sustained nothing further could be done and that the operation was by now compromised. He therefore decided to surface the craft to give his crew the chance of escaping.

X.7 was brought to the surface, but was immediately hotly engaged by gunfire and sunk. Place was left swimming when she sank, and Lieutenant Aitken, the 3rd Officer, escaped by using D.S.E.A.*

Of the other two members of the crew nothing is known, nor, apparently, have their bodies been discovered.

X.5 (Lieutenant H. Henty-Creer, R.N.V R.)

14. The information so far available is insufficient to show what part X.5 took in the

Wreckage, presumably from this craft, was discovered by divers either on the day of or the day after the attack, about one mile to seaward of TIRPITZ' berth, about halfway between TIRPITZ and the entrance to Kaafiord. Some of the wreckage from this craft was also flung to the surface.

No bodies or personal gear have been found, and there is no knowledge of any survivors from X.5.

15. X.5 may therefore already have attacked and laid her charges and have been on the way out when depth-charged and destroyed, or she may have been waiting to attack at the next attacking period after o900.

The Explosion

16. At 0830 a huge explosion took place, and TIRPITZ was heaved five or six feet out of the The explowater before settling down again. sion extended from amidships to aft, and a large column of water was flung into the air on the port side. The explosion appeared to be caused by two or more simultaneous detona-

Members of the ship's company on deck aft were hurled into the air, and several casualties resulted. The ship took on an immediate list to port of about five degrees; this was later adjusted by trimming. All the ship's lights failed temporarily, but lighting was soon restored. Oil fuel started to leak out from amidships.

17. Panic seems to have reigned for a short time immediately following the explosion.

More than 100 casualties were caused by panic firing, and destroyers and small craft went into action up and down the fiord.

18. Meanwhile, the survivors from X.6 were being questioned by officers from the Admiral's staff.

Prior to the explosion it is reported that the crew of X.6 were seen looking anxiously at

They were joined about an hour after the explosion by Lieutenants Place and Aitken from X.7.

All of them were well treated and given hot coffee and schnapps.

Everyone on board TIRPITZ expressed great admiration of their bravery.

Salvage of Craft

19. X.7 was salvaged eight days after the attack, being recovered from a position some 400 yards off the starboard bow of TIRPITZ, outside the nets. She was taken in tow and The whole of her bow beached in Kaafiord. was missing, probably caused either by the gunfire or depth charges.

Although divers made a thorough search, no signs of X.6 could be found inside the A/T nets, and it is presumed that she was totally destroyed by the explosion, which must have taken place very close to where she was scuttled.

The wreckage of, presumably, X 5 was found, as previously stated, about a mile to seaward from TIRPITZ, but there was insufficient of the craft left to make salvage worth while.

Damage to TIRPITZ

20. The explosive charges (of which at least two detonated, the others possibly being destroyed by their close proximity to each other) badly buckled and possibly holed the hull in two places, causing flooding and loss of oil

The harbour boiler and turbo generator rooms were affected, with consequent effect on lighting system and forward turret the machinery.

Damage aft was also caused, and one report states that all four turrets were damaged, the guns put out of alignment, and that the shaft tunnel was stove in in parts.

A further report assesses the damage as follows: --

"The upper bridge is awry and the guns On the after deck, aft rendered useless. especially, there are large dents and bulges. The engine room area was particularly badly 'damaged.'

The fact that a large proportion of the 50-60 victims among the crew, who were later buried on Norwegian soil, wer'e engineers, stokers, etc., seems to confirm this last statement.

- 21. Several hundreds of workmen have been transported to Alten Fiord to effect temporary repairs with the aid of repair ships which have been seen alongside, and there is a repair hut on deck, and welding is in progress. On 10th January, 1944, a 100 ft. raft with superstructure had been towed alongside, apparently for divers.
- would appear conclusive TIRPITZ has sustained considerable damage to the hull, machinery and armament as a result of the attack. Temporary repairs are result of the attack. still being carried out in Kaafiord which it is estimated will not be completed for a further one or two months, and the ship cannot be made effective for prolonged operations without docking at a German port.
- 23. With the full story of this very gallant attack now unfolded, my admiration * for Lieutenant D. Cameron and Lieutenant Place and their crews is beyond words. I take special note of the complete disregard for danger in the immediate vicinity of the enemy shown by Lieutenant Cameron in taking X.6 through the net defences in broad daylight on the surface with the full knowledge that he must be

Admiralty footnote—
* D S E A—Davis Submarine Escape Apparatus, a form of diving equipment.