

SUB-COMMITTEE ON SAFETY OF
NAVIGATION
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Agenda item 9

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CASUALTY ANALYSIS

Navigational accidents whilst under pilotage – Comment on document NAV 57/9 from the Bahamas

Submitted by the International Maritime Pilots' Association (IMPA)

SUMMARY

Executive summary: This document comments on document NAV 57/9 from the Bahamas

Strategic direction: 5.4

High-level action: 5.4.1

Planned output: 5.4.1.1

Action to be taken: Paragraph 12

Related documents: FSI 19/WP.1, FSI 19/WP.2; NAV 57/9; and FSI 19/5

Introduction

1 This document is submitted in accordance with the provisions of paragraph 4.10.5 of the Guidelines on the organization and method of work of the Committees and their subsidiary bodies (MSC-MEPC.1/Circ.2). IMPA has reservations about a number of assertions, statements and recommendations made in document NAV 57/9. The document proposes an MSC safety of navigation circular that would contain three points, the first two of which would have IMO recommend specific navigating practices that are not widely accepted or suitable for use in all situations and settings. The third point is adequately addressed in existing IMO documents.

2 The document justifies the three points by referencing two navigational accidents, including one in which an investigation by the Port State is **still underway** and some anonymous reports of "near misses". It is inappropriate to draw conclusions and lessons from an accident still under investigation and the presentation of the other accident contains several inaccuracies. Nevertheless, the descriptions in the document of the two accidents indicate that the major problem in both was a failure of the ship's bridge crew to actively participate in the navigation of the ship and to follow well-established Bridge Resource Management (BRM) principles.

Cited Incidents

3 The report of the joint investigation conducted by the Accident Investigation Board Norway (AIBN) and the Bahamas Maritime Authority into the grounding of the **Crete Cement**¹ offers a view of the incident that is much different from the one described in the Bahamas' document. The recommendations in the report focus on three operational issues: (1) lack of sufficient personnel on the bridge to carry out necessary navigating tasks; (2) a work schedule for pilots maintained by the Norwegian Coastal Administration, the competent pilotage authority, that did not ensure that pilots get the rest needed to minimize the risk of sleepiness; and (3) the failure of ship's electronic charts to display corrections indicating new navigational aids in the area. The report concluded that a lack of communication between the pilot and the bridge crew was not a cause of the accident and specifically found, "There was no doubt among those involved about which route to take, and it was also clear at what points the course would have to be changed". (Report, paragraph 2.2.2.2, page 39².) The report mentions the use of the autopilot, but there was no criticism of that by AIBN nor any suggestion that it was a causal factor in the grounding. The report merely noted that one of the two ship's personnel on the bridge (a lookout) was instructed to stay close to the steering console in order to switch from autopilot to manual steering if necessary. Unfortunately, the report observes, because there were only two crewmembers on the bridge, the lookout was not available to perform his intended function.

4 With respect to the **Crete Cement** incident, a more effective response by the flag State would have been to join the AIBN in urging shipowners to ensure that there is an adequate number of personnel manning the bridge in pilotage waters. As to the only pilot issue identified in the report as a possible causal factor, IMPA can support the AIBN's recommendation to the Norwegian Coastal Administration to "evaluate pilots' working arrangements, and implements [sic] necessary measures if appropriate" to reduce the possibility of sleepiness. (Report, page 48.) Despite acknowledgement by the Bahamas that the grounding of the **Petersfield** is still under investigation by the Port State, the document states that "findings" can be derived from the incident. IMPA is concerned that conclusions, inappropriately and prematurely derived from an incident still under investigation would be presented to the IMO as "evidence" that certain specific actions should be taken. IMPA is especially concerned that in alleging error on the part of the pilot, blame is being apportioned to a person when no determination of fault has been made.

5 Even under the Bahamas' version of the **Petersfield** incident, the major problems or deficiencies aboard the ship would appear to have been a malfunctioning gyro repeater and the failure of the bridge crew to detect the error in time to avoid the grounding. Communication between the pilot and the bridge crew was not an issue. The Bahamas notes that "there was communication between the bridge team and the pilot and the passage plan was agreed upon [but] the bridge crew failed to amend the passage plan within the vessel's ECDIS." Both these incidents show a failure of the bridge crews on the ships to follow sound BRM principles and to comply with the requirements of the STCW Code. IMO has already addressed these subjects. The Manila amendments to the STCW Code strengthen the requirement that bridge crews be proficient in BRM. IMPA believes that this could have a very positive effect on ship navigation. The piloting profession has been the leader in the development and implementation of BRM training. Such training has particular focus on pilot-bridge team communication, especially the master-pilot information exchange; co-operation and coordination between the pilot and the bridge team and the avoidance of single person error through information sharing and cross-checking. In contrast, pilots find that ships' bridge crews have rarely had formal BRM training or are familiar with the most

¹ Available at: www.aibn.no/marine/reports/2010-04-eng.

² See also paragraph 2.2.2.6 of the report (page 40).

basic BRM principles. In addition, the mandate of paragraph 49 of section A-VIII/2 part 3-1 of the STCW Code, which predated the Manila amendments, has particular relevance to the two incidents cited by the Bahamas. That paragraph sets out the responsibilities of the master and the bridge crew to co-operate and exchange information with the pilot and to take an active role in navigation when the pilot is aboard. Both resolution A.960(23) dealing with the training, certification and operations of pilots and the safety management system maintained by the owner of the **Crete Cement** have similar directives.³

6 IMPA is unable to comment on the allegations from anonymous sources of instances in which pilots have spoken to each other or to the local VTS in a language other than English. These unsubstantiated reports by unknown people are, again, not the type of evidence that would ordinarily be presented to IMO in a request for action. Nevertheless, the IMO has repeatedly and clearly spoken about the use of English on the bridge of a vessel. With respect to pilots, resolution A.960(23) states that when a pilot communicates with parties external to the ship in a language other than English, "the pilot should, as soon as practicable, explain what was said to enable the bridge personnel to monitor subsequent action ...". IMPA would have no objection to a document reminding the maritime community of the need for English to be used by all appropriate personnel on the bridge, although there is no reason to believe that such a document is necessary. If such a document is to be developed, it should rely on and cite existing IMO pronouncements on the subject.

