

Adm.

199 E T.

S
37

45.

COPY NO.

1

CLOSED
UNTIL
1972

TO BE TAKEN ON CHARGE
IN ACCORDANCE WITH
ARTICLE 39 OF U. 2 D.

ANALYSIS OF U-BOAT ATTACKS

ON

- (1) H.M.S. HECLA - 11th-12th November, 1942.
 - (2) CONVOY M.K.F.I.(Y) - 15th November, 1942.
-

2013

Anti-Submarine Warfare Division,
Admiralty.

SECRET.

Anti-Submarine Warfare Division,
Naval Staff.

25th January, 1943.

ANALYSIS OF ATTACKS BY A U-BOAT ON H.M.S. HECLA
AT 2315, 11th NOVEMBER, 1942.

Reference:

M. 052365/42. Report on loss of H.M.S. HECLA.

All Times are G.M.T.

In order to simplify the analysis of this incident the story has been divided into three parts viz:

- Phase I - covering the period from 2215/11 when VENOMOUS obtained and investigated an R.D.F. contact until 2315/11 when HECLA was first hit by torpedoes.
- Phase II - covering the period during which HECLA was stopped and subjected to further torpedo attacks until 0105/12 when she was hit for the last time and sank a few minutes later.
- Phase III - covering the period from 0105/12 when MARNE was hit and disabled until she reached Gibraltar in tow.

PHASE I.

POSITION AT 2215/11.

VINDICTIVE (S.O.) and HECLA in line ahead, three cables apart. Course 043°, speed 14½ knots.

Screened by VENOMOUS and MARNE, stationed in Screening Diagram No.2, on the port and starboard bows respectively.

Zig-zag No.15, begun at 1850.

Details of Equipment.

	<u>Asdic.</u>	<u>R.D.F.</u>
VINDICTIVE	-	-
HECLA	-	279 & 285.
MARNE	1280	286 & 285.
VENOMOUS	124	286 & 271.

No ship was fitted with H/F D/F.

... Weather

Weather.

Wind - N.N.E. Force 3.
 Sea - Slight, moderate swell.
 Weather - Cloudy.
 Visibility - 2 miles.

Narrative.

2. The movements of all ships during Phase I were as shown in the track chart.

At 2215 VENOMOUS obtained an R.D.F. contact bearing 215°, range 4,000 yards. She turned to investigate, but the contact was lost at a range of 2,200 yards, at 2228. VENOMOUS made a search in the area and at 2250, having found nothing, set course to rejoin.

VENOMOUS' signal, reporting the contact, was received by VINDICTIVE only, and not until 2230. It has been stated verbally by the Commanding Officer, H.M.S. VENOMOUS, that a signal, cancelling his previous one, was made at about 2250, when the search was abandoned. This latter signal also was only received in VINDICTIVE and not until 2320, when it was too late to be of any value, HECLA by that time having been torpedoed.

3. At 2311 VINDICTIVE sighted a wake bearing 260° at an estimated distance of one mile; this was finally lost to sight at 2318 on a bearing of 280°, after HECLA had been hit. VINDICTIVE at this time, was, for the reason explained above, unaware of VENOMOUS' position. HECLA made no alarm report although nearer the wake, and VINDICTIVE therefore made the fatal assumption that this wake was caused by VENOMOUS. In fact, VENOMOUS was at this time six miles astern, rejoining at 18 knots.

4. At 2315 HECLA was struck by two torpedoes on the starboard side. This was exactly the time for the next zig-zag alteration to port, a fact which was providential for VINDICTIVE who, by turning promptly, escaped being hit. When steadied on the new course of 090° she observed two torpedoes on a parallel course overtaking the ship, one on each side. A faint explosion was heard at 2318 which may have been one of the torpedoes exploding at the end of its run.

PHASE II.

POSITION AT 2315/11.

- VINDICTIVE - increasing speed and steaming clear of the torpedo damage zone.
- HECLA - stopped, paying off to starboard.
- MARNE - conforming with HECLA.
- VENOMOUS - about 5 miles astern, rejoining at 18 knots.

....Narrative

Narrative.

