INVASION OF THE SOUTH OF FRANCE

Operation "Dragoon", 15th August, 1944

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Foreword

1944

An Anthology of Amphibious Invasions

The sheer scale of the invasion of Normandy—Operation Neptune—which was the essential precursor of the liberation of north-west Europe (Operation Overlord), has tended to overshadow the significance of two other important amphibious assaults of that year, the invasion of the South of France (Operation Dragoon) in August 1944 and the seizure of the island of Walcheren (Operation Infatuate) in November. This combined volume of official Admiralty "Battle Summaries" not only sets the amphibious contribution in the context of the Allied success but, in the third section, describes the little-known naval activities following the break-out from Normandy and supporting the subsequent advance to, and even over, the Rhine.

The "Battle Summaries" were written relatively soon after the events which they describe (the last was produced in 1952) and are based on official documentary material which did not become available to the public at large until 1968. Like the other works in the Naval Staff Histories series, they were intended for professional use, for planners and commanders who might have to conceive and undertake similar operations, and for Staff Course students, to broaden their education and to lead them on to the possibilities offered by the deeper study of original documents. The text in each is supplemented by appendices giving orders of battle, commanders and large quantities of statistical information and the accompanying maps frequently have more detail than is shown in those prepared for books written for commercial publication. In due course, the volumes became basic reference sources for the authors of the Cabinet Office series of Official Histories of the Second World War.

The policy of the Naval Historical Branch was that the Staff Histories should be detailed narrative accounts, not analyses, and that they should concentrate primarily on maritime aspects, describing air and military plans and activity only in as far as they affected naval operations. The accounts may seem to more sophisticated modern historians to be curiously naïve, for although the operations were frequently undertaken against a background of simmering (and sometimes raging) politicomilitary controversy, the latter was rigorously eschewed. In exchange,

the reader received, and still receives, a wealth of factual information, set in its correct strategic and tactical context, written by naval officers who were versed in the black art of naval operations but were capable of synthesising the vast quantity of source material to serve up the essentials without resorting to jargon. Inevitably, the three authors (Commander LJ Pitcairn-Jones, "Operation Neptune", Commander W E H Westall, "Operation Dragoon" and Lieutenant Commander J H Lloyd-Owen, "The Campaign in North-West Europe") made minor errors and those are corrected in an errata slip which accompanies this edition.

The combination of straightforward, readable narrative and close attention to detail by authors who understood thoroughly their topics, renders this "amphibious anthology" of real value as a research tool for wider use than has previously been possible.

David Brown

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SOURCES

M05662/45.	1. Cin-C. Mediterranean's Despatch.
	2. Report of Vice-Admiral Hewitt, U.S.N.—This is the main source and as it is frequently quoted in the narrative, for the sake of brevity it is referred to as "H."
M057745/45.	Vice-Admiral Hewitt's Operation Plan with Annexes A-S.
M057950/44.	Preliminary report of Rear-Admiral Troubridge (C.T.F.88).
M010202/44.	1. Final report of Rear-Admiral Troubridge.
	2. Rear-Admiral Troubridge's Operation Orders.
	3. Individual Rs. of P. of certain of Admiral Troubridge's ships, i.e., Emperor, Khedive, Pursuer, Searcher, Attacker, Colombo and Troubridge.
M011712/44.	Cin-C. Mediterranean's comments on Rear-Admiral Troubridge's report.
M04533/45.	R. of P. Hunter.
M04532/45.	R. of P. Stalker.
M011533/44.	R. of P. Stalker (continuation) also R. of P. Dido and R. of P. Colombo (duplicate).
M0107/45.	Report of Rear-Admiral Mansfield (C.S.15, C.T.G.84.7) in <i>Orion</i> with comments by Rear-Admiral Lowry, U.S.N. (C.T.F.84).
M011587/44.	R. of P. Ramillies.
M011228/44.	R. of P. Aurora.
M010759/44.	R. of P. Argonaut.
M058498/44.	R. of P. Ajax.
M013192/44.	R. of P. Black Prince.
M013193/44.	R. of P. Orion.
M03316/45.	Loss of L.C.T. 307.
M04531/45.	R. of P. S.O. "F" Support Craft Squadron, and of individual craft.
M09992/45.	R. of P. 5th Minesweeping Flotilla.
M06465/45.	R. of P. 19th Minesweeping Flotilla.
M012172/44.	Action Report. S.C.978.
M06466/45.	Action Report Boat Minesweepers.
	Council Letter (U.S.Jimiso)

ABBREVIATIONS

A.A. A.P.D. A.S.R.C. A.T.A. A.T.R.	Anti-Aircraft. American destroyer used as a transport. Air Sea Rescue Craft. Ocean Tug Auxiliary (U.S.). Ocean Rescue Tug (U.S.).
B.Y.M.S.	British "Y" Class Minesweeper.
Cin-C. C.C.S. Cort Div. C.O.S. C.O.S.S.A.C.	Commander-in-Chief. Combined Chiefs of Staff. Escort Division (U.S.). Chief(s) of Staff. Chief of Staff to Supreme Allied Commander (for Operation "Overlord"). Flag Officer Commanding 15th Cruiser Squadron. Commander Task Force.
C.T.G.	Commander Task Group.
D Day D + or -5 D24 DD Tanks Des. Div. D.U.K.W.S.	The day fixed for an operation. Five days after (or before) the date fixed for an operation. Captain D. 24th Destroyer Flotilla. Amphibious Tanks. Destroyer Division (U.S.). Amphibious Trucks, commonly called Ducks.
E-Boat	German motor torpedo boat.
F.D.T. F.F.I. F.T.	Fighter Defence Tender = L.S.F. French Resistance Movement (MAQUIS). Fleet Tender.
G.C.I.	Ground Control Interception.
H.Hour H.Q.	The exact hour fixed for the commencement of an operation. Headquarters.
J.S.M.	Joint Staff Mission (in Washington).
L.C.A. L.C.C. L.C.F. L.C.G. L.C.H. L.C.I. L.C.M. L.C.M.(R) L.C.M.(S) L.C.N. L.C.P.(R) L.C.R. L.C.R. L.C.R. L.C.S. L.C.T. L.C.T.(R) L.C.Y.P.	Landing Craft Assault. ,, ,, Control. ,, ,, Flak. ,, ,, Gun. ,, ,, Headquarters. ,, ,, Infantry. ,, Mechanized. ,, ,, (Rocket). ,, ,, (Smoke). ,, ,, Navigation. ,, ,, Personnel (Ramped). ,, ,, Rubber. ,, ,, Support. ,, ,, Tank. ,, ,, (Rocket).
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ABBREVIATIONS

	ADDREVIATIONS
L.S.C. L.S.D. L.S.E. L.S.F. L.S.G. L.S.I. L.S.P. L.S.T.	Landing Ship Carrier. ,, ,, Dock. ,, ,, Emergency Repair. ,, ,, Fighter Direction = F.D.T. ,, ,, Gantry. ,, ,, Infantry. ,, ,, Personnel. ,, ,, Tank.
M.A.S. M.F.V. Min. Div. Min. Ron. M.L. M/S	Italian Motor Torpedo Boat. Motor Fishing Vessel. Minesweeping Division (U.S.). Minesweeping Squadron (U.S.). Motor Launch. Minesweeping.
N.C.W.T.F.	Naval Commander Western Task Force.
P.C. P.T.	Patrol Craft (U.S.). American Motor Torpedo Boat.
R.C.T. R. of P.	Regimental Combat Team (U.S.) = Brigade. Report of Proceedings.
S.A.C. MED. S.C. , S.C.A.E.F.	Supreme Allied Commander Mediterranean Theatre. Submarine Chaser (U.S.). Supreme Commander Allied Expeditionary Force (Operation "Overlord").
S.H.A.E.F.	Supreme Headquarters Allied Expeditionary Force (Operation "Overlord").
S.I.C. S.O.	Secret Intelligence Committee. Senior Officer.
T.F. T.G.	Task Force. Task Group.
U. Boat U.S.N. U.S.S.	German Submarine. United States Navy. United States Ship.
Y.F. Y.M.S. Y.T.L.	Covered Lighter (U.S.). "Y" Class Minesweeper (U.S.). Small Harbour Tug (U.S.).

INTRODUCTION

In August, 1943, the Prime Minister, Mr. Churchill, with the British Chiefs of Staff, met President Roosevelt and the American Chiefs of Staff at Quebec. The future course of the war was considered and it was decided that the invasion of Normandy, Operation "Overlord," should be carried out at the beginning of May, 1944, with an assault strength of three divisions. With the object of drawing off German forces from the north of France, and to contain those already in the south during the critical early days of the "Overlord" build up, it was further decided to carry out an operation in southern France early in May, 1944, to which was later given the code name "Anvil" and General Eisenhower, the Supreme Allied Commander in the Mediterranean, was instructed to submit an appreciation of the outline of plans to the Combined Chiefs of Staff by 1st November, 1943 (see C.O.S. (43) 509 (0)).

General Eisenhower made his report in October, 1943, and in it stated that even if "Anvil" was not mounted it would still be possible to tie down the German divisions defending the Riviera coast by the threat of landing. Then if "Overlord" went well it would later be possible to land French forces in the South without the necessity of an assault.

He considered that if "Anvil" was carried out it would be essential to capture a port, preferably Toulon, within range of single engined fighters based on Corsica, so that the limitations of the shipping available would not retard the build up.

Between 22nd November, 1943, and 6th December, 1943, a series of conferences was held at Cairo and Teheran by President Roosevelt and Mr. Churchill, together with the British and American Chiefs of Staff; Marshal Stalin and his staff attended the meeting at Teheran and particularly pressed for the mounting of the second front in France, of which operation "Anvil" formed part, with all speed.

The British Chiefs of Staff required that if "Anvil" was to be carried out the assault should be made with a minimum of two divisions. As there was not sufficient assault shipping for this in the Mediterranean, ships would have to be sent there at the expense of other operations; but there was to be no subtraction from the "Overlord" forces. The United States Chiefs of Staff agreed and the joint planners were directed to examine the proposals. They reported (see C.C.S.424) on 5th December, 1943, that at least two divisions would be required for the assault, and they also gave estimates of the additional ships and craft which the Supreme Commander in the Mediterranean would need. These included 9–12 Escort Carriers, six Anti-Aircraft Cruisers, three Combat Loaders, 26 L.S.T., and 31 L.C.T.

These conclusions were submitted to the President, the Prime Minister, and Marshal Stalin who gave them their approval, and directions were sent to General Eisenhower on 6th December, 1943, to prepare an outline plan (FAN 283 No. T.O.O.) as quickly as possible for a two divisional assault on the south of France to be launched in May, 1944.

It is important to note here that the planning staff at Teheran worked on the assumption that by the time "Anvil" was launched the allied armies in Italy would have reached the Pisa-Rimini line and would be able to exert strong pressure on the enemy.

Shortly after the Teheran meeting there occurred big changes in the allied commands in the Mediterranean. General Eisenhower was appointed Supreme

Commander of the Allied Expeditionary Force which was to land in Normandy (S.C.A.E.F.) and was relieved in the Mediterranean by General Sir Henry Maitland Wilson on 24th December, 1943. At the same time General Sir Bernard Montgomery relinquished command of the Eighth Army and became General Eisenhower's Military Commander-in-Chief and also commanded the Twenty-first Army Group. General Sir Harold Alexander was appointed Commander-in-Chief, Italy, under the Supreme Commander, General Wilson. On 28th December, 1943, Admiral Sir John Cunningham, Naval Commander-in-Chief, Mediterranean, nominated Vice-Admiral H. K. Hewitt, U.S.N., as the Naval Commander, Western Task Force (N.C.W.T.F.). Admiral Hewitt was to command the naval side of "Anvil" and was entrusted with the task of drawing up the detailed naval plan.

General Eisenhower, on establishing himself at his headquarters in London, and after reviewing the "Overlord" plan with his Commanders-in-Chief, Admiral Ramsay, General Montgomery and Air Marshal Leigh-Mallory, sent a signal to the British and American Chiefs of Staff that the "Overlord" assault should be increased from three to five divisions (B.33/M.37 232300/Jan.). He was reluctant to see the "Anvil" assault reduced below two divisions, but if it were impossible to provide sufficient resources for this then he would accept a reduction in "Anvil." It should here be emphasised that there was no difficulty in supplying the troops necessary for the two operations. The difficulty lay in transporting them to the point of attack owing to the shortage of assault shipping. General Eisenhower added that he was prepared to postpone the "Overlord" assault until early June if this delay would result in the provision of the additional shipping.

On 26th January, 1944, the British Chiefs of Staff sent a message (C.O.S.(W) 1904 261130/Jan.) to the American Chiefs of Staff expressing general agreement with General Eisenhower and stating that they were examining the extent to which the Supreme Commander's requirements could be met from British sources.

Meanwhile, the campaign in Italy had not been going entirely according to plan. German demolitions and the weather had considerably slowed down the advance. The Anzio landing, though successful, was unable to make headway against the German resistance, whilst the maintenance of this force provided an extra commitment for the Mediterranean assault shipping. Uncertainty as to how long this situation would continue rendered difficult any firm plan for "Anvil." Exchanges of views continuously took place on this subject between the British and American Chiefs of Staff, and it was finally decided that planning for "Anvil" should continue but no preparations for it were to be made to the detriment of operations in Italy, which were to have priority (C.O.S.(W) 1168 231740 and J.S.M.1538 252317/Feb.).

