defence batteries when these fired on our shipping or at the beaches. A large but carefully controlled amount of ammunition of all types was expended; replenishment at the home ports was carried out rapidly, due to the excellent provision made at the ports concerned, and to the efficient organisation evolved by the Admiralty departments responsible for planning and executing the very complicated arrangements for supply of ammunition and exchange of ships' guns. Spotting by fighter spotters, Air O.P.s, S.F.C.P.s, and F.O.s.B.*, was very successful, though there were some failures in communication between F.O.s.B. and ships, particularly in the early stages. Improvement in F.O.B. communications is still required, but failures were in part due to the natural tendency to land F.O.B. parties too early in the assault, which caused damage to their equipment and also a high percentage of . F.O.B. casualties. By common consent shooting was uniformly good and it is considered that the initial advances inland of our armies were helped in no small measure by the naval supporting fire.

Build-up Difficulties and Delays.

63. As mentioned in paragraph 57 above, delays in the turn round of ships and craft occurred initially in the assault area due to the abnormal conditions obtaining there. There were also difficulties in the United Kingdom, particularly in the Isle of Wight area and in the port of Southampton, due to the large amount of shipping to be handled in a congested area. The initial congestion in the Isle of Wight anchorage, which was caused by a variety of reasons, led to ships that should not have been there staying there for two or three days, and there were also some naval delays in getting ships up to Southampton to reload. The problem in the Isle of Wight area was far more difficult that anywhere else due to the physical characteristics of the anchorage, and it is not considered that the delays which occurred, although irritating to the army, were in any respects unreasonable. Energetic measures were taken to clear the Isle of Wight anchorage, and after the first ten days or so, there were no major delays in the United Kingdom. The figures of the rate of build-up show the great quantity of shipping that was sailed to France each day. When these are examined any serious adverse criticism of the naval organisation, either in the United Kingdom or in France, would seem unwarranted.

Wide scope of the Operation.

64. It is extremely difficult in a letter of reasonable length to deal with any completeness with the many aspects of the operation as it progressed from day to day. On the majority of the early days there were perhaps three or four incidents that in any previous operation would have been considered of outstanding interest, and it is only possible here to give my general impression of the naval operations as they developed. With 16 convoys and about the same number of landing craft groups at any one time at sea in the Channel, exposed to attack by enemy mines, E-Boats, aircraft and U-Boats, with the enemy

* Admiralty footnote:
Air O.P.s—Air Observation Posts.
S.F.C.P.—Shore Fire Control Party.
F.O.B.—Forward Observer, Bombardment.

active on both flanks with his light naval forces and his shore guns, with nightly air minelaying and sometimes air bombing, it was obvious that each day a number of actions of different types would be fought against the enemy forces and that our ships would suffer casualties and damage. The salient fact, however, was that no matter how the enemy attempted to sink our ships, he was fought, and generally with success. The casualties that we sustained were relatively light when the very large number of ships taking part is considered. The build-up proceeded quickly. By D+9 half a million men had been landed in France and 77,000 vehicles. The millionth man was landed on D+28, one day after the end of the period covered by this report.

Operations by our Coastal Forces.

65. Our coastal forces operating both from the United Kingdom and from the assault area had many successful encounters with enemy E-Boats. Because it was appreciated that it would not be possible to provide shore radar cover for the cross-Channel convoy route and the covering patrols on its flanks, Commanderin-Chief, Portsmouth, decided to extend the radar cover by using frigates fitted with American S.L. search radar to control units of M.T.B.s attached to them. Four frigates were allocated for this duty and proved very successful in controlling interceptions in over 30 actions. Great spirit liwas shown by all the Coastal Force Commanding Officers concerned, the majority of whom it should be noted were civilians a few years ago.

Difficulties of Aircraft Recognition.

66. The S.H.A.E.F.* rules for restrictions to flying and to A.A. fire are considered to have worked well, but unfortunately casualties to our own aircraft were caused by naval gunfire in the early stages of the operation, particularly in the U.S. Sector. Fire discipline and aircraft recognition in such a diverse fleet of ships and craft as was at any one time in the assault area was obviously extremely difficult to achieve; and the situation was much aggravated by the extremely low cloud base which prevailed on most days, and which, by forcing aircraft to fly very low, gave the minimum of time for their recognition. It is strongly recommended that in other theatres of war where cloud base may normally be expected to be much higher than in the Channel operations, the restricted height for aircraft should be such as to keep them outside the effective range of close range weapons. The appointment of Royal Observer Corps personnel to merchant ships to assist in aircraft recognition, which was a novel experiment, proved most successful and undoubtedly did something towards helping in this matter.

Buoying and Minesweeping of Channels.

67. Minesweeping was carried out continuously from D+1 and during the first few days of the operation channels were widened and permanently established from England to France and along the French coast in the assault area. A very large number of light buoys had to be laid to mark the channels as quickly as possible and this was expeditiously carried out by the Trinity House vessels.

^{*} Admiralty footnote: S.H.A.E.F.—Supreme Headquarters, Allied Expeditionary Force.