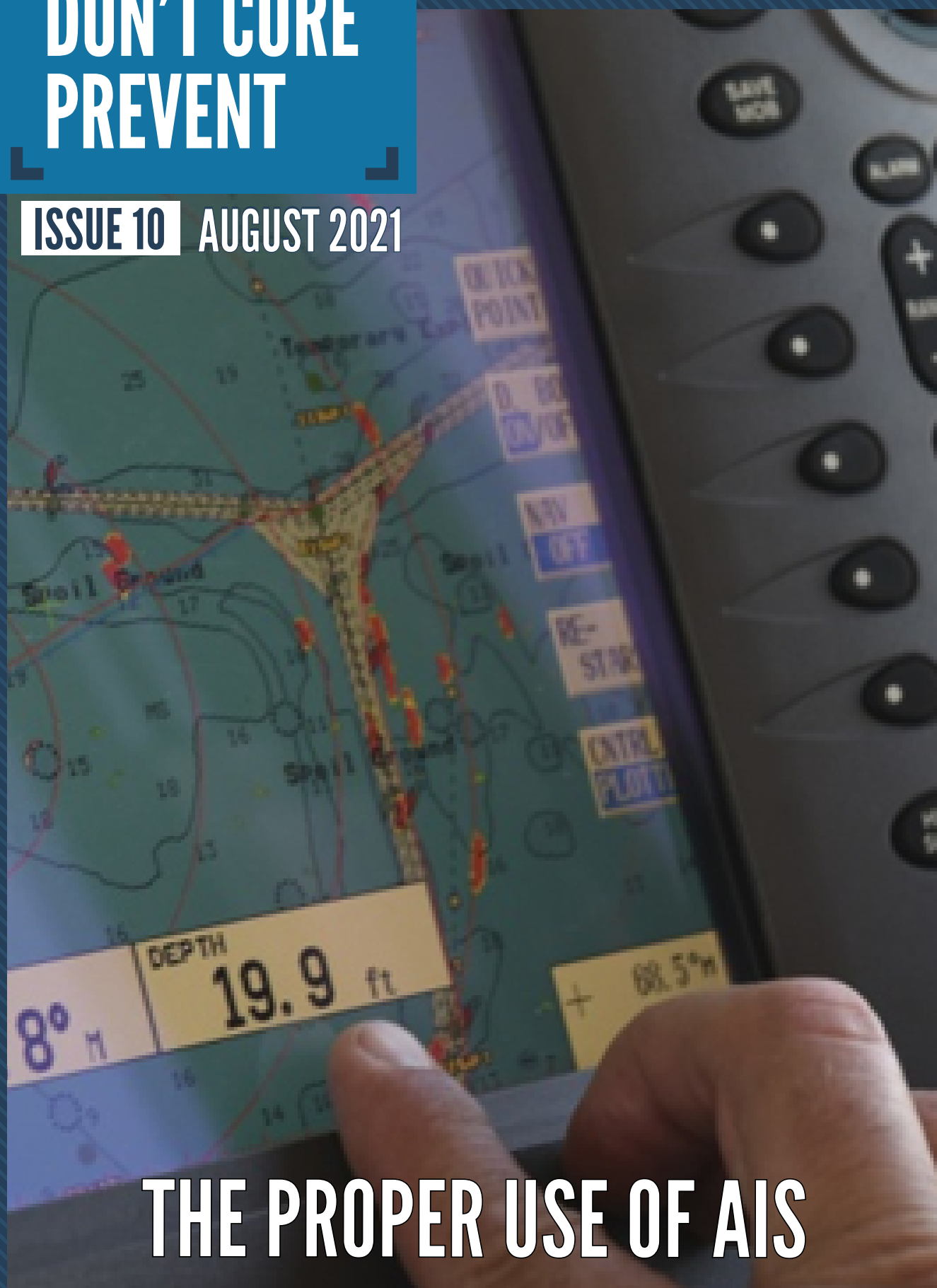


DON'T CURE PREVENT

ISSUE 10 AUGUST 2021



THE PROPER USE OF AIS



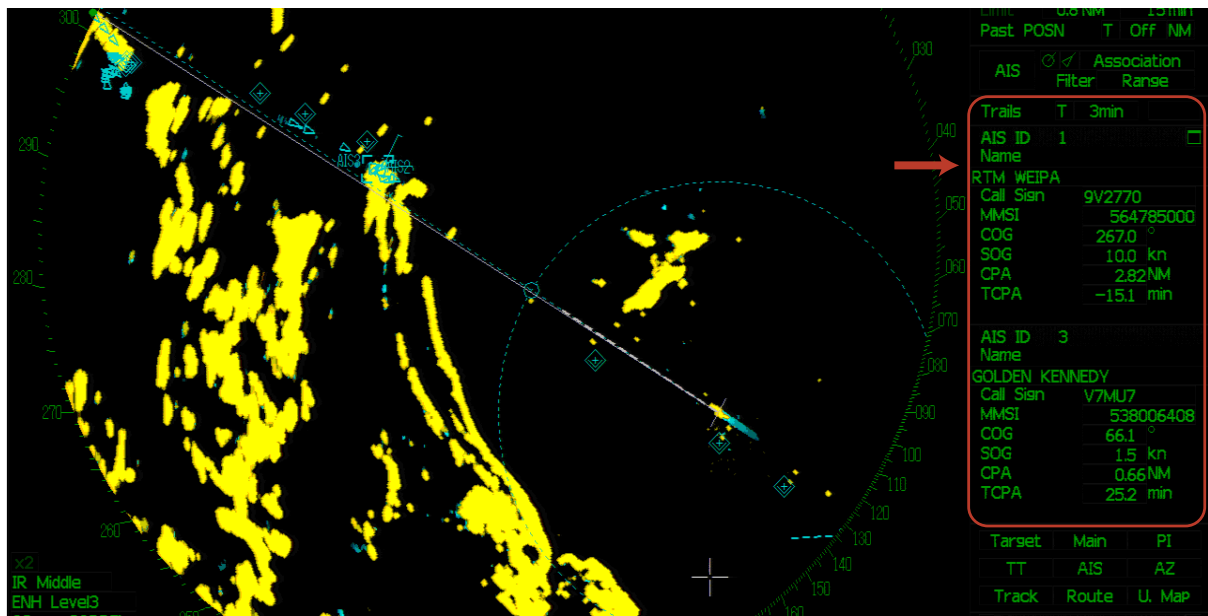
THE PROPER USE OF AIS



CASE

During a remote Navigational assessment using the VDR data, P@S Assessor observed that targets were not acquired properly by Radar Target Track, but only by AIS. The P@S Assessor reported this finding and highlighted that RADAR/ARPA are the primary electronic anti-collision aids for the Officer On Watch (OOW).

The subject observation comprises a common finding, which may lead to complications during PSC inspections, if the CPA and TCPA** calculations are provided through AIS.*



*CPA: Closest point of approach

**TCPA: Time to closest point of approach



REGULATORY FRAMEWORK

AS PER BRIDGE PROCEDURES GUIDE 5TH EDITION CH.4.4.1

ARPA are able to display AIS target information or merged with ARPA information if connected to the AIS transponder on board. The ARPA display should clearly indicate whether target information comes from ARPA or AIS. AIS information particularly CPA and TCPA, should not be relied upon for collision avoidance.

AS PER IMO RESOLUTION A.1106(29)

The potential of AIS as an assistance for the anti-collision device is recognized and AIS may be recommended as such a device in due time.



WHAT WENT WRONG?