On 19th March, 1944, General Wilson submitted his views on the situation. He said that no fresh attack in Italy could be made before April 15th. He was confident that this attack would be successful but did not expect the junction with the army at Anzio before 15th May. If it were decided to mount "Anvil" the earliest date would be late July. As the result of these views further discussion took place between Washington and London as to whether or not "Anvil" should be carried out, and it was not until 2nd July that this was finally decided upon and orders were given to General Wilson to launch the assault on 15th August, 1944, with three divisions (C.O.S. Med. 139 021120/July).

On 27th July, for security reasons, the code name of the operation was changed from "Anvil" to "Dragoon" and detailed planning, which had

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never entirely ceased, was now redoubled in intensity at the various headquarters in the Mediterranean.

It will be seen from the foregoing that in the months which had elapsed since the inception of "Anvil" at the Quebec meeting in August, 1943, the object of the operation had changed. The original intention of the Allied Chiefs of Staff was that the landing on the Riviera should take place soon after the assault on the Normandy beaches with the object of drawing to the south some of the German divisions opposing General Eisenhower. The tenacious resistance offered by the German army in Italy rendered necessary a post-ponement of the southern landing, and when it was finally decided to undertake it the defeat of the enemy in Northern France had been accomplished. The successful achievement of "Overlord" had now raised a new American requirement for another large port in France in order to land 35 divisions which were ready in the U.S.A. and which could not be deployed through the northern ports. Operation "Dragoon," if successful, would achieve this.

In the following chapters a detailed account is given of the planning and preparations, the assault and the follow up for operation "Dragoon." The operation took place, as planned, on 15th August, 1944, three American divisions landing on the beaches to the eastward of Toulon preceded by a airborne division and by commando landings. The build up consisted of seven French divisions two of which were armoured, the whole comprising the Seventh Army under Lieutenant General Patch. While a portion of this army operated against Toulon and Marseilles, both of which ports fell on 28th August, the bulk of the Allied forces advanced up the Rhône valley driving before them the German divisions, which had opposed them. So rapid was the advance, and so little resistance were the Germans able to offer, that Lyons was entered on 3rd September and Dijon on 11th September, while Vesoul was captured on 12th September. On 15th September, one month after the landing, the Seventh Army was in line with General Eisenhower's forces in Northern France and General Wilson, Supreme Allied Commander Mediterranean, then relinquished the direction of General Patch's army in favour of General Eisenhower.

CHAPTER I

PLANNING AND PREPARATIONS

1. Outline Plan of Operation "Dragoon"

The assault was to be carried out by the U.S. 6th Corps, commanded by Major-General Truscott and comprising the 36th, 45th and 3rd Divisions from North to South, landing at Agay, St. Raphael, Sainte Maxime, and in the Bays of Pampelonne and Cavalaire, and by a French armoured brigade, which was to be put ashore near St. Raphael. It was timed for 0800 on 15th August, 1944.

In the early hours of that morning French Commandos were to land on Cape Nègre to capture batteries which could enfilade the Cavalaire beaches, and American commandos, under Colonel Waller, were to land on the islands of Levant and Port Cros to capture batteries, which could command the transport and naval bombardment areas. Another detachment of commandos was to land before daylight to the south of La Napoule Gulf to block the roads leading from Cannes to St. Raphael.

The assault was also to be preceded by the dropping of an airborne division, commanded by Brigadier-General Frederick, which was to emplane at airfields near Rome. Included in this division were the only British troops taking part in the operation, the 2nd Parachute Brigade. The airborne division, which was to land in the vicinity of Le Muy, had the mission of blocking the movement of enemy reserves into the assault area from the north and north-west. The infantry divisions were to move inland as rapidly as possible, making contact with the airborne force, secure the beach head, and extend it to a depth of about 14 miles by D+1.

The follow up was to commence on D+1 and was to be by French army B, under General de Lattre de Tassigny, composed of the 1st Corps under General Martin which consisted of the 2nd and 4th Moroccan Divisions and the 5th Armoured Division, while the 2nd Corps under General de Larminat contained the 1st Motorised Division, the 3rd Algerian Division, the 9th Colonial Division and the 1st Armoured Division. The 2nd Corps less the 9th Division was to be ashore by D+5 and the remaining division was to land by D+9. The French troops were to pass through the left of the Americans and proceed to the capture of Toulon and Marseilles. The 1st Corps was to land from D+20. The whole Seventh Army was under the command of Lieut.-General Patch who had commanded the American forces at Guadalcanal. The detailed naval plan will be considered later.

The Strategical Air Force was under the command of Major-General Twining, and the Tactical Force was commanded by Brigadier-General Saville² both of the U.S. Army Air Corps. The Strategical Force, based in Italy, was to carry out a programme of heavy bombing before the assault, aimed at the neutralisation of the enemy's air power and the disruption of his communications. This bombing had to be carefully integrated with the general air offensive to prevent the enemy from deducing the point selected for the assault. This softening up had begun as early as 29th April with an attack on the harbour at Toulon, and continued with increased intensity from 19th May. Once the

¹ F.80296, 071900 August and C.O.S. (44) 713 (0) 9th August.

 $^{^2}$ C.O.S.(44)713(0). In Admiral Hewitt's operation plan, Annex F. Appendix 1. p. 6, it is stated that the Tactical Air Force was commanded by Major-General Cannon.

assault had been launched the Strategical Air Force would be employed mainly against communications and tactical targets, but airfields would be attacked when necessary. The Tactical Air Force was based in Corscia and Sardinia and had the task of providing close support and cover for the assaulting forces. It was to be augmented by the aircraft from the Carrier Force.

2. Planning

In the Mediterranean naval planning was commenced at the end of December 1943, when Vice-Admiral Hewitt, U.S.N., commanding the 8th U.S. Fleet, was appointed Naval Commander Western Task Force (N.C.W.T.F.) and charged by the C.-in-C. Mediterranean, Admiral Sir John Cunningham, with the task of planning and launching the naval side of operation "Anvil." The experience gained in the invasions of North Africa, Sicily and Italy was of the greatest value. Planning sections of the Army, Navy and Air Force were all established at Bouzareah, just outside Algiers, and when General Patch arrived he established his headquarters in the same place. On 8th July, 1944, Planning H.O. for the operation followed Allied Force Headquarters to Naples, near where it had been decided to train the three assault divisions. General Patch and Brigadier-General Saville, who had been appointed Air Commander of the expedition, also set up their H.Q. at Naples, as did General Truscott who commanded the 6th Corps and General de Lattre de Tassigny who was in command of the French Army; hence there was no repetition of the difficulties which arose during the planning of the Salerno landing owing to the wide dispersal of the different authorities.

Difficulties, however, there were. In the first place there was no certainty as to the strength of the assault, and it was not until 2nd July that the final order for a three divisional assault was issued. Moreover, until 2nd July the Italian campaign had a priority over preparations for "Anvil" and as most of the available assault craft were engaged in supplying the armies in Italy it was never possible to carry out much training, nor to estimate how many landing craft would be available for the invasion. To carry out a landing with three divisions, additional assault shipping had to be provided from the United States and from General Eisenhower's forces, but the decision to send craft from America was only reached in mid-May, while not until the end of June was the exact number of the craft to be withdrawn from S.H.A.E.F. made known.

Owing to the late decision as to the strength of the assault it is not surprising that the 6th Corps assault plan was not ready before 30th July, and not until then could the final details of the naval plan be worked out and promulgated. As the first of the assault convoys had to sail on 9th August there was not much time. Under these circumstances the naval planning memoranda issued from time to time were of the greatest value in enabling force commanders to draw up their plans before the general plan was finally completed. It was at first intended that the 85th Division at Oran should make a ship to shore assault while the landing of the other two divisions from Naples would be shore to shore. It was eventually decided, however, that the 36th Division should take the place of the 85th so that the whole force would sail from Naples. As a result it was planned that each division would have one Regimental Combat Team (R.C.T.) loaded in combat loaders or L.S.I., one in L.S.T. and the third R.C.T., which would be in reserve, would be embarked in L.C.I. and L.C.T.

¹ See Introduction.

² M.05662/45. Admiral Hewitt's report. p. 7.

³ The R,C,T, is the equivalent of a British brigade.

The naval forces corresponding to the three divisions were named "Alpha," "Delta" and "Camel," while the naval force working with the Commandos was given the name "Sitka." Each of these forces was self-contained and had its own bombardment force, support craft and minesweepers. The aircraft carriers formed a separate force under Rear-Admiral Troubridge, while escorts, anti-U-Boat patrols, screening groups and the Naval Train were under the direct command of Admiral Hewitt, who was to fly his flag in the *Catoctin*.

Early in 1944 Corsica was being developed as an advanced naval supply depot for the invasion, and it was arranged that landing craft convoys should stage in Corsican ports. Airfields in Corsica were also organised so that shore-based single-engine fighters could give cover to the beaches. An amphibious training centre was developed at Salerno where the assault divisions could train with landing craft.

3. Five different areas in Southern France had been considered as landing places for the invasion—the Cette-Agde area, the Gulf of Fos, the Gulf of Hyères, the Marseilles-Toulon area and the Cavalaire-Agay area. The objections to the Cette-Agde area were that there was no lee for shipping and no port which could shelter deep draught vessels; furthermore the port of Cette was small and could easily have been blocked by the enemy, while the neighbouring beaches were poor, their gradients unsuitable for pontoons, and their exits bad. In addition beach obstacles were more highly developed than in any of the other areas and the country between Cette and Marseilles was difficult and broken by lakes, lagoons, marshes and ditches, which would have hindered the rapid advance of the army. Finally the area was out of range of fighters based on Corsica.

The Gulf of Fos was heavily mined; the beaches were good but the area contained no port capable of maintaining the assault divisions, and the country inland was swampy. The objections to the Gulf of Hyères were the fact that extensive minesweeping would be necessary before the assault, while there would not be sufficient hours of darkness for this to be accomplished; there was lack of sea room for the bombardment forces, and the batteries on the coast and on the islands of Porquerolles, Port Cros and Levant would command the beaches and transport areas. The beaches in the Marseilles-Toulon area were good but it was considered that the strength of the coast defences would make a landing too hazardous.

The Cavalaire-Agay area was eventually chosen as being the most favourable. It was the nearest possible area to Corsica, the sea approach was good and not heavily mined, it was less strongly defended than most landing places on the coast, the beaches were good and three small ports offered shelter and good anchorages for shipping. In addition, the enemy did not appear to expect a landing in this neighbourhood and a bridge-head in this sector would provide a suitable base for the advance on Toulon and Marseilles. On the other hand the country inland was difficult, and an advance of 38 miles would have to be made to reach Toulon. Great stress was laid on the necessity for a rapid advance inland to reach high ground so as to deny to the enemy artillery, positions from which the beaches could be shelled. It was desired that by D+1 the depth of the beachhead should be about fourteen miles and this in fact was attained. The hour for landing the main forces was fixed for 0800. This was a compromise between the need to give adequate time to the bombardment forces for neutralising the defences and the necessity for allowing the maximum of daylight hours for unloading.

Before the landing in Normandy efforts were made to convince the enemy

that an assault would be made on Southern France. Later, when it was finally decided to carry out Operation "Dragoon," a strategic deception was adopted to fix the enemy's attention on the Eastern Mediterranean. For this purpose preparations were made for mounting follow-up divisions at ports in the "heel" of Italy, the escort carriers were ordered to the Levant, and the concentration of the bombarding forces at Malta and Taranto and of the assault shipping at Naples was consistent with an intention to carry out an invasion to the east of Italy; to what extent the enemy was deceived is not known.

4. The Gunfire Plan

Admiral Hewitt's criticisms after the Salerno landing of the military insistence on the doctrine of tactical surprise with the corollary that there must be no bombardment of the enemy's positions immediately before a landing, had at length borne fruit. In planning for Operation "Dragoon," it was assumed that the convoys would be sighted and that by midnight on August 14th the enemy would have realised in what region the expedition intended to land. Hence plans were made for a heavy naval bombardment to be carried out from dawn to H-hour. Heavy air attacks were to be made in conjunction with the naval bombardment, and air support would be given during and after the landing. The Air Plan is considered more fully in Section 11.

The bombarding forces consisted of about sixty vessels, battleships, cruisers and destroyers. The weight of the bombardment was, however, limited by the restricted quantity of heavy calibre ammunition available, especially for the French ships, and the necessity of conserving it for the later bombardments of the fortifications of Toulon and Marseilles. The principal targets selected were four heavy coast defence batteries, but light and field batteries were also to receive attention and a comprehensive target list was drawn up so that the Naval Force Commanders could rapidly assign targets to their bombarding ships.

Air spotting had been considerably developed and would be carried out by aircraft from the American cruisers, from the carrier force, and from the Allied Air Forces. Air spotting was to be supplemented by Landing Craft Control (L.C.C.) which, when the target was near the coast, could control the fire from close off shore. The "Sitka" fire support group, after its task of covering the commando landings had been completed, would form a reserve bombardment force which Admiral Hewitt could employ to augment the fire in any desired sector. Owing to the fact that the enemy surface forces were insignificant there was no necessity for providing strong covering forces, and so all the heavy ships available could be used for bombardment.

