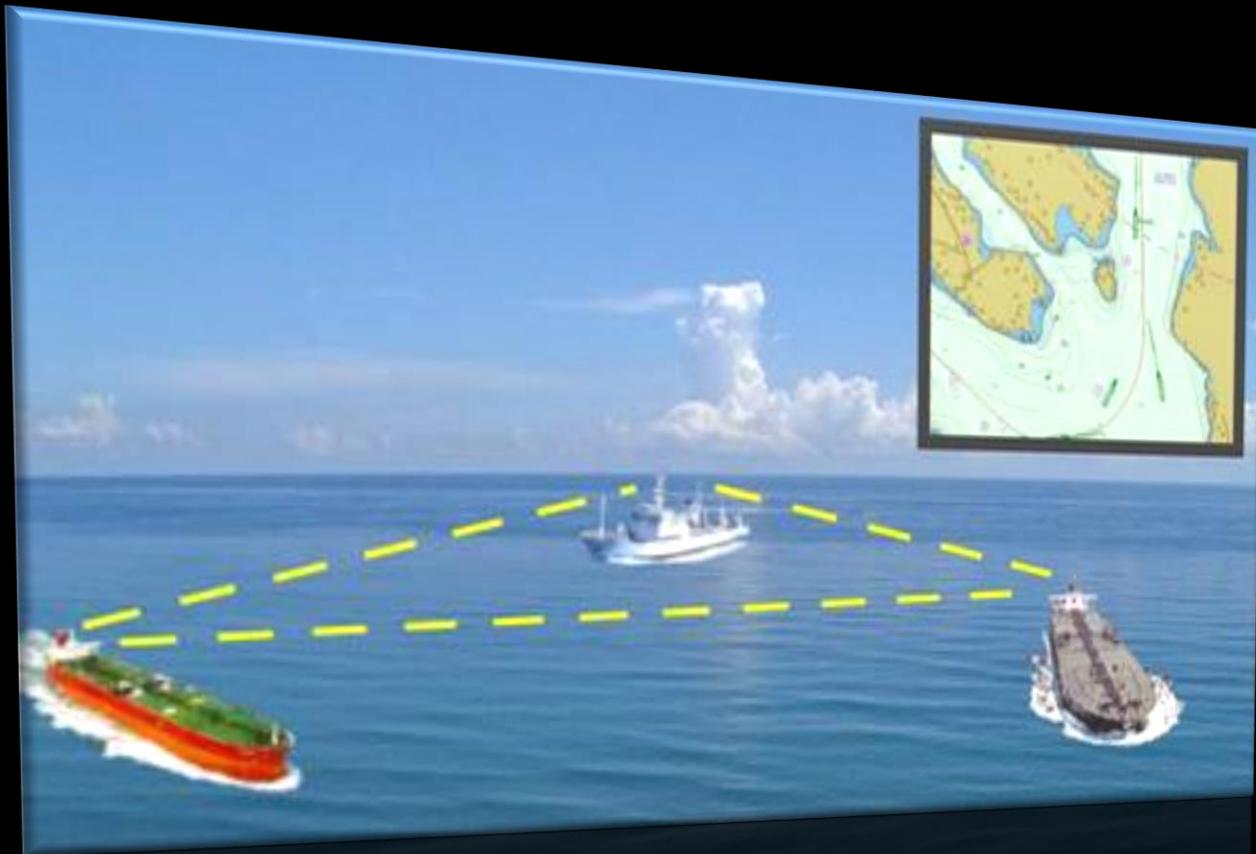


Why GPT doesn't use AIS Channel



An Intro to AIS

- Wikipedia

https://en.wikipedia.org/wiki/Automatic_identification_system

Permitted Personal Beacon Description: Class B Transceivers

Class B transceivers are smaller, simpler and lower cost than Class A transceivers. Each consists of one VHF transmitter, two VHF Carrier Sense Time Division Multiple Access (CSTDMA) receivers, both alternating as the VHF Digital Selective Calling (DSC) receiver, and a GPS active antenna. Although the data output format supports heading information, in general units are not interfaced to a compass, so this data is seldom transmitted. Output is the standard AIS data stream at 38.400 kbit/s, as RS232 and/or NMEA formats. To prevent overloading of the available bandwidth, transmission power is restricted to 2 W, giving a range of about 5–10 mi.

Four messages are defined for class B units:

Message 14

- Safety Related Message: This message is transmitted on request for the user – some transceivers have a button that enables it to be sent, or it can be sent through the software interface. It sends a pre-defined safety message.

Message 18

- Standard Class B CS Position Report: This message is sent every 3 minutes where speed over ground (SOG) is less than 2 knots, or every 30 seconds for greater speeds. MMSI, time, SOG, COG, longitude, latitude, true heading

Message 19

- Extended Class B Equipment Position Report: This message was designed for the SOTDMA protocol, and is too long to be transmitted as CSTDMA. However a coast station can poll the transceiver for this message to be sent. MMSI, time, SOG, COG, longitude, latitude, true heading, ship type, dimensions.

Message 24

- Class B CS Static Data Report: This message is sent every 6 minutes, the same time interval as for Class A transponders. Because of its length, this message is divided into two parts, sent within one minute of each other. This message was defined after the original AIS specifications, so some Class A units may need a firmware upgrade to be able to decode this message. MMSI, boat name, ship type, call sign, dimensions, and equipment vendor id.

AIS is a system designed for ships, not for tourists or divers

1. Many countries do not issue MMSI to personnel. Only vessels are permitted to apply for MMSI, thus there are doubts as to the conformity of the regulations for personal or diver use
2. AIS Personal Beacons are not capable of good performance for real-time tracking

Gpacers Technology believes that a real-time tracking system is the best way to secure people during marine activity



Gpacers