (refer to tables A-II/1 and A-II/2 of the STCW Code). MSC.1/Circ.1503/Rev.1 Annex, page 7 I:\CIRC\MSC\01\MSC.1Circ.1503Rev.1.docx competence required by the 2010 Amendments in accordance with the control provisions of article X and regulation I/4 of the STCW Convention;

7. companies should also maintain evidence of the familiarization in compliance with STCW Convention, regulation I/14, paragraph 1.5. Administrations should inform their port State control officers of the requirements for ECDIS training as detailed in sub-paragraph 6 above.