The landing was to be covered by close support fire from destroyers, L.C.G., L.C.T.(R) and from the ship-borne L.C.S., while protection against enemy air attacks on the beaches and shipping would be given by the L.C.F. After the landing the heavy ships would continue to provide supporting fire, and shore fire control parties were to be landed and put into operation as quickly as possible. Elaborate plans were drawn up for the use of smoke as a protection to our ships and forces, and considerable supplies had been built up. Each Force Commander would control the making of smoke in his area, and it was realised that he must decide whether the risk from the enemy was sufficient to justify the loss of visibility and slowing down the work on the beaches which the use of smoke would inevitably entail.

5. Naval Demolition Units

Owing to the fact that off the assault area the hundred fathom line is only from three to six miles from the shore, the area in which the enemy could lay deep minefields was very restricted, but the approaches to the beaches were plentifully strewn with shallow water mines. In addition, access to the beaches was obstructed by concrete pyramids and tetrahedra, usually mined, and in some places by rows of rails or stakes to which explosives were attached. To deal with these obstacles a number of L.C.V.P. had been converted to Apex boats, also known as Drones or Drone boats; these carried 8,000 pounds of high explosive and were remotely controlled. The Apex boats were to precede the assault and were to be guided towards the selected beaches, scuttled and exploded so as to clear a channel through the obstructions. Obstacles which remained after the assault were to be cleared by the use of "Reddy Fox" demolition charges. Another special craft was the "Woofus." This was an L.C.M. converted to fire rockets to clear barbed wire and other obstacles on the beaches. Fifty-four Apex boats and twenty-one Woofus craft were to be used in the assault. Naval Combat demolition units had also been formed to deal with these obstacles. Not much reliance was placed on the Apex boats, and it was assumed that the first boat waves would suffer considerable losses1 but that the demolition parties, each of which had its own L.C.V.P. would be able to clear channels for the later assault waves as they were to land a few minutes after the assault. These parties also had the duty of assisting the army engineers in their task of clearing the beaches, and in addition they were to operate the Woofus boats.

6. Convoys

The greater part of the assault convoys was to sail from Naples. There were four types of convoy, two fast, one for combat loaders and L.S.I., and one for L.C.I., the medium speed convoys were principally for L.S.T. and the slow for L.C.T. The L.C.I. and L.C.T. convoys were to stage at Ajaccio. The Commandos were in a special L.S.I. convoy (SY1) which was to sail from Naples and stage at Propriano in Corsica. The French armoured brigade was to sail in a special L.S.I. and L.S.T. convoy from Oran. The composition and programmes of the convoys is best shown in tabular form and will be found in Appendices C and D, while the convoy routes are shown in Plan 2. The carrier force was to sail from Malta, and the different bombardment forces concentrated at Malta, Taranto, Palermo and Naples. The first follow up convoy of store ships was to sail from Naples and arrive in the assault area during the afternoon of August 15th, closely followed by a convoy of ammunition ships and store ships from Oran. On August 16th two convoys from Taranto were due to arrive containing troops and equipment of the 1st French Infantry Division and 3rd Algerian Infantry Division. Information about the later follow up convovs is not given in the annex to the operation plan.3

¹ The experience of the Normandy landing had also confirmed the soundness of a preliminary bombardment.

¹ H. p. 302.

² The numbers of ships shown in convoys in Annex H. to operation plan do not in all respects agree with numbers taking part in the assault shown in H. p. 30. The additional L.S.T., L.C.1., and L.C.T. are accounted for by craft completing repairs quicker than had been expected, and as stated in H. p. 30 deficiencies were usually due to craft having broken down. Four cruisers and eleven destroyers listed in the operation plan were not in the assault area on D day; the destroyers were the escorts of D+1 convoys, while the four cruisers remained in reserve at Palermo, and two of them, the Sirius and Omaha, took part in the later stages of the operation. A number of ships belonging to the train remained in ports far from the assault area though their role in the operation was very important.

³ It is stated in Annex H to operation plan p. 2 that detail of follow up convoys is shown in Appendix 5 to this annex, but the copy supplied to the Admiralty contains no Appendix 5.

There had been considerable concern during the planning at the slow speed (5½ knots) of the L.C.T. convoy. This convoy was composed of different types of craft, some of which had been operating for long periods without proper refits. The speed was necessarily that of the slowest craft and was further reduced by the fact that a number of the L.C.T. would be towing smaller craft, such as L.C.M. and L.C.C. Individual approach corridors were arranged for the three main Task Force Commanders, and the assault convoys were to be released to the Force Commanders at points AL AM and AN.1

The convoys were to receive the greatest possible protection from the aircraft of the Coastal Air Force and arrangements were made to carry out check sweeps of the Straits of Bonifacio through which most of the convoys had to pass.

7. Logistics

The logistics of the operation reached tremendous proportions. It was necessary hurriedly to establish an amphibious training base at Salerno and to organise ashore at Salerno, Naples, Nisida and Pozzuoli the numerous activities required to support a large number of ships and craft. As Admiral Hewitt remarks² "The success of this and other amphibious landings in the Mediterranean has been due in large part to the outstanding support rendered by shore based activities and by repair ships based . . . at some distance from the area of assault." Advanced naval and air bases were established in Corsica and as no one port in the island was big enough to contain all the necessary services, these had to be divided between a number of different places. Large quantities of fuel of different types had to be provided for the smaller craft and arrangements made for shuttle services to transport this fuel from Corsica and to maintain stocks in the island.

Water had to be supplied in great quantities for the beaches and for ships, as little could be expected ashore in the assault areas. Storage tanks and distilling plants were constructed in Corsica. No less than 26 L.S.T. were equipped as water carriers to supply drinking water over the beaches, but there was a shortage of water carriers, and it was realised that the greatest economy would have to be exercised. It may be noted that the requirements of the army alone during the first five days of the assault amounted to 350,000 gallons. Great quantities of ammunition of different calibres had to be accumulated at suitable ports and plans had to be laid for the carrying out of repairs to ships and craft, particularly to L.C.T. as these craft would have to bear a heavy burden in unloading store ships in the assault area.

Repair ships were based at Naples and Oran and others were stationed at Corsican and Sardinian ports during the early stages of the assault, being due to move to the assault area as soon as this should be considered reasonably safe. In addition three L.S.T. and four L.C.I. had been fitted out as Mother Ships for the smaller craft and these relieved a long felt want. Two 350-ton pontoon dry docks were to accompany the repair ships to the assault area and two British Landing Ships Dock (L.S.D.) were scheduled to take part in the operation. Two British Landing Ships Emergency Repair (L.S.E.) had been requested but only one could be spared, and she did not arrive in the assault area until long after D-day. Organisation had also to be provided for the rapid and orderly unloading of store ships to provide for the increasing degree of maintenance and build up of the forces ashore. This unloading was to be carried out by the L.C.T. and the Army

Dukws augmented by 218 L.C.M., of which 170 were loaded on merchant vessels and the remainder on two L.S.G. and one L.S.C.

8. Naval Command and Forces Employed

The naval forces were commanded by Vice-Admiral H. K. Hewitt U.S.N., who was also in command of the army until it was firmly established ashore. Under him were five task force commanders. C.T.F.84, "Alpha" Attack Force, was Rear-Admiral Lowry U.S.N., whose gunfire support group was commanded by Rear-Admiral Mansfield flying his flag in the Orion. C.T.F.85. "Delta" Attack Force, was Rear-Admiral Rodgers, U.S.N., who had under his orders a gunfire support group commanded by Rear-Admiral Bryant, U.S.N., who flew his flag in the Texas, and containing a French bombarding force commanded by Rear-Admiral Jaujard in the Georges Leygues. C.T.F.87, "Camel" Attack Force, was Rear-Admiral Lewis U.S.N., whose gunfire support commander, Rear-Admiral Devo, U.S.N., flew his flag in the Tuscaloosa. C.T.F.86, "Sitka" Assault Force, and subsequently support force commander was Rear-Admiral Davidson, U.S.N. The combat loaders and transports were under the general command of Commodore Edgar, U.S.N. The Carrier Squadron, Task Force 88, was commanded by Rear-Admiral Troubridge, 2 whose second-in-command was Rear-Admiral Durgin, U.S.N., flying his flag in the Tulagi. Admiral Hewitt's flagship was the Catoctin. The Assault Force Commanders wore their flags in the Duane (Alpha) Biscayne (Delta) and Bayfield (Camel) while Admiral Davidson's flagship was the Augusta and that of Admiral Troubridge the Royalist.

A number of formations remained under the direct command of Admiral Hewitt. These comprised a division of minesweepers, the special operations group, the screening group consisting of 18 P.T. boats, the anti-submarine and convoy control group, which contained twelve flotillas of destroyers and escort vessels, and finally the Naval Train.³

The Naval Forces engaged in the Assault were:—4

5	Battleships				(3 U.S., 1 British, 1 French)
17	Cruisers				(6 U.S., 6 British, 5 French)
	A/A Cruisers				British
	Escort Carriers				(2 U.S., 7 British)
87					(54 U.S., 26 British, 3 French, 4 Greek)
2	Corvettes	·			British
2	Gunboats				British
25	P.C				U.S.
	S.C				U.S.
35	Minesweepers				(13 U.S., 22 British)
32	Y.M.S				(26 U.S., 6 British)
	M.L				
6	Danlayers				British
3	Auxiliary Mine	elayers	and	mine-	
	sweeping depot	ships			(2 U.S., 1 British)

¹ Rear-Admiral Moon who had been designated for this command died ten days before the landing and was succeeded by Admiral Lewis, at that time Chief of Staff to Admiral Hewitt. (Information verbally from Admiral Lewis.)

¹ See Plan 2.

² H. p. 313.

the squadron, was relieved owing to illness shortly before the operation.

² Rear-Admiral Bissett, who had been in command of the carriers and who had trained ³ It is stated in H. p. 31 that the task organisation is shown in Annex A of the Operation plan, but it is not contained in the copy supplied to the Admiralty.

⁴ H. p. 30.

4	Fighter Defence	Ships	s and		
	Trawlers				British
4	H.Q. ships .				U.S.
	Combat Loaders				U.S.
9	Transports				U.S.
10	L.S.I				British
1	L.S.P				British
1	Repair Ship				U.S.
	L.S.D				British
2	L.S.G				British
	L.S.C				British
	Tankers				French
21	Tugs				(15 U.S., 6 British)
	Salvage Vessels				British
	Netlayer				U.S.
	Motor Fishing V	essels			British vessels, French crews.
	L.S.T				(75 U.S., 3 British, 3 Greek)
124	L.C.I				(97 U.S., 27 British)
	L.C.T				(77 U.S., 65 British)
30	L.C.T. (R)				British but 14 had American Crews
	L.C.F				British
5	L.C.G				British
42	P.T. boats				U.S.
	Air Sea Rescue				(16 U.S., 1 British)
	Cargo Ships				
	0 1			-	1. (1 1 1 1 11 11 11 11

Thus in all 881 ships and major landing craft took part in the assault in addition to which about 1,370 smaller craft were ship-borne or towed to the assault area, making a total force of 2,250 ships and craft.

9. The Naval Assault Plan

Some aspects of the naval plan have already been dealt with and it now remains to deal broadly with the assault plan. The "Sitka" Support Force was to arrive at a position about 25 miles south of Cape Camarat at 2150 on 14th August, and by 2300 two groups of landing ships were to have taken up their positions off the Islands of Port Cros and Levant, while the third group containing the French Commandos, was to lie further off shore near the support force. Landings from the L.S.I. and from the American destroyer transports were to be effected by L.C.A., L.C.P.(R), L.C.R.2 and Kayaks, followed by L.C.M. with supplies. The entire force was to be protected by screens of P.T. boats. About 800 French Commandos were to land near Cape Nègre. Of the American forces, 1400 were to land on Levant Island for the purpose of capturing batteries, while 700 men were to assault Port Cros Island. The landings were to be made by stealth, without preliminary bombardment, at 0130 on 15th August, advance units having been put ashore an hour earlier to mark beaches and the cliffs, which would have to be scaled. Naval bombardment and aerial bombing would be provided, if necessary, minesweepers were to clear the area, and a net tender would remove the net believed to run from Port Cros to Cape Benat.

"Alpha" Assault Force had the duty of establishing ashore the 3rd division over Red beach in Cavalaire Bay and Yellow beach in Pampelonne Bay.

The area was believed to be strongly defended and heavy bombing attacks were to be made from 0550 to 07301. The naval bombardment was to commence at 0700, but might open earlier if enemy batteries were firing, and cease at 0750. Minesweepers, covered by destroyers, were to start clearing the outer area at 0440, and shallow draught vessels were to sweep the inshore areas between 0710 and 0745, while underwater obstacles were to be cleared by drone boats. The boat waves would be covered until 0758 by the fire of L.C.G., L.C.T.(R) and L.C.S., and at 0745 a smoke screen would be put up. The first wave of assaulting infantry with a few tanks and anti-tank guns was to land at 0800. An inner transport area for L.S.T., L.C.I. and L.C.T. was to be laid out five miles to seaward of each beach and outer transport areas for combat loaders and cargo ships a further five miles out to sea. Boat lanes ran between the two areas and from the inner areas to the beaches. L.C.T. and L.C.I. were to beach as soon as possible followed by the L.S.T., which would probably require pontoons. The troops were to strike north. overrun the St. Tropez peninsula, capture Cogolin, and in conjunction with the 45th division secure the roads round Grimaud, and also to push to the west and join hands with the French Commandos ("Romeo" Force). As soon as it was seen that the assault was successful, most of the L.C.T.(R) were to be released to the "Camel" Attack Force Commander for the afternoon assault on Red and Yellow beaches. An assault commander embarked in an L.C.I. was responsible for the attack on each beach and under him three sector commanders, each in an L.C.C., had the duty of controlling traffic, smoke laying, and inshore supporting gunfire.