5. The movements of MARNE and VENOMOUS during the second phase of this incident have not been completely established. Also it is not known for certain whether one or two U-boats were involved. On the whole it is considered more likely that there was only one present during this period and its probable movements based on this assumption, have been described at the end of this section.
6. At 2327 MARNE made a starshell search on HECLA's starboard side and began a circular A/S patrol.
7. By 2342 VENOMOUS had closed HECLA and offered to take her in tow. She was ordered instead to carry out an A/S patrol round HECLA. VENOMOUS accordingly adjusted her course to join MARNE in a circular patrol, but the exact movements of either destroyer and their relative positions during this period are not known.
8. At about 0030 two green Very's lights are stated to have been seen in HECLA on the starboard beam. No explanation of these lights has been found.
9. At 0032 HECLA was hit forward by a torpedo which was seen to approach from Red 145°. The explosion was very violent, large quantities of water, oil and debris being thrown into the air. The ship listed heavily to port. VENOMOUS at the time is thought to have been somewhere ahead of HECLA and, on seeing the explosion, she steamed in the direction from which she considered the attack had been made. At 0039, although not in contact, she dropped depth charges and began a starshell search. She did not sight the U-boat. MARNE had received a signal from HECLA shortly before this telling her to stand by to pick up survivors should it become necessary for the latter to abandon ship. On seeing VENOMOUS' starshell she decided to proceed to her assistance but had not got there before HECLA was again hit from approximately the same direction, at 0048, and ordered MARNE to stand by. MARNE accordingly turned back towards HECLA and stopped in a position about two cables on her port quarter. HECLA began to abandon ship. VENOMOUS, meanwhile, had resumed her patrol.
10. Shortly afterwards, MARNE saw a swirl about five cables on HECLA's starboard beam. Full speed astern was ordered with the intention of proceeding to investigate but this was immediately countermanded to "half ahead both" to take off sternway as it was realised that the boats and survivors were not clear. At the same time fire was opened with starshell.
11. Almost at once, at 0105, HECLA was hit again, for the last time, on her starboard side right aft by a torpedo that was fired from the beam. A few seconds later MARNE sighted the wake of a torpedo one cable away and was hit aft and had her stern blown off. At about this time VENOMOUS heard hydrophone effect. It is considered that this was probably from a third torpedo which missed. At 0116 HECLA heeled over and sank stern first.
12. A possible reconstruction of the U-boat's movements during this period is as follows. Having fired the initial salvo, two torpedoes of which hit HECLA, the U-boat proceeded clear to the Northward and reloaded its bow tubes. Having done this the original position was closed and HECLA was seen to be

... stopped

stopped. The two torpedoes fired at 0032 and 0048 are thought to have been single aimed shots fired from the bow and the stern tubes respectively. After the second of these it is probable that the U-boat sighted VENOMOUS approaching and moved clear and to the Southward of HECLA. The U-boat must have been aware of the presence of two destroyers in the vicinity and its action in returning to deliver the coup de grace was a bold one. However, this final attack in which the three remaining torpedoes from the bow tubes were fired resulted in the U-boat being sighted, chased, attacked and probably sunk by VENOMOUS.

PHASE III.

POSITION AT 0105/12.

HECLA - in a sinking condition.
MARNE - torpedoed and stopped.
VENOMOUS - on HECLA's port bow.

Narrative.

13. In the light of the starshell fired by MARNE the U-boat was seen, about 1,000 yards away on the starboard quarter. MARNE informed VENOMOUS who closed at full speed, illuminating the area with starshell and herself sighted the U-boat on the port bow crossing ahead from port to starboard at a range of about 1,500 yards. Fire was opened with "B" gun and, sighting VENOMOUS, the U-boat altered course stern on and commenced zig-zagging. VENOMOUS overhauled gradually; when the range had decreased to 1,000 yards the U-boat fired a torpedo from her stern tube, but avoiding action was taken and it passed harmlessly down the starboard side. VENOMOUS then fired a snowflake and the U-boat dived at a range of 200 yards. The periscope was seen passing down the port side about ten yards away and, at 0139, a five charge pattern, set to 50 feet, was dropped when the last feather from the disappearing periscope was passing the stern. The explosion from the last charge was considerably heavier than normal and the column of water much higher, although this depth charge did not appear to fire shallow. Due to a defect in one dynamo, caused by the depth charge explosions, power failed and contact was not gained after this attack. The area was illuminated with starshell and snowflake but nothing was sighted. An asdic search was carried out without result and at 0240 VENOMOUS returned to pick up HECLA's survivors.

