

Axe Yacht Club

RYA Yachtmaster Shorebased Course 2020

Predicted EP

Chart RYA 3. Take magnetic variation to be 6°W.

Scenario

At 0933SPDST on 7 October, St Kilda Coast Guard receives a Pan Pan call from the fishing vessel(FV) "Pot Luck". The vessel has had an electrical fire on board which has knocked out their GPS, radar and steering motor. The steering is jammed but the boat is managing to proceed at an estimated 5 knots on a magnetic heading of 176°. One of the crew suffered minor burns, which have been treated, during the fire when it was being extinguished. The skipper is requesting assistance to return the vessel to St Kilda. The boat's last known position at 0703UT by GPS was 46° 10.4'N / 006° 12.4'W.

The Coast Guard (CG) request assistance from the St Kilda Lifeboat (LB), who agree to launch. At 0733UT the skipper of the lifeboat radios the CG to report that they are in position 45° 52.0'N / 005° 58.7'W, are steering 334M and can operate at 20 knots in the prevailing conditions.

Work out:

1. The fishing boat's predicted EP for 0803UT. Use <>E.
2. The lifeboat's predicted EP for 0803UT. Use <>J.
3. How far apart will the boats be at 0803UT?
4. At 0803UT, on what relative bearing will the skipper of LB expect to find the FV on his radar display?

Solution:

Victoria 7 October

HW 1033UT / 6.0m LW 0421UT / 0.1m Range = 6.0 - 0.1 = 5.9m

0703UT - 0803UT = HW-3

<>E HW-3 131°T 3.0Sp/1.5Np Extrapolated for a range of 5.9m = 3.7kn

<>J HW-3 119°T 3.3Sp/1.7Np Extrapolated for a range of 5.9m = 3.9kn (LB only on passage for 0.5hrs - use 3.9/2=1.95 nm for drift.)

Plot and answers:

1. Fishing boat EP =

46°03.048'N /
6°07.164'W

2. Lifeboat EP =

46°00.479'N /
6°07.164'W

3. The boats are
4.2nm apart.

4. Assuming that the
LB has its radar
display in "Head
up" mode the FB
will be 3° to port
of the vessel's
head.