The task of the "Delta" Assault Force was to land and maintain the 45th division over beaches in Bougnon Bay. The four beaches, Red, Green, Yellow and Blue, were close together. The ideal landing place would have been the beaches in the Gulf of St. Tropez, but it would have been impossible for minesweepers to clear the gulf before the assault in the face of converging gunfire from the three sides whereas it was believed that the beaches selected had few if any defences, though the area in general was strongly fortified. Aerial bombing was to be carried out from 0550 to 0730, and battleships, cruisers and destroyers would bombard from 0650. Close support fire for the assault boat wave would be given from 0745 to 0756 and smoke would be used if necessary.

The seaward areas were to be cleared by mine sweepers and demolition units were to be used inshore if necessary. The assault troops were to be landed over all four beaches at 0800, and were to push inland as quickly as possible as the small Delta area required a deep bridgehead to prevent the enemy guns from covering the unloading. At the same time troops were to push west in order to open up the Gulf of St. Tropez where the two small ports of St. Tropez and St. Maxime, the good beaches and the excellent anchorage provided far greater facilities for army maintenance than the Bougnon Bay beaches. On the right flank the 45th division was to join troops in the "Camel" Area in the Argens valley and on the left flank it was to make contact with the 3rd division near Grimaud. The northern half of "Alpha" Yellow beach was to be taken over by "Delta" force at noon if the Bougnon Bay beaches were becoming congested. The inner transport area was $7\frac{1}{2}$ miles from the beaches and the outer area another $2\frac{1}{2}$ miles to seaward, with a single swept boat lane serving both areas and branching into four, $1\frac{1}{2}$ miles from the beaches.

¹ H. p.133.

² L.C.R. had previously meant Landing Craft Rocket, but in August 1944, it meant Landing Craft Rubber.

 $^{^{1}}$ H. p. 184, but on p. 253 it is stated that bombing was to be carried out from 0610 to 0730.

10. "Camel" Assault Force was to land and maintain the 36th Division over four rather widely separated beaches; Red beach in the Gulf of Fréjus near St. Raphael, Green beach near Cape Drammont, Yellow at the end of the Rade d'Agay, and Blue beach at Anthéor Plage. Of these only Green and Blue beaches were to be used for the assault, as Red beach was believed to be too heavily defended and the approach to Yellow beach too well mined, but it was planned to assault Red beach in the afternoon when more support fire and air cover would be available and to capture Yellow beach from landward. Before the assault a commando force was to be landed by the Special Operations Group in darkness in the Gulf of la Napoule to protect the right flank. The outer transport area was twelve miles to seaward of Red beach and was flanked by two small craft reassembly areas; Red and Green beaches were to be served by a common lowering area seven miles from the shore while for Blue beach there was a lowering area 41 miles out to sea. As in the other sectors boat lanes were to be swept in to the beaches and the seaward areas would be cleared by sweepers. Bombing and naval bombardments were to be carried out as in the other sectors and close support fire would be afforded immediately before the landing which, as in the other areas, was to take place at 0800.

All Combat loaders and L.S.I. were to sail from the area as soon as possible after the assault followed by the L.S.T. and L.C.I., and all convoy destroyer escorts were to be released as soon as their duties were completed, to be detailed for anti-submarine patrols and as escorts of returning convoys. In "Alpha" area the Le Lavandou beaches were to be opened up as soon as possible so as to increase the facilities for the maintenance of the 3rd Division, and it was hoped to open the three small ports of St. Tropez, St. Maxime and St. Raphael before the close of D-day. Arrangements had been made for the four gunfire support groups to retire for the night into specified areas out to sea. It was laid down that after the assault Admiral Hewitt would put into effect a new organisation whereby only units necessary for the maintenance and build up of the beach heads would remain under the orders of the assault force commanders, the remainder being released and given new tasks by Admiral Hewitt's staff.

Arrangements had been made for the reception and unloading of the first follow up convoys. Of these SM.2, a storeship convoy from Naples, was due to arrive at 1600 on 15th August, at which hour special convoy No. 2, containing French armoured forces from Oran was also scheduled to arrive. Convoy AM.1 consisting of store ships, and L.S.T. from Oran was expected at 1800 on D-day. On 16th August convoys T.F.1 and T.M.1 were due to arrive from Taranto. The first of these was a personnel convoy transporting the 1st French Infantry Division and the 3rd Algerian Infantry Division while the other convoy contained stores and equipment for these troops. It was of the utmost importance that the follow up should be effected rapidly in order that a wide beach-head might be occupied before the enemy could commence any counter-attacks. By the close of 16th August it was hoped that the 6th Corps would have advanced as far as the "Blue Line" (see Plan 1), which starting at the Gulf of la Napoule followed roughly the main St. Raphael-Toulon road and railway as far as Le Luc, and then turned south reaching the sea between Hyères and Cape Benat. It may be said that this line was duly reached and in many cases passed before the end of the day.

11. Air Plan

The Allied Air force employed consisted of 84 squadrons of heavy day bombers, 4 squadrons of heavy night bombers, and 6 squadrons of medium night bombers of the Mediterranean Strategical Air Force, about 1,800 aircraft,

but these squadrons were not exclusively employed in operation "Dragoon." From the Mediterranean Tactical Air Force 35 squadrons of fighters and fighter bombers were employed, as well as 28 squadrons of medium bombers and 30 squadrons of troop-carriers, night fighters, reconnaissance aircraft and anti-submarine and anti-shipping elements, in all some 1,700 machines. In addition there were about 220 aircraft from the carrier force, and air escorts for the convoys were supplied by the Mediterranean Coastal Air Force to a strength of nearly 300 aircraft ¹

The strategical forces carried out heavy bombing on objectives in Southern France from 29th April until four hours before the assault. The principal task was to destroy all the bridges over the Rhone from Avignon to the mouth of the river, over the River Durance from Sisteron to its junction with the Rhone, and also the bridges over the Var from its mouth to Annot. All road junctions between the Durance and the Var north of the assault area were to be attacked, as also were tunnels, viaducts, marshalling yards and airfields. In short, the whole assault area was to be isolated. This bombing plan had to be integrated with the general bombing plan for Western Europe in such a way as to disguise the isolation of the assault area. In all 5,408 sorties were flown by the Strategical Air Force, and 6,704 tons of bombs dropped with such success that with one exception every bridge across the Rhone, Durance and Var leading into the assault area was destroyed, while the damage done to roads and railways contributed materially to the enemy's inability to concentrate his forces swiftly after the landings.²

The tactical bombing was intended mainly to neutralise the coast defences and radar stations and was to continue from 5th August to 14th August. To prevent the enemy from deducing the exact point of the assault, heavy attacks were directed against the Cette, Marseilles and Genoa areas as well as against the "Dragoon" area. In addition it was planned to carry out intensive bombing immediately before the assault. For this purpose more than 1,300 aircraft were concentrated to carry out attacks against the forty miles of coast line which comprised the assault area. Attacks were to be made on batteries, light artillery positions, airfields, beaches, and military concentrations. These attacks were to be concentrated into eighty minutes and were to cease at 0730, half an hour before the assault. Admiral Hewitt says that the execution of this plan exceeded expectations, in spite of the fact that bad visibility prevented the bombing of some targets.

After the assault, bombing of enemy communications was to continue, but the principal task of the air forces would be the provision of fighter cover over the beaches and transport areas. Fighter direction was assigned to the Commanding General 64th wing, who became Air Defence Commander, and was embarked in the British Fighter Direction Tender 13, a converted L.S.T. The *Ulster Queen* was first standby fighter direction ship, and the *Catoctin* was second standby and, in addition, control ship for offensive fighter bombers. L.S.T.32, 140, and 394 which were specially equipped and furnished with radar were to provide information on aircraft movements during daylight and control night fighters during the dark hours. Four fighter patrols were to be provided giving low, medium and high cover with a total number of aircraft on patrol

 $^{^{\}rm 1}$ F.80296 071900 August from General Wilson, and operation Plan Annex F Appendix 1, p. 2.

² H. p. 246.

 $^{^3}$ H. p. 253 says from 0610 to 0730 but on p. 184 it is stated that bombing was to start at 0550.

⁴ H. p. 254.

varying from 28 to 32. Air spotting for naval bombardments was to be carried out by special aircraft of the tactical force, by machines from the carriers and also by aircraft carried in the American cruisers. Other aircraft were detailed for mine spotting. Air-sea rescue operations were to be controlled by H.M.S. Antwerp, the ship being stationed half-way between Corsica and the assault area; twelve launches and four pinnaces were detailed for rescue work as well as 23 aircraft. The Army plan and forces employed have already been sufficiently described in Section 1.

12. Topography, Beaches, Enemy Defences. Weather (See Plan 1).

Very thorough air reconnaissance of the assault area was carried out during the months which preceded the landing, and much information was also obtained from the Resistance Movement, as a result of which intelligence was very complete and there were few surprises. The assault area may be considered as extending from Cape Benat on the west to La Napoule, near Cannes, on the east. In general the coast line of the area is not favourable for amphibious operations, having inadequate communications. The beaches are not very good; they are separated by cliffs and rocky shores and can often be enfiladed because of the configuration of the coast. The principal capes, which divide the beaches, are Cape Nègre, the great headland between Cavalaire Bay and the Gulf of St. Tropez which includes Cape Lardier, Cape Camarat and Cape St. Tropez, Issambre Point, Cape Drammont, and Cape Roux. The coast line is cut by some small streams and by the River Argens, which was of great importance for up the valley of this river were to rush the assaulting armoured units the rapid advance of which was essential if the beach head was to be quickly conquered.

The terrain inland consists of a low mountainous region cut by many ravines and extending from the rocky coast to the foothills of the Alps. The hills usually arise directly behind the beaches, but there are small cultivated plains in which villages are situated. The mountains have an arid aspect in summer because of the thin soil, sparse vegetation and high evaporation, and there are large areas of barren rock. During the summer the wooded areas are very dry and there is considerable danger of fire. The drainage is good owing to the slope of the terrain and the porous nature of the soil. A first class road runs from Cannes along the coast to St. Raphael, where it is joined by a secondary road from Cannes which skirts the inland side of the Esterel mountains. From St. Raphael a good coast road runs as far as St. Tropez from which it runs inland to Hyères, Toulon and Marseilles, but a secondary road from St. Tropez cuts across to Cavalaire Bay, follows the coast as far as Le Lavandou and then turns inland to join the Cannes-Hyères road near Bormes. From St. Raphael another first class road runs up the Argens Valley through Fréjus, and Le Muy, traversing the country where the airborne division was to land, and continuing through Le Luc and Carnoules to Hyères, Toulon and Marseilles. From Le Luc a road runs through Brignoles to Aix-en-Provence where it joins the great Paris-Lyon-Marseilles trunk road.

With the exception of the St. Raphael-Le Luc road there is no road of any importance running directly inland from the coast. The main railway line from the Italian frontier skirts the coast as far as St. Raphael and follows the road through Fréjus, Le Luc, Les Arcs, Carnoules and Sollies Ville to Toulon, Marseilles and Paris. From a junction near Sollies Ville a single line runs

to Hyères and terminates at Les Salins on the shores of the Gulf of Hyères. From St. Raphael there is a narrow gauge line which follows the coast to St. Tropez, cuts across to Cavalaire Bay, continues along the coast again as far as Le Lavandou and thence runs inland to Hyères and Toulon. A single line runs north from Les Arcs to Draguignan and from Carnoules another single line runs through Brignoles to Marseilles. The only islands off the coast are the Hyères group in the gulf of that name and consisting of Port Cros, Levant, and Porquerolles and the islet of Bagueau. The two first of these were of cardinal importance as their batteries commanded the Cavalaire beach and the entire Alpha transport and fire support areas. These islands were to be captured by Commandos before the main landing, after which operations would be carried out against Porquerolles.

The small ports of St. Raphael, St. Maxime, and St. Tropez, which are in the assault area, were expected to be of great value, though it was known that the Germans had carried out demolitions. St. Raphael could accommodate one vessel of 3,000 tons. The other two ports are smaller, but vessels drawing up to thirteen feet can enter St. Tropez, and St. Maxime can take ships drawing up to ten feet. But the principal value of these ports was the protection they would afford to small craft and the fact that they could be extensively used by landing craft.

13. The beach at Le Lavandou was suitable for assault craft, but L.S.T. would have to use pontoons. The beach extends over 1,800 yards and after some preparation of exits would be suitable for landing tanks. This beach was not scheduled to be assaulted, but was to be opened up as soon as possible for landing troops from the follow up convoys. The three beaches between Le Lavandou and Cap Nègre, covering in all 2,350 yards but separated by small rocky promontories, have easy gradients and were considered to be suitable for all types of landing craft up to and including L.S.T., which it was thought would not need pontoons. These beaches like that at Le Lavandou were to be opened up as soon as possible after the assault. Just to the east of Cape Nègre is a beach on which a small French commando force was to land, while the remainder of the French commandos were to land on a beach a mile and a half to the eastward.