Rescue work was broken off on several occasions to investigate R.D.F. contacts and to drop depth charges periodically.

14. At 0420 MARNE sighted a dark object and a swirl 1,000 yards on her starboard beam, fire being opened with her 4.7" and starshell. Hydrophone effect was heard on the bearing and firm echoes obtained at a range of 1,000 yards, extent of target about 5°. The range decreased to 150 yards and contact was lost as the target passed underneath MARNE. VENOMOUS was informed and asked to drop depth charges but she was unable to obtain contact and MARNE considered subsequently that it may have been a large fish. VENOMOUS dropped two depth charges.

15. VENOMOUS, at 0550, obtained an R.D.F. contact moving right at a range of 3,600 yards and closed to investigate. A U-boat was then sighted on the surface moving towards MARNE on an approximate course of 260°. Speed was increased to ram and fire opened with the 4.7" and Oerlikon, by which time the U-boat had reached a position 1,000 yards 30° on MARNE's port bow. VENOMOUS considered that she had been unobserved until this moment. Fire was also opened by MARNE with "B" gun but was broken off as VENOMOUS came in.

16. VENOMOUS scored hits with her Oerlikon on the conning tower and the U-boat dived 300 yards fine on her port bow. Radio contact was obtained with opening doppler and a counter-attack was carried out at 0554 with a five charge pattern set to 50 feet. After the fifth charge had detonated a sixth and heavier explosion was heard. Immediately after the attack VENOMOUS had to alter to port to avoid MARNE.

17. Contact was regained with closing doppler and hydrophone effect and it was decided to carry out another counter-attack without waiting for a full charge pattern to be reloaded, as the U-boat was dangerously near the disabled destroyer. The second attack at 0603 was therefore made with five heavy charges set to 140 feet. Contact was not regained and a search was carried out until daylight when rescue operations were resumed at 0730.

The impression of various witnesses was that this U-boat was considerably larger than the one previously attacked at 0139.

18. It was not until 1250 that VENOMOUS finally completed the rescue work. She had picked up a total of 17 Officers and 476 ratings. About 55 others were saved by MARNE.

19. By this time VENOMOUS was running very short of fuel and an attempt was made to oil from MARNE but this was found impossible owing to the heavy swell. By 1600 there was no sign of the escorts detailed to join and screen MARNE. JONQUIL and LOUISBURG, however, were sighted proceeding to join Convoy J.G.F.2. As it was imperative that VENOMOUS should proceed immediately if she was to make harbour under her own power, JONQUIL was instructed to stand by MARNE until the arrival of the other escorts.

20. At 1615 VENOMOUS set course for Casablanca where she arrived with just under four tons of fuel remaining.

21. At daybreak on 13th November the tug SALVONIA arrived and commenced towing immediately. PRESCOTT, LANDGUARD and the tug JAUNTY arrived later in the forenoon and MARNE reached Gibraltar without further incident.

CONCLUSIONS.

22. Had the signal made by VENOMOUS when she had set course to rejoin at 2250 after investigating an R.D.F. contact been received in VINDICTIVE before the torpedoing the story might have been a very different one. VINDICTIVE would have known that the wake she saw at 2311 could not have been VENOMOUS and would have acted accordingly. Four minutes elapsed before HECLA was torpedoed and this time might have been just sufficient to execute an emergency turn to comb the tracks.

23. It is of interest to note that neither HECLA nor MARNE saw the U-boat's wake and that neither obtained R.D.F. contact.

24. The movements of the destroyers while HECLA was subjected to further attacks are not completely known and it is therefore difficult to suggest any reason for their failure to detect the U-boat during this period.

25. The promptness of VENOMOUS' attack at 0554 undoubtedly saved MARNE from sharing the fate of HECLA. The attack has been assessed as "U-boat probably severely damaged".