but was fully effective within those limitations. In general, it is considered that the operations of carrier-borne fighters reflected great credit on the foresight and planning of the Rear-Admiral Aircraft Carriers, on the spirit and training of the Fleet Air Arm and the efficiency of the carriers alike.

Bombers.

15. The provision of close support bombing by carrier-borne aircraft suffers from similar limitations to those referred to in paragraphs 13 and 14 above. In spite of these drawbacks it proved remarkably effective whenever opportunity was given.

In particular the dive bombing of La Senia aerodrome was most striking not only for its accuracy and effect, but also for the extremely gallant and determined manner in which it was pressed home.

16. A point which emerged was the ineffectiveness of the means provided for the destruction of the Fleet Air Arm aircraft in the event of landing in hostile territory.

Communications.

- 17. The complication of the communications inherent in any Combined Operation was enhanced in "Torch" by the fact that a W/T organisation had to be evolved for a new station concurrently with carrying out a major operation therein.
- 18. Further difficulties were the number of services involved and the manner in which they were inextricably mingled in both the Eastern and Centre Task Forces. The mounting of the Western Task Force in the United States of America added considerably to the troubles of the planning stage.
- 19. Naval communications were generally satisfactory and stood up well to the heavy load of traffic which was considerably increased by the failure of certain W/T links of the other services.
- 20. The two Headquarters Ships—His Majesty's Ships BULOLO (Captain R. O. Hamer, D.S.O., Royal Navy) and LARGS (Commander E. A. Divers, R.D., Royal Naval Reserve)—were of inestimable value.*

Naval Operations.

- 21. The complaisant attitude of the Italian fleet, and the inactivity of the French main fleet, unfortunately gave Force "H" no scope for action. This powerful force had in fact to be kept cruising idly in an area where it was subject to sporadic air attack and faced with an increasing concentration of U-Boats. We were perhaps fortunate that torpedo casualties were limited to the two destroyers, His Majesty's Ship MARTIN and Her Netherlands Majesty's Ship ISAAC SWEERS.
- 22. The value of Force "R" was amply demonstrated. These two oilers, Royal Fleet Auxiliary DINGLEDALE and Royal Fleet Auxiliary BROWN RANGER, did yeoman service. It was not my intention that large cruisers should fuel from this force, nor should I have permitted it except in emergency. It

is considered very fortunate that His Majesty's Ship BERMUDA (Captain T. H. Back, Royal Navy) escaped damage in her prolonged fuelling at dead slow speed on a steady course inadequately screened.

- 23. In this connection it has been observed from numerous reports that many Commanding Officers without Mediterranean experience lacked appreciation of the problem with which they were faced in these narrow submarine and aircraft infested waters. It is clear that advice on this subject should have been promulgated beforehand. This has now been done within the "Torch" area, and will be available for future operations.
- 24. Such surface actions as did take place were somewhat distasteful and one sided encounters with the French destroyers trying to break out of Oran. His Majesty's Ship BRILLIANT (Lieutenant-Commander A. G. Poe, Royal Navy) fought a satisfactory duel with the French destroyer LA SURPRISE. His Majesty's Ship AURORA (Captain W. G. Agnew, C.B., Royal Navy) polished off her opponents on each occasion with practised ease. The performance of His Majesty's Ship JAMAICA in expending 501 rounds to damage one destroyer was less praiseworthy.

Unloading.

- 25. The weather only held in our favour long enough to enable the smooth working of the assault and early maintenance. The break of weather on D+1 was not sufficient to stop disembarkation, but speedily reduced the flow of supply and served to show up the need for greater robustness in the landing craft and for training in rough water and surf conditions for the crews.
- 26. The early seizure of Arzeu and the surrender of Algiers were invaluable in assisting unloading of the convoys. Even so, we were left with the great anxiety of vast masses of shipping anchored in open roadsteads for many days. Had the enemy shown more enterprise with his U-Boats or had more torpedo aircraft been at his call, our losses might well have been uncomfortably high. This had of course been recognised as an unavoidable and acceptable risk.

Shipping Casualties.

- 27. I was concerned to get shipping away as soon as possible from these crowded anchorages. Orders had been issued on this subject in accordance with which the fast troopships were sailed independently for Gibraltar as soon as empty. We were most unfortunate, I consider, in that two of these ships blundered on to U-Boats and were destroyed. It was an even chance whether they would be safer at sea proceeding at high speed for Gibraltar alone, or anchored in the mass, escorts not being available.
- 28. This ill fortune with the big troopships persisted with the destruction of ETTRICK and WARWICK CASTLE in convoy M.K.F.1 after they had passed clear of the Mediterranean.
- 29. Other personnel ship losses, notably NARKUNDA, CATHAY, and His Majesty's Ship KARANJA (Acting Commander D. S. Hore-Lacy, Royal Navy), were part of the price which may be expected to be paid for taking such large and valuable vessels into the for-

Admiralty footnote:—

^{*} These H.Q. ships for the conduct of combined operations, accommodating combined service staffs, were the first to be converted for this purpose, and this was the first occasion on which they were used.