These two beaches and another between them were too small to be of much use for maintenance. "Alpha" Red beach, which was in Cavalaire Bay and extended over 3,900 yards, was a good beach from the naval point of view in spite of a sand bar lying off it. It could be used by all types of landing craft though it was thought that in some places landings would be wet, and that L.S.T. would require pontoons in the centre part of the beach though not in the east and west sectors. The beach exits were fairly good and the army considered that the beach would be suitable for maintenance. This beach was prolonged by another stretch of sand 1,500 yards long, the exits from which were poor and which was not to be used for the assault though it was thought that it might be opened after a thorough survey. "Alpha" Yellow beach was in Pampelonne Bay, separated from Red beach by the Lardier-Camarat headland. This was a fine beach 4,500 yards long with good exits. The sand bars off the beach were not expected to impede most landing craft but a survey would be necessary before sending in L.S.T. and large L.C.T.

The four "Delta" beaches, Red, Green, Yellow and Blue were situated between Cape Sardineau and Issambre Point. The first three were really part of the same beach, in all some 800 yards long. It was doubtful if L.S.T. could use these beaches without pontoons, and their bad exits reduced their utility from the army point of view, but they were only to be used for the assault, the

 $^{^{\}rm 1}$ The principal source for this section is Annex A to Admiral Hewitt's operation plan, but the Mediterranean Pilot Vol. 2, and B.R. 503, the N.I.D. Geographical Handbook on France, Vols. 1 and 4, have also been consulted.

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follow up being made through St. Tropez and Ste. Maxime. Blue beach was about a mile to the N.E., it was suitable for all types of landing craft but had no exits. The Camel Red Beach was in the Gulf of Fréjus immediately to the S.W. of the town of St. Raphael, it is 2,700 yards long and though obstructed in places by a sand bar it was thought that landing craft could easily make the beach. It was considered that L.S.T. would be able to beach in many places and other craft anywhere on the beach; exits were good and the army pronounced the beach suitable for maintenance.

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"Camel" Green beach was immediately to the west of Cape Drammont and was 840 yards long, the gradients making it suitable for all types of landing craft up to and including L.S.T. but the exits were only fair and its use to the army after the assault would be limited. Yellow beach was at the head of the Rade d'Agay; it is 1,100 yards in length and was thought to be suitable for L.S.T.; beach exits again were poor. Blue beach was situated at Anthéor Plage about two miles east of Yellow beach and separated from it by a headland; it is a small beach only 80 yards long and though suitable for small craft it was unlikely that L.C.T. or L.S.T. could use it owing to lack of space for manoeuvring. The American Commandos were to land on Levant Island at a very small beach in the Anse du Liserot and at four other places where there was no beach, and on Port Cros Island the raiding party was to avoid the beaches possibly because they were considered to be too far from the objective. On the extreme right flank French Commandos were to be landed at Pointe des Deux Frères near Théoule-sur-Mer.

14. The Riviera was very strongly defended by coast defence batteries. Between Marseilles and Nice there were 199 batteries mounting 647 guns. The defences of the assault area were comparatively weak but even so they totalled 29 batteries mounting 88 guns of three-inch calibre and above, as well as 34 casemates, some of which were not occupied.1 The heaviest batteries were, firstly one of three 6.5-inch guns on the N.E. point of Levant Island; 2 a battery of five 8.8-inch guns was situated on Cape St. Tropez.³ Near Agay there was a battery of five 6-inch guns, but it was not certain whether it was completed, and finally, on Issambre Point there were three 8.8 inch guns with three dummy guns near by. Of guns below three inch and machine-guns, there were large numbers often in concrete emplacements and pill boxes. Most of the beaches were defended by mined obstacles of different types and some by shallow water mines. Owing to the absence of tide these were never uncovered and it would be a matter of some difficulty to clear them, but on the other hand they were more difficult to erect than would have been the case in tidal waters. With regard to deep sea mines, the hundred fathom line was so near the coast of the assault area in most places (from three to six miles) that the zone of mineable water was very restricted. Not much was known about the enemy's deep sea minefields. Submarines had been used for reconnaissance but without much success, and a well laid field of 90 mines in the Gulf of Fréjus was a surprise, as on July 28th a submarine had reported that no mines could be detected.4 On the other hand a minefield reported at the mouth of the Gulf of St. Tropez did not exist. 5

The weather was confidently expected to be favourable for the assault and

to continue good till the end of the month; in September occasional strong off shore winds were probable, but there was no expectation of a "mistral" until the end of September. It had been realised during the planning that beach maintenance would be impossible in October, and that it would be necessary to open up a big port before then. In point of fact both Toulon and Marseilles were captured on 28th August, and though unloading over the beaches continued after this date, weather only interfered with unloading on one occasion, on 3rd September. Sunrise on 15th August was at 0639 and sunset at 2035.

15. The Enemy Forces

The naval forces of the enemy in the Western Mediterranean on July 24th were insignificant. They consisted of one destroyer, 2 five torpedo boats, the equivalent of our Hunt class, seven escort vessels of corvette type, five of the so called "heavily armed vessels" which were small armed merchant ships used as escorts, fifteen M.A.S. boats (Italian M.T.Bs.), fifteen minesweepers, twenty-five miscellaneous auxiliaries and five or six submarines active, plus several damaged in air raids on Toulon. These ships were based at different ports along the coast from Marseilles to Genoa. In addition there were two destroyers refitting at Genoa which it was thought might soon be in commission. Of these vessels one destroyer, one torpedo boat, thirteen escort vessels. three minesweepers and five submarines were destroyed during the operation.

A greater threat than these war vessels was perhaps the human torpedoes. explosive boats with remote control, and limpeteers, though in point of fact they were of little use to the enemy. Sixteen explosive boats and thirteen human torpedoes were destroyed during the course of the operations. A far greater potential menace to the invasion forces was the Luftwaffe. It was estimated that the enemy had based within easy range of the assault area on 25th July 175 torpedo bombers, twenty-five single engine fighters, ten twin engine fighters and thirty reconnaissance machines. There were another 800 fighters in Northern France and Italy and 170 heavy bombers in Northern France, but the extent to which these forces could be used to reinforce the South of France would depend on operations in these two theatres. The greatest threat from the Luftwaffe was the different types of controlled missiles which had inflicted heavy losses on the Allied naval forces during the Salerno and Anzio operations, but by August 1944 considerable strides had been made in coping with these new weapons. In the event the German Air Force was not able to interfere with our operations and no major vessel was damaged by air attack.

Opposed to our assault forces was the German 19th Army under General von Blaskowitz. This Army had once had a strength of thirteen divisions, but reinforcements had been sent to Normandy and on July 28th it was estimated to be composed of six infantry divisions, 7 not all at full strength, and

¹ H. p. 139.

² This battery turned out to be a dummy.

³ After the assault it was found that in reality these guns were 6.5 inch.

⁴ H. p. 144.

⁵ H. p. 144.

¹ H. p. 136.

² Operation Plan Annex A.

³ In H. p. 35 the number of M.A.S. boats on 9th August is given as 30 which figure presumably included the minesweepers, the number of heavily armed vessels as 6, and the number of submarines as 3. Some of the M.A.S. boats were in reality German S. boats which are very similar.

⁵ This presumably includes the corvettes and the heavily armed vessels.

⁶ Operation Plan Annex A.

⁷ Operation Plan Annex A and C.O.S.(44)713(0) of 9th August.

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one armoured division. Early in August another armoured division appeared to be moving from Bordeaux towards the Mediterranean coast while an infantry division was due to arrive from the Pyrenees. Last minute information was to the effect that the armoured division from Bordeaux had stopped near Toulouse while the 11th Panzer Division in Provence had started to move northwards. In addition there were a considerable number of miscellaneous troops, mostly of poor quality. In the assault area was stationed the 242nd Infantry Division but it was thought that three days after the assault the enemy might concentrate three to four divisions, including possibly one armoured division.

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16. Preparations, Training, Rehearsals

A combined training centre was opened at Salerno as early as February because it was realised that most of the assault divisions would be withdrawn from the Italian front, and it was desired to avoid waste of time in transporting troops to North Africa for training and back to the Naples area for embarkation, while owing to the shorter distance from the assault area, it was necessary to mount most of the expedition at Naples. In the event the time factor was even more important than had been anticipated owing to the late date at which it was possible to withdraw the American divisions from the fighting line; moreover, all three divisions were taken from the Italian front.

Every effort was made to reproduce enemy defensive methods and obstacles on the Salerno beaches, and before any troops were available for training many experiments had been carried out to discover methods of breaching underwater obstacles and beach defences. The 45th Division arrived at Salerno and began training on 24th June and the 36th Division commenced on 8th July. The 3rd Division trained at Pozzuoli, a little to the north of Naples, commencing on 6th July. Late in June, 28 L.S.T. and 19 L.C.T. arrived from the United States followed a month later by a force of P.C. and Y.M.S. Late in July there arrived the assault shipping released from Normandy by General Eisenhower and consisting of six combat loaders, 24 L.C.I. and 24 L.C.T., followed by a number of mine-sweepers and by a strong force of rocket craft (L.C.T.(R.)).

The naval reinforcements for the bombarding squadrons mostly arrived from the United Kingdom late in July or early in August; in some cases the margin of time was very small, for instance the Ramillies only arrived at Algiers on 11th August so that instead of sailing from Malta with the "Alpha" gunfire support group, she had to rendezvous with it early on D day. During the training period all three divisions practised landings by day and night from L.S.T., L.C.I., and L.C.T., and ship to shore exercises from a combat loader were also carried out. The commandos trained at Agropoli with four American destroyer transports (A.P.D.) which on 4th August were joined by four L.S.I., one more A.P.D. and nine P.T. boats; on 7th August they carried out a full scale rehearsal on Ponza Island. Gunfire support ships carried out a three day bombardment exercise at the Camerota range and communication practices were carried out to ensure smooth co-ordination between the bombarding ships, spotting aircraft and shore fire control parties. The 3rd Division carried out a full scale landing rehearsal on July 31st in the Gulf of Gaeta during which 146 ships and craft were employed, and some days later the other two divisions did the same, landing over the Salerno beaches in co-operation with all the Air Forces. So life-like were these rehearsals that practically no change in organisation or procedure had to be made.1

17. The Convoys sail. Passage

On 9th August Admiral Hewitt by signal ordered his operation plan to be put into effect and announced D day as August 15th and H hour as 0800.

On 11th August the C.-in-C. Mediterranean set up an advanced command post at Ajaccio in H.M.S. Largs. The first of the convoys to sail was SS1, 1A and 1B, composed mainly of L.C.T. which departed from Naples at 1000 on August 9th. The L.C.I. and L.S.T. convoys sailed from the Naples area on 12th August and the remainder also put to sea according to schedule as shown in Appendices C and D. Convoy AM1 consisting of store and ammunition ships sailed from Oran on 10th August, and next day special convoy No. 2, containing the French Armoured Brigade ("Combat Command Sudre") also sailed from Oran, while from Taranto the merchant ship convoy TM1 sailed on 10th August. All convoys sailed without incident. The fact that the great agglomeration of ships and craft in the Gulf of Naples had failed to provoke any air attack from the enemy was an index of the decline of the Luftwaffe. No attacks from submarines or aircraft were made on the convoys during their passage though they were sighted several times by the enemy's reconnaissance aircraft, so the vigilance of our air and surface escorts was not tested. Various ships joined and left convoys during the passage according to the operation plan. As arranged, the SS1 and SF2 convoys staged at Ajaccio while convoy SY1 staged at Propriano. The weather was perfect during the passage, and the few L.C.T. which straggled from their convoys had no difficulty in rejoining at Ajaccio.

18. The Approach

On 14th August the C.-in-C. Mediterranean who was in H.M.S. Kimberly watching the progress of the assault convoys through the Straits of Bonifacio, made the signal "carry out Operation Dragoon." At this juncture the Commando Convoy (SY1) was only some 30 miles from its objective, the L.C.T. convoys had long passed points AL AM and AN and were well up the approach corridors, which the L.S.T. convoys had just entered; the L.C.I. convoys had just sailed from Ajaccio while the convoys of combat loaders and L.S.I. had been joined by their gunfire support groups³ and would arrive at the entrance to the approach corridors in under two hours. All rendezvous were made in accordance with the operation plan. The approach lanes had been fixed so as to give the minimum period of contact to the enemy's radar, to give as much sea room as possible for manoeuvring the large forces involved, and to keep the assault convoys well clear of the carrier force. The assault convoys were released to the Task Force Commanders as soon as they entered the lanes. The reference Vessels (mark boats) which were mostly P.C. and S.C. were detached to take up their assigned stations.

As the "Camel" convoys had to make a turn to port of eleven degrees from the end of the corridor to the transport area, a destroyer was stationed at the turning point, while a second destroyer marked the right flank of the "Camel" transport area. The minesweepers were detached at 0300 on 15th August to execute their tasks and the gunfire support ships proceeded to their positions for the bombardment which was to commence at 0650. All the convoys arrived in the transport areas punctually

¹ H. p. 168.