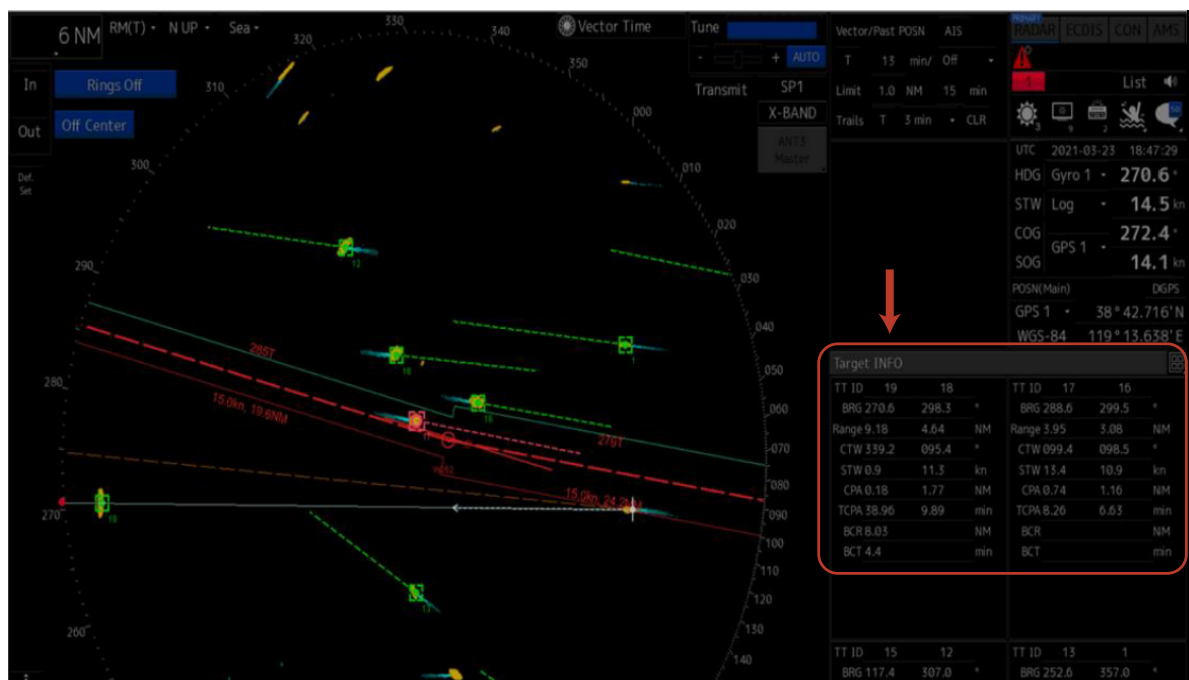
- Improper use of available information of monitoring instruments.
- Company's Navigation Procedures **did not** include instructions regarding the proper use of AIS in relation to Radar targets.



OUR SUGGESTION

We suggest the following actions with the aim to prevent such cases from occurring.

- ⦿ The Company should prepare specific procedures concerning the proper use of AIS, along with relevant posters to instruct and remind the Officers On Watch the proper use of AIS in relation to Radar targets.
- ⦿ Bridge Team may merely use AIS, as an additional source of navigational information.



BEST PRACTICE

- ✓ The Officer on Watch (OOW) should use AIS device only for exchange static and dynamic information between other vessels.
- ✓ The Officer on Watch (OOW) should not trust the Speed Over Ground (SOG) and Course Over Ground (COG) sent by the target's AIS transmitter.

REMEMBER:

- ▶ For collision avoidance, DO NOT rely on AIS information, particularly CPA and TCPA.
- ▶ AIS device can never replace the human expertise on bridge!



Q&A

1. What is the Automatic Identification System (AIS)?

- a. AIS transmits own ship's position so that other ships are aware of its position.
- b. AIS transmits a ship's position so that other ships are aware of its position.
- c. AIS transmits own ship's static information so that shore base to be aware of this information.

2. Could AIS information be used for anticollision purposes?

- a. AIS information may be used to assist in collision avoidance.
- b. AIS information such as CPA and TCPA could be used for collision avoidance.
- c. AIS information assist only in the identification of targets by name or call sign.

3. OOW is responsible to comply with the collision regulation rule 7 at all times even if AIS device does not exist on board.

