

Ports of Jersey - Trinity House Inspection & Audit of Aids to Navigation – 2018



Date of Inspection / Audit:	06/07 November 2018
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Circulation	Captain Bill Sadler Captain Trevor Harris Jamie Dallimore Operations Manager

Background.

Trinity House has been requested to inspect and audit the Aids to Navigation owned and maintained by Ports of Jersey in Territorial Waters on behalf of the Sates of Jersey as one of public service obligation Air and Sea Ports (Incorporation) (Jersey) Law 2015 and to review the current Aids to Navigation (AtoN) provision.

Introduction

The audit was conducted over two days 6th and 7th November, planned with selected afloat inspections followed by a detailed review of documentation. Poor weather throughout inspection period precluded undertaking the afloat inspection, which providing more time for the documentary review process. Terms of reference for the audit are detailed at Annex A.

Executive Summary

A positive and proactive audit was undertaken with open and professional support provided throughout. Previous recommendations were noted and observed as being embedded in current procedures. It is my view that Jersey Ports are operating an effective SMS, with good risk management processes in place, which facilitates the proactive approach to AtoN management and navigation that has been implemented.

Visual Inspection of AtoN's

Afloat inspection was planned to be undertaken primarily to check sectors at Corbierre and Demie Du Pas and undertake a general inspection of AtoN in area. Strong Southerly winds throughout the Audit period precluded undertaking an afloat

inspection. However an enhanced inspection of shore based lights and beacons was completed including:

Corbierre Lt House,
St Aubin, breakwaters inshore beacons and approach buoys,
St Helier entry leading lights and buoys,
Demie Du Pas,
Western Passage leads Greve D'Azette and Mont Ube,
Uncharted 3rd party Cable beach termination marking at Fort William and Archirondel*
Gorey Lt House,
St Catherines Breakwater light,
Rozel Harbour Leading Light and Beacon.

*The uncharted 3rd party cable marking beacons are not included within the authority AtoN listing, inclusion worthy of further internal discussion.

Reporting and Recording of AtoN Casualties

AtoN are provided by the States of Jersey as the Local Lighthouse Authority and maintained and inspected by Jersey Harbours. There is a clear distinction between AtoN provision for Jersey Ports and the broader Public Service Obligation (PSO) AtoN, there are numerous un-categorised beacons within the PSO area, and these are all listed and drawn into casualty recording where relevant. This process was discussed at length, and considered to address recommendations identified in the 2014 audit.

Within the Jersey Harbours PMSC documentation section 2.1.4 and 2.1.5 of the Conservancy & Marine Services Manual address the issues regarding Lighthouse Authority Duties towards Aids to Navigation (AtoN). This document was first issued in 2016, and due its first review in 2019. It provides a concise and clear direction against the provision of AtoN and navigation services for the Jersey Harbours and State.

Aligned with the Marine Service Manual are a number of supporting documents.

- Casualty reporting guidance notes
- Casualty report spreadsheet which now includes un-categorised beacons as an incident based addition, and a rolling KPI (availability stats) with data back to 2012 (Previous audit recommendation)
- Navigation Aids database which includes categorised and un-categorised AtoN, with links to information and history sheets for each individual AtoN
- Detailed history and maintenance schedules

Availability Statistics

Statistics were reviewed against the new rolling data process with Cat 1 availability recorded at 98.7% slightly below the IALA recommendation due to the Gronez Light being unreliable for a short period from 20th August.

Cat 3 availability was also slightly low due to Grande Anquette Beacon being unreliable, and La Conchiere Light Beacon being unlit for the period 5th to 31st October.

AtoN Inspection and Maintenance

Detailed records for inspection history and maintenance of all AtoN were demonstrated, all of which are embedded in their Planned Maintenance TABS facilities management system. With a sliding scale of requirement based on category:

- Land based Lights 6 weekly

- Sea based Lights 3 months
- Floating AtoN; annual inspection, 4 year replacement for buoys and 2 years for moorings
- Uncategorised beacons; 5 year paint programme with ad hoc inspections

Some discussion over the management of the numerous uncategorised beacons was undertaken, with a number of examples identified, eg Jette des Fontaines, Grande Vasculin and Pippettes. The policy for these beacons is to monitor and review, and I subsequently suggested that this is seen as a 'nice to have but not essential' approach. This was agreed as a reasonable description for these AtoN requirements, and is a policy approach that is endorsed by all.

An example of the Authority's repair capability was demonstrated with the 2013 replacement of the Le Fara lighted beacon. A circa 14" diameter stainless steel 10m structure, approximately 3 tonnes, designed, built and installed 'in house' which clearly demonstrates what is an extremely capable engineering resource.

Buoy preparation and maintenance operations were also inspected, it was noted that AtoN prepared and ready for deployment were finished to a high professional standard, which reinforces the identified maintenance regimes in place.