^{1 090930} and 091750 August.

² C.-in-C. Med. 141818 August.

^{3 &}quot;Alpha" gunfire support group did not rendezvous with the assault convoy but proceeded independently.

and according to plan and the anti-submarine surface patrols were put into effect. Everything had gone according to schedule except for the fact that the "Alpha" combat loader convoy passed through the slower L.C.I. convoy off Ajaccio at dusk on 14th August. This was caused by the L.C.I. having sailed from Ajaccio an hour early, while the other convoy was half an hour behind schedule.1 Fortunately no serious consequences attended this untoward

The slow speed of the L.C.T. convoys had caused considerable concern during planning but these convoys all arrived safely in the assault area at the specified time. The Carrier Force arrived in its operating area at about 0530 and the first aircraft was flown off at 0610. The "Sitka" Force encountered the enemy auxiliary Escaburt escorted by the Camoscio to the south-west of Port Cros Island and U.S.S. Somers promptly sank both of them at 0500, while five small enemy patrol craft were destroyed by the "Alpha" minesweepers in Pampelonne Bay at about the same time. Shore based fighters began reporting to the Fighter Direction Ship at 0550 and the first patrol arrived at 0615. These fighter patrols dropped bombs on previously assigned targets before reporting for defence and patrol duties. Heavy and medium bombers commenced intensive bombing attacks on the beaches and at 0650 the guns of the battleships, cruisers and destroyers opened a heavy fire. The assault had commenced.

THE ASSAULT

CHAPTER II

19. "Sitka" Sector

The "Sitka" Support Force (T.F. 86) consisting of the cruisers Augusta. flagship of Rear-Admiral Davidson, and Dido, with the destroyers Somers. Gleaves and Lookout, arrived at a point 25 miles south of Cape Camarat shortly before 2200 on 14th August. About an hour later two groups of transports and L.S.I. carrying the American Commandos arrived off the Islands of Port Cros and Levant, while the third group transporting the French Commandos took up its position near the Support Force. At 0030 on 15th August advance scouts and preparatory units were landed on the two islands and on Cape Nègre unobserved by the enemy. In this sector the plan called for a landing by stealth without previous minesweeping and without support of naval guns though the cruisers and destroyers could be called upon if necessary for bombardment after the landing.

The French Commandos embarked in the small craft and at 0130 one party of 75 men was landed at Cape Nègre, but the westerly set of the current and haze on the water caused the second party of 750 troops to land on a beach some two miles to the west of the intended point. This made little difference for there was small opposition from the enemy and once the beach-head was established L.C.M. were sent in with supplies. At 0742 the French complained that they were being bombed by allied aircraft, but by 1000 they had carried out their task of destroying the enemy defences on Cape Nègre, seized the high ground two miles north of the Cape, and blocked the coastal highway thus protecting the left flank of the main assault. Enemy resistance was nowhere serious and the French casualties were light; the Germans made one counterattack but this was repulsed with the help of gunfire from the Augusta, Dido and Ajax and later in the day the French made contact with the American 3rd Division of "Alpha" Attack Force. Meanwhile, at 0130 the American Commandos landed from their L.C.A., L.C.P.(R), L.C.R., and kayaks. A force of 1,400 men was landed on Levant Island, and 700 on Port Cros without opposition from the enemy. By 0920 the initial resistance on the islands had been overcome; the heavy battery on Levant Island was captured but proved to be a dummy, and a number of prisoners were taken, but isolated strong points still held out and not until 2234 did resistance on Levant Island cease while a party of the enemy still resisted in the old fort at Port Cros and prevented L.S.T.32 from entering the port and landing radar equipment for a fighter direction station which was to have been set up ashore.

The transports sailed early for Ajaccio leaving two behind to evacuate casualties and prisoners, and one of these sailed at 1600. Casualties to the American forces were very light and no naval craft was damaged except one L.C.A. which sustained a hit from an 88 mm. shell at Port Cros. It is interesting to notice that it was found that the British L.C.A. was superior to the American L.C.P.(R) for these surprise landings on rocky shores, as it was easier to manoeuvre and less noisy. At daylight minesweeping commenced. The British 5th Minesweeping Flotilla assisted by four M.Ls. was responsible for sweeping channels into the islands and the waters to the south and east of them inside the hundred fathom line; the fire support areas were also swept and an east-west channel north of the islands was to be cleared. These tasks were all duly carried out by 17th August but no mines were swept in the "Sitka"

¹ H. p. 175.

area except between Cape Benat and Port Cros where 36 mines were dealt with by the sweepers and M.Ls. often under fire from a battery on the cape. During these operations M.L.559 was damaged by a mine and the danlayer *Kintyre* was hit by a shell.¹

It had been thought that there was a net between Port Cros and Cape Benat and a net tender was present to remove it, but it was found that there was no such obstruction. However, Rear-Admiral Davidson thinks the net may have been sunk below the surface and that this may have been the cause of the difficulties and loss of gear experienced by the sweepers when they subsequently tried to force an entrance into the Hyères Roads. ²

At 0700 the French battleship Lorraine arrived to join the Support Force but she was not required and sailed for Propriano in the afternoon to stand by. Little gunfire support was required by the troops on Levant Island though at 0807 the Lookout fired 33 rounds at some enemy troops on the west of the Island, but considerable bombardment was required to reduce Port Cros, where the Augusta fired 281 rounds of 8-inch before the final surrender of the fort on 17th August, supported by the Somers 692 rounds, and finally on 17th August by the Ramillies which arrived from "Alpha" sector and fired twelve rounds of 15-in at the fort and brought about the final collapse of the defence, after which the battleship sailed for Propriano where she remained on call. The bombardment of the Ramillies was spotted by aircraft from the Quincy and resulted in six direct hits.4 The Dido and the Gleaves carried out bombardments of strong points and batteries between Cape Nègre and Le Lavandou though these were in "Alpha" area, and helped to defeat the German counter-attack on the French Commandos. The Dido fired 502 rounds and the destroyer 195. Support in this area was also given by the Aurora, Ajax, Orion, and Quincy and by the destroyers Livermore and Ericsson all of which ships belonged to the "Alpha" force.

20. "Alpha" Sector

The "Alpha" assault began at 0300 when the P.C. boats detailed to act as mark boats took station ten miles off Red and Yellow beaches, followed by the stationing of the five mile mark boats. At 0440 minesweeping commenced and by 0630 the British 13th Minesweeping Flotilla, together with four American fleet sweepers and sixteen American Y.M.S. and S.C. boats equipped as shallow sweepers, had swept the gunfire support and transport areas and also the boat lanes up to 1,000 yards from the beaches. No mines were found. In Pampelonne Bay the British sweepers were attacked by five small enemy patrol vessels all of which they destroyed without themselves suffering any damage. The sweepers also came under fire from shore batteries which they engaged with their guns. By 0500 the gunfire

support, L.S.T., L.C.T., and combat loader convoys had arrived. At 0640 the L.C.I. convoy arrived and with the L.S.T. and L.C.T. moved to the inner transport areas. At 0745 the combat loaders moved in.

From 0710 to 0745 the shallow minesweepers cleared the boat lanes from the point reached by the fleet sweepers to within a hundred yards of the beaches. The gunfire support ships fired at the allotted targets from 0700 to 0750. The drone boats were sent in from 0710 to 0730, nine to each beach. All the drones on Red beach detonated as planned except that they were concentrated too much on the left side of the beach but on Yellow beach three failed to function properly and one of these exploded prematurely and severely damaged S.C.1029, one of the mark boats. From 0750 to 0758 the L.C.T.(R) six at Red beach and four at Yellow, L.C.M.(R) seven craft at each beach and the L.C.S.(S) poured a stream of rockets on to the beaches, while the L.C.G. and L.C.F. fired from close inshore. Combined with the off-shore bombardment and the aerial bombing the result was "an overwhelming concerted blow of only one hour and fifty minutes duration which dazed and weakened the enemy; and the Army was placed ashore with extremely light losses".

The firing of the rockets was arranged in successive waves of barrages which must have upset any idea of the enemy that rocket fire was a one punch weapon.² Meanwhile the combat loaders and L.S.I. had lowered their assault craft and the first waves were approaching the shore; some of the boats were endangered by rockets which dropped short. The enemy's gunfire was light and was limited to mortar and machine-gun fire with a few rounds of 88 mm. The first wave of assault craft was the largest. It was composed of the support craft and the first troop wave. The boat minesweepers led by an S.G. or an L.C.C. proceeded first to conduct a sweep of the boat lanes, and where amphibious scouts were used they preceded the initial wave and carried out a rapid hydrographic reconnaissance for obstacles. The drone boats were directed by the L.C.C. and were in the van of the support wave. Deployed astern of them and in the van of the first troop wave were the "Woofus Craft" (L.C.M.(R)), while the rocket firing L.C.S.(S) were stationed between the formations of L.C.V.P. or L.C.A., which were carrying troops, and when ordered by the L.C.C. speeded ahead at firing time. On the flanks of the first wave were the L.C.F. and L.C.G. to render close gunfire support and also some L.C.T. carrying D.D. tanks and tank destroyers.

Each formation of L.C.V.P. was led by an L.C.C. which directed the craft to their assigned beaches, the L.C.T.(R.) followed astern of the L.C.V.P. and fired over them at the beach. Those of the L.C.C. which were not required for immediate control at the beaches returned to the line of departure to assist in guiding in the later waves. The L.C.I. and L.C.T. were usually led in from the transport area by a craft of their own type. The D.U.K.W.S. were guided by L.C.C. or L.C.V.P. and released when about 1000 yards from the beach. In guiding the later waves the L.C.C. were helped by S.C. boats. Two battalions of the 7th R.C.T. and two of the 15th R.C.T. were to land over Red and Yellow beaches respectively, followed by the 30th R.C.T. and ancillary units over Red beach. The first two waves were to land by divisions of five boats; the assault craft were organised in such a way that a company with three rifle platoons would touch down first at the centre and on each flank while the heavy weapon platoons would land each side of the centre one minute

¹ M09992/45. R. of P. S.O. 5th M/S Flotilla p. 2. Admiral Hewitt's report p. 211 says that no mines were swept in the "Sitka" area, but most of these mines were on the dividing line between Sitka and Alpha.

² M09992/45 Admiral Davidson's covering letter p. 1.

³ There is little information about bombardments in the narrative of Admiral Hewitt's report, but diagrams 18 to 23 at the end of the report give full details.

⁴ M0115 44 R. of P. Ramillies Part 1 p. 4.

⁵ M011533 R. of P. Dido. The figures given in H. diagram 18 are slightly different.

⁶ Information about the "Alpha" Sector is more copious and detailed than that on the other sectors, partly because the bombardment force was mainly British. The details given about the organisation of boat waves for the assault apply equally to the Delta and Camel sectors.

¹ H. p. 285.

² M04531/45 Rear-Admiral Lowry's remarks para. 5.

³ These were the amphibious tanks first used in the Normandy landings.

⁴ H. pp. 216, 217.

later. For the assault phase there was an assault commander for each beach embarked in a command L.C.I., or in British parlance an L.C.H. Under the assault commander were three sector commanders each in an L.C.C., charged with control of all traffic, smoke laying, and close inshore fire in their respective sectors. 1

21. The first assault waves landed with little hindrance at 0800 and were followed by eight other waves which landed on schedule, though the ninth wave on Red beach was delayed by shallow water mines on the right flank of the beach. These waves of assault craft were followed by L.C.T. and L.C.I. Enemy gunfire continued to be innocuous but three L.C.V.P. and four L.C.I. were damaged by teller mines while beaching on the right end of Red beach where no drone boats had exploded. At 1030 the L.S.T. were sent in to place pontoons and at 1045 the Commanding General of the 3rd Division landed and set up his headquarters ashore. Removal of land mines on Red beach caused some delay in unloading as did a shortage of truck drivers and beach labour, but matters were remedied by placing trucks in L.C.M., loading bulk cargo in slings directly from the ships into the trucks and sending the trucks from the L.C.M. to unload directly at the dumps. On Yellow beach all landing craft were unloaded by 1400, though a certain amount of congestion was caused by the narrowness of the exits. At 1545 unloading over the right or eastern half of Red beach had to be stopped until mines could be cleared, but additional landing points were put into use and at 1800 Green Beach, in the eastern corner of Cavalaire Bay, was opened, though the exits were found to be heavily mined. At 1700 all the original assault troops having landed, a reorganisation of the naval forces was put into effect in order to provide for the maintenance and follow up phase.