Pilot – Bridge Team Relationship

7 In the introduction to document NAV 57/9, the Bahamas suggests that pilots should be "fully integrated into the bridge team" and that this notion was supported at FSI 19. Both suggestions are erroneous. Compulsory pilotage is a form of port State control. In fact, it is the most effective measure that a national or local government can take to protect its waters from the risks to safety, commerce and the environment posed by vessel operations. As a consequence, in many places in the world, the national or local pilotage systems seek to insulate their pilots from undue control or pressures from ship operators and bridge teams. In such places, pilots are expected and are lawfully required, to exercise independent judgment – in other words, to resist actions or intentions of a bridge team that would compromise safety. Fortunately, the need to do this rarely occurs. Pilots and bridge teams typically work harmoniously together in a way that accomplishes the objectives of both the ship and the public interest.

8 Much of pilot training in BRM is focused on how a compulsory pilot carries out his or her public interest duties while establishing and maintaining a co-operative, mutually supportive working relationship with the ship's master and crew. Pilots can and, in many countries, must do that without being absorbed into or subservient to the bridge team. As a consequence, "integration" is not the appropriate term to describe the pilot-bridge team partnership. It is far better to say that a pilot must *coordinate* with the bridge team rather than be integrated into it. During the discussions at FSI 19 on the Correspondence Group's work on Casualty Analysis, IMPA pointed out that the use of the term "integration" and references to pilots as an integral part of the bridge team are not grounded in international or national law. One example is SOLAS regulation V/15, which repeatedly distinguishes, in the context of BRM, between the pilot and the bridge team. This was discussed at length in the WG at FSI 19, and the Chairman concluded that the real issue was one of communication and co-operation, a position with which IMPA agreed then and agrees now. The language in paragraph 21 in the WG's report, FSI 19/WP.2, reflects the shift of focus to co-operation and coordination.

³ Resolution A.960(23), Annex II, paragraph 2; CRETE CEMENT Report, paragraph 1.9.5, page 17.

Proposals for Recommended Navigation Practices

9 IMPA agrees with the Bahamas that navigation safety is aspirational. There is always more that can be done to enhance safety and minimize risk. Two of the three measures proposed by the Bahamas for official endorsement by the IMO, however, are not supported by the casualties cited in the document and would decrease safety. The third recommended practice, "clear and open communication between the pilotage team and the bridge team" is so basic and fundamental – and already addressed by IMO documents – that it does not warrant a safety circular or any additional pronouncement from the IMO.

10 The idea of a pilot's passage plan being submitted to a vessel in advance of the pilot's arrival or the face-to-face master-pilot information exchange has been discussed for many years. During the consideration of what became resolution A.960(23), the concept was reviewed many times by the MSC, STW and NAV. At each step of the way, the idea was rejected as impractical and unwise. Unlike routine open-ocean steaming, navigation of a vessel in pilotage waters is a dynamic exercise that requires flexibility informed by local knowledge and experience. The route to be taken, the speed, the specific navigational manoeuvres, etc., all depend on ever changing conditions, such as traffic, weather, tides and currents, availability of tugs, etc., and on information such as berth destination that is often not available prior to when a pilot boards a vessel. The idea of submitting an advance passage plan is fundamentally flawed because it assumes that a pilotage transit will follow a fixed route. A system that would use generic passage plans or plans that offer a menu of optional courses would have little value and, in fact, could present a real danger to navigational safety. Advance passage plans as envisioned by the Bahamas would foster a culture of unsafe rigidity and reluctance to respond to changing conditions. The earlier the plan is submitted, the less the chance that it will reflect the real world at the time of the passage. The safety benefits of pilots and bridge crews having a shared understanding of the intended voyage in pilotage waters is a widely accepted part of BRM. The place and time for gaining that shared understanding, however, is on the bridge and during face-to-face master-pilot information exchanges, both when the pilot arrives and throughout the voyage. This subject is addressed at length in resolution A.960(23).

11 Pilots have worked in many places to provide vessel interests with information about pilotage in their areas. Many pilot groups have informational cards, chartlets, or brochures with useful static information about the navigational demands in their port areas. We expect that this trend will continue – in a measured and careful way and on a case-by-case basis. This is clearly not a subject suitable for the IMO to prescribe a one-size-fits-all approach, however. The proposed direction from the IMO that pilots should not manually steer vessels, especially through the use of auto-pilots, ignores the equipment fitted on modern vessels, best practices in some locations, and the paucity of crew available for steering duties. This is a situation that varies, quite properly, from location to location and from vessel to vessel. In some places, pilots have more experience and expertise in steering particular types of vessels in close, confined waters than the vessel's crewmembers. For some vessels, particularly smaller vessels with cockpit configurations, the only way that a pilot can effectively direct and control the vessel's navigation is by personally steering the vessel. In some places, manually steering a vessel by the pilot is not only the accepted and standard practice, it is legally required.

Action requested of the Sub-Committee

12 The Sub-Committee is requested to consider the views and position of IMPA and decide as appropriate.