It was noted within the buoy stock that there are no dedicated wreck marking buoys available, with the authority view that wreck marking will be undertaken from resources within existing stocks. Provision of a dedicated ready to go wreck marking AtoN, would be worthy of further consideration.

Risk Assessment

The Navigation Risk Analysis (NRA) process is based on the Gael Risk process (adopted from the aviation industry) it places individual risk under constant review through the QPOS process, with the whole NRA reviewed on a 2 year basis.

Traffic analysis is undertaken through its VTS management process, which is primarily radar coverage to the South and West of the Island, which sees the bulk of the traffic movements and AIS cover to the East. The majority of traffic operates under a PEC, against which a comprehensive examination process was demonstrated. Pilotage information is contained within the pilotage book edition 12, which is also under constant review.

Light house sectors are comprehensively used as part of the AtoN process, some of the sectors provide critical demarcation between safe and clear water. Although sectors are generally fixed, many old systems are simply screens which can be moved to allow for changes in bathymetry. As such maintenance activity may potentially also see a sector inadvertently disturbed. An effective sector check process was demonstrated, but there is no reference or record of sector checks within the maintenance procedures. It is recommended that a formal methodology for sector checks is identified and embedded within maintenance procedures and records.

Reviewing of AtoN

In terms of AtoN changes, an assessment of the of the review process was undertaken, a Stakeholder consultation list was demonstrated which comprehensively covers all marine users and as a clever modern supplement also

takes in social media resources through contacts who have subscribed to the Jersey Ports website.

Planned changes to the Corbeirre light, a slight reduction in range of the red sectors was used to demonstrate, what was shown to be an effective review process, with clear timeframes for the issue of the consultation, the publishing and action on feedback and subsequent implementation. In this case early 2019.

It was noted that charted information is particularly detailed, some discussion was undertaken with regard to reviewing potentially redundant leading mark information, which in some cases could be removed, streamlining available data and improving the quality of the navigational information available.

Recommendations

- The intelligent use of light sectors in support of safe navigation is clearly identified, although informal sector checks were demonstrated, it is suggested that a methodology and check record is included within the AtoN maintenance regime.

Observations

- The charted information is necessarily detailed, a review of leading mark data, and removal of potentially redundant information, could be of value.
- 3rd Party uncharted AtoN were observed at beach cable terminations, consider if these need to be included in AtoN listings.
- Consider wreck marking capability, and provision of dedicated wreck marking AtoN.
- Conservancy and marine services manual due first review in 2019

Conclusion

Despite the poor weather conditions curtailing the opportunity to undertake an afloat inspection, it provided the opportunity to spend more time undertaking a detailed and thorough process review.

From the evidence seen, it is clear that the Navigation management system in operation at Jersey ports, provides a comprehensive SMS and NRA process, which is accurately maintained and actioned. The process is further enhanced by the obvious professionalism and commitment to the delivery of safe and effective navigation services, from all the personnel involved in its delivery.

My thanks to the HM for facilitating the audit and in particular the Operations Manager in managing and providing access to data, resources and personnel.



Graeme Proctor
Inspector of Seamarks
Trinity House.

Annex A

TERMS OF REFERENCE:

Inspection & Audit of Aids to Navigation - 2018

Introduction

1. Trinity House has been invited to inspect and audit the Aids to Navigation owned and maintained by Ports of Jersey in Territorial Waters on behalf of the Sates of Jersey as one of public service obligation Air and Sea Ports (Incorporation) (Jersey) Law 2015 and to review the current Aids to Navigation (AtoN) provision.

Management Objective

2. To ensure that the AtoN provided by Ports of Jersey meet the requirements of the present and changing needs of all mariners and that AtoN comply with internationally accepted standards.

Audit objective

3. To provide an independent and objective opinion to the Jersey Maritime Administration in that the management process established by the Harbour Safety Management System pertaining to the AtoN continue to meet the changing need of all mariners and comply with internationally accepted criteria (IALA).

Scope

1. The inspection / audit will cover how risks are identified, managed and addressed by internal controls (PMSC Safety Management System) and other governance arrangements to provide a reasonable assurance that management's objectives are being furthered and supported. Areas to be reviewed include:
 - A visual inspection of a sample of Aids to Navigation as can be viewed in the time available with assistance from Ports of Jersey staff. Noting the IALA category components: light character / position / daymark / top mark
 - How Ports of Jersey record and report on the availability of their AtoN's to IALA standards and guidelines.
 - The process used to identify and assess hazards and to specify the type and mix of AtoN's required to minimise the risk to mariners.
 - The arrangements for communicating with all stakeholders, including commercial shipping; fishing and leisure users regarding AtoN provision and future requirements.
 - Review recommendations and observations made in 2014

Inspection / Audit approach

1. A risk based approach will be adopted, wherever possible. Files, records and other forms of evidence will be examined, also discussions with relevant staff to identify and assess risks, document systems and evaluate control. Any emerging thoughts will be discussed with management during the inspection / audit.