Ships and craft reported for the assignment of new tasks, and the existing forces with the addition of some P.T. boats for patrolling the western flank were reconstituted into a Screening and Smoke Group, Gunfire Support Group, Minesweeping Group, Salvage and Fire-fighting Unit, Area Unloading Control, Joint Loading Control, and Naval Beach Party. After the "Alpha" Assault the L.C.T.(R.) were ordered to proceed to "Camel" sector where they were to be employed in the afternoon assault on Red beach. Only three pontoons had been supplied for "Alpha" area, but it was arranged that nine more should be sent from the other sectors as required. The Gunfire Support Group for "Alpha" sector consisted of the Ramillies, the Orion, wearing the flag of Rear-Admiral Mansfield, Aurora, Ajax, Black Prince, the American Cruiser Quincy, the French cruiser Gloire, the British destroyers Terpsichore and Termagant and the American destroyers Livermore, Eberle, Kearney and Ericsson. Heavy bombardments were carried out by these ships. Before the assault the targets were chiefly coast defence batteries, particularly those commanding Yellow beach, and the beach areas. After the assault, ships were to fire at troop concentrations and other targets as required; but in point of fact there was little firing after 0800 in "Alpha" beach areas as the troops required no support and moved rapidly inland, so the ships moved to the westward and engaged targets between Cape Nègre and Cape Benat supported by some of the Sitka ships. Admiral Lowry, who was in command of the "Alpha" assault particularly praises the shooting of the Aurora, which silenced a battery near Cape Benat after firing only six rounds.² The Ramillies fired ten rounds at the heavy battery

¹ H. p. 185.

to the south of St. Tropez at 0615¹ and at 0654 she fired 24 rounds at a battery near Cape Camarat without any reply from the enemy.

Altogether the Aurora fired 409 rounds, the Orion 40, the Ajax 116, the Black Prince 80, the Gloire 149 and the Quincy 143. Of the destroyers the Livermore was the most heavily engaged, firing 644 rounds, the Kearney 528 the Ericsson 267 and the Eberle upwards of 200 rounds; some of the destroyers also fired with light weapons.2 The Termagant and Terpsichore engaged batteries and strong points near Yellow beach, but their complete figures for ammunition expended are not given. Admiral Lowry comments on the very effective beach neutralising fire carried out by the Terpsichore, Termagant and Ericsson, the latter using a walking barrage to cover the centre of Yellow beach. Much of the spotting was done by L.C.C. and even by the bombarding ships themselves but the aircraft from the Ouincy also did very good work. Admiral Mansfield particularly commends the work of the Quincy (Captain Senn) and the Gloire (Capitaine de Vaisseau Adam).4 The shore fire control parties were of little use on D Day as the army advanced so quickly, in some cases as much as thirty miles in the day, that they had difficulty in keeping up, nevertheless the Terpsichore established contact with her shore fire control only half an hour after the landing.⁵ The only casualty to the bombarding ships was a hit from a 47 mm. shell on the Livermore which did little damage.

Of the close support craft, L.C.G.4 and L.C.F.4 were stationed off Red beach and L.C.G.8 and L.C.F.8 off Yellow beach; most of these craft reported that the smoke screens interfered with their fire. The two L.C.G. withdrew to Ajaccio on 16th August followed by the L.C.F. the following day. The fact that the L.C.F. could be dispensed with so early, shows how little apprehension was felt about enemy air attacks.

22. "Delta" Sector

The stationing of the mark boats commenced as early as midnight. Minesweeping was started at 0300 by the British 19th Minesweeping Flotilla reinforced by two American fleet sweepers and a number of M.L.s and Y.M.S.; no mines were swept. The scout boats reported that there were no underwater obstacles protecting the beaches so at 0543 Rear Admiral Rodgers cancelled the orders for the use of drone boats. Meanwhile at 0440 the L.C.T. convoy had arrived in the inner transport area followed by the gunfire support group, while the combat loader and L.S.T. convoys arrived in their transport area at 0500. At 0800 the L.C.I. reached the inner area. The bombardment was particularly important in "Delta" sector owing to the strength of the coast defences. It was most effective and by H-hour the air and naval bombardments had put out of action all major guns, and most of the coast defence crews had deserted their posts," with the result that no enemy shells fell in the transport areas and only about 60 rounds of mortar fire and a few rounds of 75 mm. fell in the boat lanes, doing no damage. More than 6,000 rockets were fired at the

² M0107/45 Rear-Admiral Lowry's comments on Rear-Admiral Mansfield's Report para. 29. In point of fact diagram 18 in Admiral Hewitt's Report shows that the *Aurora* in all fired 72 rounds at this battery between 1057 and 1559. No R. of P. covering D day has been received from the *Aurora*.

¹ M011587/44 R. of P. Ramillies para. 21. Diagram 18 of H. shows this bombardment as having taken place at 0812, but this diagram is not always accurate.

² M0107/45 App. I. Figures given here for the British destroyers seem incomplete.

³ M0107/45 Rear-Admiral Lowry's comments paras. 35 to 38.

⁴ M0107/45 R. of P. Rear-Admiral Mansfield paras. 12 and 13.

⁵ M0107/45 Rear-Admiral Lowry's comments para. 36.

 $^{^6}$ M04531/45 R. of P. Lt.-Cdr. Wilde R.N. S.O. ' $\rm F$ ' Support Craft Squadron in L.C.G.4 and reports of individual craft.

⁷ H. p. 188.

beach defences, paralysing the enemy, although the L.C.M. (R.) from the East-way did not arrive in time.

The arrangements for the assault and support were similar to the organisation already described for "Alpha" sector. The first waves had landed by 0802 and by 0910 the first seven waves of troops were ashore. The 157th R.C.T. landed over Red and Green beaches and the 180th R.C.T. over Blue and Yellow beaches, followed by the 179th R.C.T. The Commanding General of the 45th Division landed at 1100 and in the afternoon the Commanding General of the 6th Corps disembarked. The L.S.T. had to use pontoons at Red and Green beaches, but on the other two beaches unloading was accomplished dry. All L.C.T., L.C.I. and combat loaders had been emptied of troops and vehicles by 2145 and the unloading of the merchant vessels had started.

A rapid advance of the troops was most necessary in this sector, which was very narrow, so as to prevent enemy mobile guns being set up to cover the unloading, this rapidity was fully achieved and Ste. Maxime was captured by 1700. The amphibious tanks, from which much had been hoped, were not a great success, five out of twelve being stopped by mines on the beach, and two more knocked out, also by mines, soon after. By 1600 all troops had landed and the reorganisation plan was put into effect as in "Alpha" sector. The assault plan had envisaged the possibility of the small "Delta" beaches becoming very congested, in which case it had been determined to use the northern half of "Alpha" Yellow, but this was not necessary, and during the day 11 combat loaders, transport and cargo ships, 30 L.S.T., 41 L.C.T., and 36 L.C.I. were unloaded over the four exiguous beaches giving a total of 33,000 persons and 3,300 vehicles¹ besides quantities of stores. Army losses were very light; there were no naval casualties and no vessel was hit by enemy fire.

The Gunfire Support Group consisted of the American battleships Texas and Nevada, the cruisers Philadelphia, Georges Leygues and Montcalm, three French and eight American destroyers. The Nevada fired 106 rounds of 14 inch2 at the heavy coastal battery on Issambre Point during the pre H hour bombardment while the Texas during the same period fired 172 rounds at the heavy battery near St. Tropez spotting in both cases being carried out by destroyers inshore. In the afternoon the Nevada sailed for Propriano, where she remained on call, while the Texas sailed for Algiers on 17th August. The Philadelphia was heavily engaged and fired 610 rounds during the day, both before and after the assault, using chiefly her own aircraft for spotting, though the shore fire control party was also at times employed. The Georges Leygues fired 290 rounds and the Montcalm 246. Of the destroyers the Rodman fired 543 rounds, the Emmons 434, the Macomb 400, the Hobson 361, the Ellyson 343, and the Hambleton 255 rounds, the Fitch and the Forrest being less heavily engaged; in general the American destroyers did their own spotting. Of the French destroyers the Fantasque fired 231 rounds, Le Terrible 120, and Le Malin 35. As has already been mentioned the naval gunfire was most effective.

23. "Camel" Sector

In this sector only two of the four beaches, Blue and Green, were to be assaulted at H hour, as the other two were thought to be too strongly defended. Red beach, in the Gulf of Fréjus, would be attacked in the afternoon at a time to be fixed by the Commanding General of the 36th Division, when rocket craft

from the other sectors would be available to augment the fire and when a heavier air bombardment could be provided. The capture of this beach was most important not only for the rapid build up of the division, since Blue beach was extremely small, and Green beach was not thought to be very satisfactory, but also on account of its position at the mouth of the Argens valley up which the French armoured troops were to push as soon as possible, and its proximity to the port of St. Raphael, the airfield at Fréjus and the main coast road and railway. No assault was planned for Yellow beach, at the head of the Rade d'Agay, but it was hoped to capture it from landward before the close of D-day.

The assault opened with the landing of seventy French commandos at Deux Frères Point, south of Théoule, from P.T. boats at 0010. These troops had the task of blocking the main roads from Cannes to St. Raphael. No information is available about the operations of these troops, but presumably they were successful since no counter-attacks developed on D-day from the direction of Cannes. At 0100 the mark boats, which in this sector included two destroyers, took station and minesweeping commenced. The channels and boat lanes into Blue and Green beaches were swept but no mines were found, neither were there any underwater obstacles. The gun support ships and the convoys of combat loaders, L.S.T., L.C.I., and L.C.T. arrived on time. The bombardment was effective and all major targets were destroyed or neutralised by 0800 with the exception of one coastal battery near St. Raphael, which gave some trouble until it was later destroyed, while the fire of the rocket craft was as devastating as in Alpha and Delta areas. The arrangements and organisation of the assault waves was similar to what has already been described for "Alpha" sector.

The first waves reached the beaches with the loss of two L.C.V.P. sunk by machine-gun fire near Green beach, and at 0800 one battalion of the 141st R.C.T. landed on Blue beach while three minutes later the other two battalions of the 141st R.C.T. commenced landing on Green beach followed by the whole of the 143rd R.C.T. Immediately after the first wave of infantry, two L.C.T. landed amphibious tanks on Green beach. All troops and vehicles were landed dry-shod, and Green beach was found to be better than had been anticipated, though for a time it was under machine-gun fire, and after 0930 some artillery fire was directed against it, hitting and inflicting damage on L.S.T.51 and L.C.T.339, 610 and 625. Unloading at Blue beach was completed by 1100. The Commanding General of the 36th Division landed with his staff at 1000 having already asked that the 142nd R.C.T. should be put ashore on Red beach at 1400.

Now occurred the only mishap of a triumphant day. At 1110 the mine-sweepers engaged in sweeping the approaches to Red beach were heavily shelled and obliged to retire. At 1230 an S.C. boat led eight shallow water sweepers towards the beach. The sweepers came under a heavy barrage at 1,700 yards from the beach but continued to within 500 yards of the shore when they were compelled to withdraw still under fire. From 1220 to 1330 heavy bombers attacked Red beach, at 1310 the Gunfire Support Group commenced a bombardment and a little later twelve drone boats were sent in. Three drones duly exploded on the beach but the others either did not explode or ran wild on the way in. Arrangements had been made for the "Camel"

¹ H. p. 189.

² Details of bombardments are taken from diagram 19 of Admiral Hewitt's report.

¹ The British L.C.T. 307 was hit by shellfire and abandoned on D-day, but M03316/45, the interrogation report of one of the crew, does not say in which sector this took place. This casualty is not mentioned by Admiral Hewitt except that the craft is shown as damaged in p. 53 of the report.

rocket craft to be reinforced by L.C.T.(R) from the other two sectors but some of these were delayed and the approaching assault craft came under heavy fire. Under these circumstances the Beach Assault Commander reported to Rear-Admiral Lewis, who was in command in "Camel" area, that it would be advisable to postpone the assault till 1430.

By this time the presence of a dense minefield in the Gulf of Fréjus had been reported, while the progress of the troops ashore had been so good that the early capture of St. Raphael and Red beach seemed probable, and in these circumstances Admiral Lewis cancelled the assault at 1415 and ordered that the 142nd R.C.T. should be landed at 1515 over Green beach where unloading was proceeding smoothly. This was done, but it had not been possible to inform the divisional headquarters of the change in plan. From 1930 to 2000 the Fréjus-St. Raphael area was bombarded from the sea preparatory to the assault from landward, and the enemy's resistance was overcome, though the two towns were not occupied till next day. Yellow beach had already been occupied by American troops; at 1915 the net across the entrance of the Rade d'Agay was removed, and an hour later Yellow beach was open for some traffic. No mines were swept in the Rade d'Agay, but the first craft to touch down at Yellow beach, L.C.I.951, set off a whole row of land mines at the water's edge, and sustained damage. Sweeping of the Gulf of Fréjus was recommenced, and Red beach was opened at 1900 on 17th August, but it required two more days of intensive effort completely to clear the small Gulf of 90 shallow-laid moored mines and 15 moored magnetic mines; during this operation five craft were mined, four of which were sunk.2

At 2043 a force of about four Dornier 217 approached "Camel" area at 15,000 feet dropping to 8,000 feet. Bombs were dropped near the *Bayfield*, Admiral Lewis' flagship, and one glider bomb was released which destroyed L.S.T.282 and two L.C.V.P. which were off the beach at St. Raphael. The control plane employed a new technique operating over the land, so that it was able to keep its victim between it and our jamming ships. Although twenty-two ships were trying to jam the missile they were unable to control it. This was the only bombing attack made against the naval forces on 15th August.

