diving speed in a cross tidal stream, had maintained their positions off the enemy coast until daylight on the 6th June when they flashed lights to seaward from the surface in their correct positions as a guide to the oncoming assault craft. It is considered that great skill and endurance was shown by the crews of X.20 and X.23. Their reports of proceedings, which were a masterpiece of understatement, read like the deck log of a surface ship in peacetime, and not of a very small and vulnerable submarine carrying out a hazardous operation in time of war.

42. Weather conditions off the assault beaches immediately before H hour were as follows:—

Wind—Westnorthwest—force 4.* Sea.—Moderate—waves 3/4 feet.

Sky.—Fair to cloudy with cloud increasing. These unfavourable conditions interfered to some extent with the release of the assault craft and also with the launching of D.D. tanks,† but nevertheless the majority of the leading waves of the assaults touched down at the right place and at approximately the right time throughout the length of the front. The following is a brief summary of how each Assault Force fared.

Force S (British).

43. The leading groups passed through the "lowering positions" and approached the beaches generally on time. Enemy opposition was restricted to shell fire at craft off the beaches from light batteries ashore. D.D. tanks were successfully launched but were overtaken by the L.C.T.(A.V.R.E.); which touched down at the right time and place. Beach obstacles presented some difficulty but landing craft were, when necessary, driven through them relentlessly. Opposition ashore was initially only moderate, and for some hours the chief difficulty in this sector was that of congestion on the beaches, as only two exits could be brought into use.

Force J (British).

44. The first touch down was from 10 to 15 minutes later than planned, and moderate opposition was experienced on landing. On account of the weather D.D. tanks were not launched but were discharged directly on to the beach. By 1000, however, all beach objectives had been gained and the Army were advancing steadily, if slowly, inshore against opposition. Several major landing craft were damaged in this sector by beach obstacles and TELLER mines.

Force G (British).

45. The assaults landed dead on time but the left group of L.C.T. (A.V.R.E.) touched down slightly to the eastward. D.D. tanks were not launched here on account of the weather but were later beached inshore. Considerable difficulty was experienced in developing JIG beach on the left, which was enfiladed from the

* Force 4—Moderate breeze (11-15 m.p.h. at sea level).

† D.D. tanks are tanks fitted with flotation gear to enable them to swim ashore when disembarked outside their wading depth.

‡ L.C.T.(A.V.R.E.)—Landing Craft carrying tanks fitted with special obstacle clearing equipment used by R.E.

outset by two strong points, and it was not until 1600 that the situation became stabilised on that beach. Here also a large number of major landing craft were damaged by TELLER mines and beach obstacles.

Force O (U.S.A.). .

46. Considerable difficulty was experienced in this sector due to the state of the sea. Assault craft on their way inshore had a bad time, a number of craft were swamped and the assaulting infantry in the remainder in general arrived on the beach in rather poor shape. D.D. tanks were launched three miles offshore as planned on the left flank but regrettably all but two or three foundered. Thus the initial attack here had to be carried out with little tank support. On the right flank D.D. tanks were landed directly and successfully on to the beach, but were quickly put out of action by enemy fire. Enemy opposition at the beach exits was severe. The first waves of the assault touched down five minutes late at 0635, but due to the weather, the loss of the D.D. tanks and the failure of some L.C.T.(A)* to keep their position the order of landing was somewhat mixed. Due to the heavy surf, the difficulty in clearing the beach obstacles, and the persistent enemy fire directed on the beaches, the programme of landing troops and vehicles quickly fell behind in time. For about two hours assault troops were pinned to the beaches. During the rest of the morning penetrations were made inland but only slowly and by relatively small groups. All naval personnel who witnessed the battle were unanimous in paying tribute to their determination and gallantry. The supporting destroyers and gun support craft stood in close inshore during the period of fiercest fighting on the beach and rendered great support to the troops. At one time it was considered that it might be necessary to land part of Force O through the Force G beaches, but this proved unnecessary, as the First U.S. Division fought its way off the beach towards the end of the forenoon and the beach exits could then be developed. A considerable number of craft were sunk or damaged in this sector due to enemy action and the weather. Beach obstacles and mines proved particularly troublesome. The Assault Force Commander has reported that the preliminary air bombardment planned for this area had struck too far inland to affect the beach defences. Its absence was severely felt when the landing commenced and fierce opposition was met.

Force U (U.S.A.).

47. Almost complete surprise appeared to be achieved in this sector. Despite the late arrival of some groups in the transport area, due to the weather, assault waves were generally landed on time and against only slight enemy opposition. Due to the early loss of two control vessels the landing was made 2,000 yards to the south-east of the planned position. This proved fortunate, as the obstacles and defences there were found to be less formidable than those farther north. D.D. tanks were launched and landed successfully, but did not arrive until H + 20 minutes. Beach obstacles were relatively

^{*} Admiralty footnote: L.C.T.(A)—Tank Landing Craft strengthened to allow the self-propelled artillery which they carried to fire whilst still embarked, thus providing an addition to the naval close support fire.