- a. False
- b. Correct

4. Pick the correct IMO performance standards for AIS:

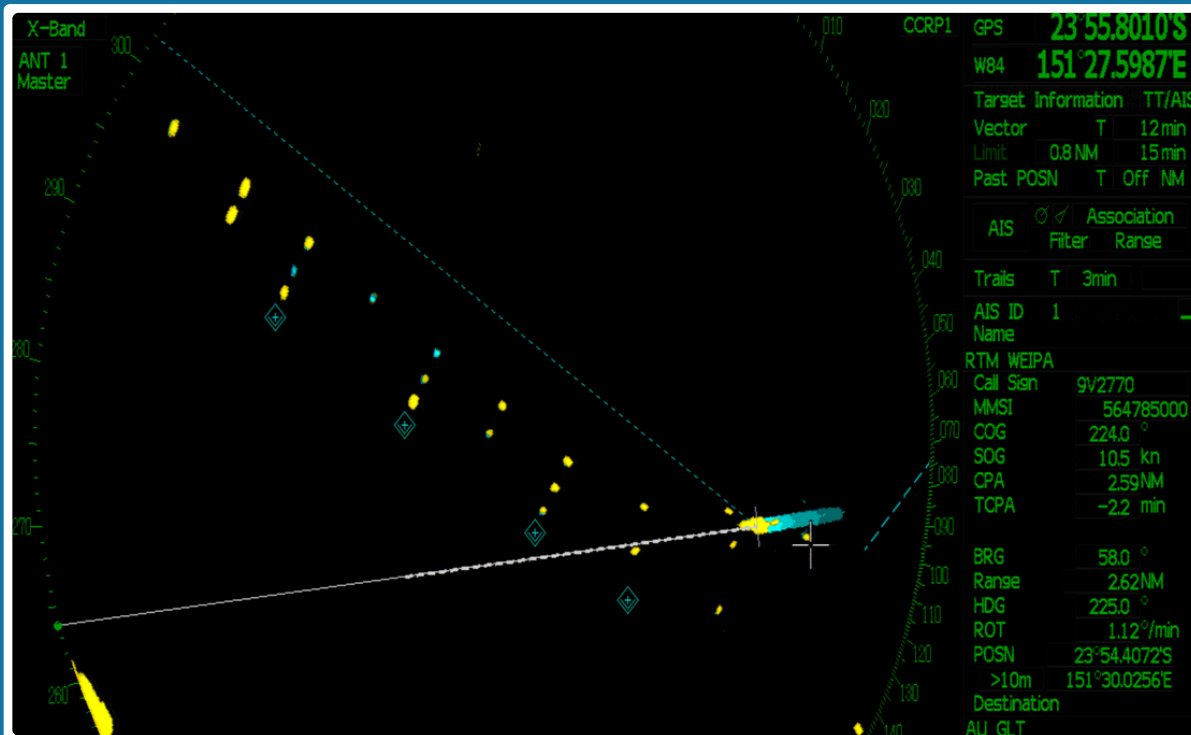
- a. The use should rely on AIS as the sole information system. on board ship is intended to heave any special impact on the composition of the navigation watch.
- b. AIS is a recognized device and may be used for anti-collision avoidance.
- c. AIS is an additional source of navigational information. It does not replace but supports, navigational systems such as radar target – tracking and the use of AIS does not negate the responsibility of the OOW to comply at all times.



TEST YOUR KNOWLEDGE

SPOT THE DEFICIENCY

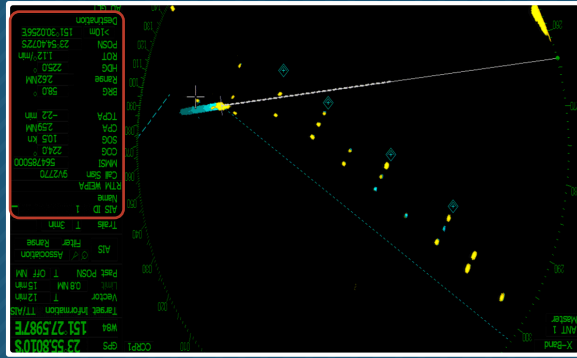
Can you find the deficiency in the photo below?



TEST YOUR KNOWLEDGE ANSWERS

1. b
2. a
3. b
4. c (IMO resolution A.1106 (29))

08A



SPOT THE DEFICIENCY



 **PREVENTION AT SEA**

DON'T CURE PREVENT

ISSUE 10 **AUGUST 2021**

FOR MORE INFORMATION,
PLEASE DO NOT HESITATE TO CONTACT US.



Prevention at Sea Ltd

5 Artemidos Avenue, 6th Floor,
Artemidos Tower, 6020
Larnaca - Cyprus

Tel: +357 24819800

Fax: +357 24819881



PREVESEA Ltd

91 Akti Miaouli Str.
Piraeus 18538
Athens - Greece

Tel: +30 210 64 37 637



PREVENTION AT SEA ASIA

80 Robinson Road
068898, Singapore

Tel: +65 64206258



info@preventionatsea.com



www.preventionatsea.com