

made upon them for extraneous duties on the station. In the case of the Eastern Task Force, all ships, belonging as they did to the normal forces of the station, were heavily and continuously employed right up to the date of sailing for the operation, and in but few cases took part in any rehearsal or training. That their duties were performed so adequately when the time came reflects highly alike on the adaptability of their ships' companies and on the standard of maintenance achieved in spite of many months of arduous service at sea.

Collection of Beach Intelligence.

16. Much credit is due to the officers and men of the beach reconnaissance parties for their arduous and hazardous effort to obtain details of the beach gradients and sand bars. Credit is also due to the submarines of the 8th and 10th Flotillas which worked on beach reconnaissance in company with these parties.

Their casualties in this operation were unfortunately heavy; apart from natural dislike of such losses, the possibility of capture always gives rise to anxiety on grounds of security.

Location of Headquarters.

17. Much discussion was devoted to the best location for the combined headquarters from which the three Commanders-in-Chief should conduct the operation. Various alternatives were explored in an effort to find a common site satisfactory to all, but in the end communications problems, and, to a lesser extent, lack of suitable accommodation, caused an undesirable dispersion in that though the navy and army headquarters moved to Malta from Algiers, the Air Officer Commanding-in-Chief found himself unable to move from his existing headquarters at Marsa, where he was in close touch with his main forces.*

I am sure Malta was a wise choice from both naval and army viewpoints, and apart from an unexpected assault of sandflies which devastated my staff, the arrangements were in all respects excellent.

18. The separation of the Commanders did not in the event have serious reaction, but was manifestly undesirable and might have proved extremely awkward had things begun to go awry. In particular the navy and the air are closely interdependent in a sea assault, and with the exception of the coastal air component, the air plans of the operation had all along appeared to the other services to be somewhat nebulous, and their day-to-day exposition was necessary to make the picture clear.

The Approach and Assault.

19. The co-ordination and timing necessary to ensure the punctual concentration of this vast force in the assault areas, presented a problem of some complexity. The problem was to some degree complicated by the great distances over which the forces were initially dispersed†, by the need for deceptive routeing

to avoid disclosure of intention, by the bottleneck presented by the Tunisian war channel, and, finally, by the requirement for topping up the fuel of escort vessels before their arrival in the assault area.

Very detailed orders were issued regarding the routes and timing of the approach, backed up by track charts and the inevitable "Mickey Mouse" diagrams which are in my view essential to the clear understanding of a problem of this nature. Even so, everything depended, as always, on the seamanship and good sense of individual commanding officers and on the smooth working of the berthing and fuelling organisations of the several ports concerned.

My confidence in their abilities was not misplaced. The operation ran like a well-oiled clock.

20. The only incidents which occurred to mar the precision of this remarkable concentration were the loss by submarine attack of four ships in convoy, the CITY OF VENICE and ST. ESSYLT in K.M.S. 18B on the 4th July, the DEVIS in K.M.S. 18B on 5th July, and the SHAHJEHAN in M.W.S. 36 on the 6th July. The passage of the convoys was covered most effectively by the operations of the North-West African Coastal Air Force, of No. 201 (Naval Co-operation) Group, of squadrons operating under Air Headquarters Air Defence, Eastern Mediterranean, and, on D-1 day, of the North-West African Tactical Air Force Squadrons based on Malta. Their problem was one of a complexity equal to our own. It was solved with conspicuous success, since no bomb was dropped on any convoy—the majority were not sighted by enemy aircraft—and all reports showed that the fighter cover was excellent.

21. An aspect of the approach which caused me concern was the slow speed of the L.C.T. convoys, and the necessity for their arrival at the assault beaches well before first light to provide the supporting arms the army needed. Throughout the planning stages, the estimates of speed of advance allowable for L.C.T. convoys had continually to be lowered as experience was gained. In the end it became clear that not more than 5½ knots could be counted upon in safety, even in calm weather. I was not sanguine of our ability to maintain surprise at any time after 1200 on D-1, since it appeared beyond doubt that the enemy must by then become aware of our concentration south of Malta: but it appeared to be beyond the wildest expectation that he should be unaware of the L.C.T. convoys which must be within 20 miles of his coast at sunset.

It is, I suggest, a matter of urgency that some means be devised of landing supporting arms at an early stage from craft whose speed is at least in the region of that of the average infantry assault ship, if tactical surprise is to be aimed at.

22. Little anxiety had been felt on the score of weather, which is so rarely bad in the Mediterranean at this time of year. Nevertheless, plans had been made whereby a postponement of 24 hours could, if necessary, be ordered as late as 1200 on D-1. Beyond this time it was felt impracticable to disturb the march of events, and it was also expected that in the event the weather would have sufficiently disclosed its intentions by this time.

Air Ministry footnote:

* Besides the accommodation and communications difficulties mentioned, time did not permit of the Air Officer Commanding-in-Chief changing the elaborate arrangements for controlling the air operations from Marsa.

Admiralty footnote:

† Some of the British assault force was sailed from Egypt and the First Canadian Division from the Clyde. Part of the American assault force was mounted in the U.S.A., making only a short call at Algiers and Oran on passage to the assault beaches.