The bombardment forces in the "Camel" area consisted of the battleship Arkansas, the cruisers Tuscaloosa, Brooklyn, Marblehead, Argonaut, Duguay Trouin and Emile Bertin and eleven American destroyers. The Arkansas fired 383 rounds of 12-inch⁴ against batteries near Anthéor and St. Raphael, the Tuscaloosa fired 581 rounds, the Marblehead 628, and the Brooklyn 528 at troops, batteries and defences using aircraft from the Brooklyn for spotting, though some shoots were controlled by shore parties and at times the ships approached sufficiently close to do their own spotting. The Emile Bertin was still more heavily engaged, firing 828 rounds, but the Duguay Trouin had little opportunity for firing. The Argonaut fired 394 rounds during the day, largely at batteries between Cannes and Antibes and on Ile Ste. Marguérite, coming under fairly heavy fire; later in the day she moved to the Gulf of Fréjus, where she joined in the bombardments. The destroyers bore their full share of the bombardment, usually approaching sufficiently near the target to spot their own fall of shot. The Ordronaux was particularly heavily engaged. In

the afternoon the *Philadelphia*, and two French destroyers arrived from "Delta" area and reinforced the "Camel" ships, some of which must have been running short of ammunition. The result of the delay in capturing Red beach was that the French armoured brigade, which had arrived had to postpone landing till next day, when it was put ashore in "Delta" sector.

24. The Airborne Assault

The mission of the Provisional Troop Carrier Airborne Division was to carry the parachute troops and tow the glider-borne elements of the 1st Airborne Task Force to the drop and landing zones in the Argens Valley between Le Muy and Carnoules. The Airborne Task Force, which was commanded by Brigadier-General R. T. Frederick, consisted of the British 2nd Independent Parachute Brigade, the American 517th Parachute R.C.T. and two additional American parachute battalions together with the 550th Infantry Battalion (Glider) and supporting troops. The objective of this force was to block the movement of enemy reserves into the assault area from the north and northwest. During the planning stage Admiral Hewitt was concerned to make certain that a corridor was chosen through which the aircraft could fly without being fired on by allied ships or beach anti-aircraft guns, and as a result there was no single case reported of troop carrier aircraft being fired on by allied guns. To assist the aircraft to reach landfall at Le Trayas three beacon ships, the Stuart Prince, Antwerp, and P.T.209, were stationed in the centre of the corridor at thirty-mile intervals before 0300 on 15th August.

The aircraft took off from their bases near Rome in the early morning. The first Pathfinder aircraft made landfall at about 0315, followed an hour later by 396 troop carriers, which returned to their bases after dropping the paratroops. The departure of the glider-borne force had to be postponed for two hours but at 1015 the gliders, towed by 71 aircraft, were cut loose over the drop zone. Later in the day reinforcements and supplies were flown in mainly by gliders. In all, the aircraft made 807 sorties, 446 carrying paratroops and 361 towing gliders, for the loss of only three aircraft and nine gliders. This is remarkable considering that more than half the sorties were made in darkness and that there was a dense fog over the drop zones. Though the fog caused a number of troops to be landed some distance from the scheduled area, a high percentage was dropped in or very close to the drop zones.

The airborne troops accomplished their mission with great success, and a decisive factor in the development of the allied plan was the exploitation of the wedge driven into the enemy positions by the landing of this force. Through this wedge light armoured columns thrust northwards and the enemy forces were split into three separate groups. On 16th August the airborne division, having concentrated its forces and mastered the enemy in the neighbourhood of the drop zones, occupied Draguignan and Les Arcs. On 19th August the airborne forces reinforced by a regiment of Commandos from Port Cros, wheeled to the right for the advance to the east, but the enemy, who had retreated in haste at other points, offered a bitter resistance in the region towards the Italian frontier and was reinforced by troops from the

¹ H. p. 192.

² These craft were Y.M.S.24, P.T.218, P.T.202, M.L.563 sunk, B.Y.M.S.2022 damaged.

³ H. p. 46.

⁴ Bombardment figures are taken from H. diagram 20.

¹ H. pp. 54 and 192.

² H. p. 275.

³ H. p. 275. This no doubt refers to the American troops for less than half of the British brigade was dropped in the correct area.

⁴ H. p. 275.

 $^{^{\}rm 5}\,{\rm Information}$ about the advance of the airborne troops is taken from H. Part II, Chapter 1.

German armies in Italy. Not till 25th August did the Airborne force enter Cannes and Antibes, after which stiff opposition was met on the east bank of the River Var, which was crossed on the 27th; on the 28th Nice was occupied.

The German retreat from Nice was covered by demolitions and minefields slowing down our advance, and such stiff resistance did the enemy offer that in spite of considerable support from naval bombardments (see Section 40) the Airborne Task Force only reached the line Utele-Sospel-Monaco on 5th September. By 12th September our troops had reached Menton on the coast, and repelled a counter-attack; for some days they had to remain on the defensive near the coast, though inland they started to penetrate the mountain passes towards the Italian frontier. On 25th September, on which day Operation "Dragoon" may be considered to have terminated, our troops were holding a line roughly along the Franco-Italian frontier from St. Antonin (3½ miles North of Menton) to a point on the coast some three miles to the west of Ventimiglia.

It may be of interest to add a few details about the operations of the 2nd Parachute Brigade of three battalions, the only British troops to take part in the invasion of the south of France; the information is taken from the war diary of the Brigade. Dropping was inaccurate, for though the 6th Battalion was 70% intact, the 4th and 5th were very scattered, groups landing as far afield as Fayence and Cannes.1 Headquarters were established at Le Mitan by 0615, and the 6th Battalion captured La Motte. Reinforcements arrived during the afternoon, and by 2000 the artillery was in fair strength while many of the scattered parties had joined up with their units. The actual landing was unopposed and though later on resistance was encountered, it was never serious, and by the close of day all objectives had been reached, all counterattacks repulsed and many prisoners taken. Le Muy was attacked during the night; this attack failed, but the town was occupied at 1500 next day. During the 17th a considerable quantity of supplies was flown in and the brigade occupied Fayence and Callas, but during the night, the force holding Les Quatre Chemins, two miles south-east of Callas, was counter-attacked and had to withdraw, retaining contact with the enemy, who retreated next morning. During the 18th the brigade was withdrawn into army reserve. On 20th August the British force moved to the front and some skirmishing took place. The brigade continued in action with the enemy but fighting was not heavy and on the 25th it occupied Cannes. Next day the British force embarked and left the area.

25. The Special Operations Group

The purpose of the operations of this group, commanded by Captain Johnson U.S.N., was to deceive the enemy about the exact point of landing of the expedition once he had realised that an invasion was imminent at some point between Genoa and the Spanish frontier. This deception was to be brought about by threatening successively the Genoa area, the Nice-Cannes area, and the Cette-Agde area, with groups of small craft which would simulate powerful invasion forces. Two groups were formed, the eastern consisting of the Aphis, Scarab, Antwerp, Stuart Prince, four M.Ls. and twelve P.Ts., while the western group comprised the destroyer Endicott, four M.Ls., eight P.Ts. and twelve A.S.R.C.

The eastern group, less the P.Ts. sailed from Ajaccio during the morning of 14th August, with fighter cover to prevent it being sighted by the enemy's reconnaissance aircraft, and at 2130 was joined by the P.Ts. which had been

based at Bastia. Three P.Ts. were detached to form an anti-E boat screen off Nice, and another four to land the French Commandos in the Gulf of La Napoule, as related in *Section 23*. The main group continued north as if heading for Genoa, simulating a large force with the aid of radar jamming and the creation of many artificial radar targets from aircraft and reflector balloons. At 2230 the *Antwerp* and *Stuart Prince* were detached to take station as beacon ships for the transport aircraft and at 2330 the remainder of the group altered course to the westward. The P.Ts. which had landed the Commandos rejoined and took station to the eastward of the group to guard the force against E-boats.

At 0420, 15th August, the group arrived off Antibes and the gunboats carried out a bombardment of targets between Antibes and the Var river while the M.Ls. and remaining P.Ts. employed radio counter-measures to distract the enemy's attention from the Aphis and Scarab. These measures were successful, for most of the enemy's fire was directed at the decoy screen and the gunboats were not hit. The bombardment was maintained for about an hour, after which the force proceeded to Briande Bay in "Alpha" sector, where it joined the Western group, releasing the P.Ts. which were sent to augment the screening forces.

The Endicott and M.Ls. of the western group sailed from Ajaccio on 14th August, about two hours later than the eastern group and were joined at 2100 when about 25 miles south of the Hyères islands by the P.Ts. and A.S.R.C. from Calvi. Reflector balloons were streamed and radio counter-measures commenced by the unit and by covering aircraft, to simulate a convoy twelve miles long and eight wide, a much larger force than the "Sitka" Attack Force. which was then moving up to its assault position. At 0100 15th August, the group turned towards La Ciotat and as the radar station on Cape Sicié had purposely been left unmolested, it was hoped that the enemy would track this movement. Fog and radar failures somewhat interfered with the programme, but the Endicott and two of the M.Ls. opened fire on shore-positions near La Ciotat at 0300. Dummy radio traffic was put on the air imitating a force flagship, vessels of an amphibious attack force, and a fighter direction ship controlling night fighters. To heighten the illusion the A.S.R.C. were to enter La Ciotat Bay and after laying a smoke screen, put down a beach barrage, and simulate a landing; in the event however, only one craft actually entered the

Except for a few rounds of anti-aircraft fire, the enemy made no opposition. The force withdrew and had joined the eastern group in Briande Bay by 1100. To continue the mystification of the enemy, at 0400 aircraft dropped 300 dummy paratroops rigged with demolition charges to the north-west of Toulon. These operations seem to have caused considerable confusion to the enemy, for during the first two days of the assault German announcements credited the Allies with landings on a front stretching from Cannes to the westward of Toulon, while on D-day it was stated that Cannes had been captured and that a force of battleships had bombarded Antibes and Nice. Another German claim was that an attempted landing to the east of Marseilles had been frustrated by the assault force running into a minefield.¹ Thus it is very probable that these operations retarded the arrival of German reinforcements in the real assault area.

A second simulated landing was to have been staged at La Ciotat during the night of the 15th/16th, but owing to the failure of a tanker to arrive the force could not refuel in time, and the operation was postponed for twenty-four

¹ The 4th Battalion was only 30-40% intact while the 5th could only raise one company.

¹ H. p. 179.

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hours; even then some of the P.Ts. were not ready and had to be left behind. The second diversionary operation commenced at 1600 on 15th August, when the Aphis, Scarab, and four M.Ls. sailed from Briande Bay, followed four hours later by the Endicott with four P.Ts. and thirteen A.S.R.C., who overtook the gunboats at 2300. After arriving off La Ciotat a bombardment was carried out between 0310 and 0435, while four waves of A.S.R.C., simulating an assault, entered the bay, fired rockets and made smoke. The enemy was thoroughly alarmed and opened a heavy fire against the imaginary gunfire support and transport areas, but the smoke screens and rapid manoeuvres enabled the craft to evade the barrage and no serious hits were sustained. The Germans claimed to have repulsed the assault of a strong force whose convoy was twelve miles long, which was the exact convoy size which the radar counter-measure plan intended to convey.1

During the retirement one of the A.S.R.C. picked up two radar targets, which were thought to be friendly vessels until they opened fire. The A.S.R.C. employed evasive tactics until 0555 when the two gunboats arrived. The Aphis and Scarab continued the action and were joined by the Endicott at 0609, but the enemy, which turned out to be the escort ships Capriolo and Kemid Allah continued fighting until 0730, when they were sunk thirteen miles off La Croisette point, the southern point of Marseilles Bay, 211 prisoners being taken. The Endicott was hit by one small calibre shell and by splinters and had three men wounded while one of the A.S.R.C. sustained slight damage. The diversion unit returned to the assault area, and on 18th August, the Special Operations Group was dissolved, the British gunboats being released to the C.-in-C. Mediterranean while the remainder of the craft were assigned other tasks in the assault area.

26. Naval Off-Shore Movements in Assault Area, 15th-17th August

As soon as the transports, combat loaders and L.S.I. had unloaded, they were formed into convoys and sailed from the area. So rapid was the unloading that seven ships due to sail on 16th August, and two on 17th, were able to depart on D-day; in all 95 vessels organised into four convoys were sailed from the area before the close of 15th August. 2 Control of convoys and of escorts was exercised by C.T.G. 80.6, Captain Clay U.S.N., in U.S.S. Jouett, assisted by two other destroyers and some P.Ts. stationed in Briande Bay. A convoy assembly area was set up ten miles east of Cape Camarat for merchant vessels bound for Naples and Ajaccio and for all L.S.T., while all other landing craft and merchant vessels bound for Oran assembled ten miles east-south-east of Cape Camarat. Two convoys arrived in the area on D-day after the assault, one of these being Special Convoy No. 2 from Oran, containing the French Armoured Brigade, which was to have landed at once over "Camel" Red

As explained in Section 23 disembarkation was delayed, and landing commenced at noon on the 16th over the "Delta" beaches. The second convoy was S.M.2 from Naples consisting of store ships. On 16th August the convoy control handled 76 ingoing and 86 outgoing ships, including among the former convoy T.F.1 from Taranto, containing two French infantry divisions of the 2nd Corps, which commenced landing at 1800 over "Alpha" beaches. On 17th August, one convoy arrived and five departed. Thereafter convoy movements were regularly carried out and in general arrangements worked smoothly; though some mistakes did occur owing to lack of information, the

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planned schedule was met and in some cases accelerated. General Patch, commanding the Seventh Army, landed with his staff on the 16th, and set up his headquarters at St. Tropez, taking over the command of the troops which in accordance with American practice had up till then been exercised by Admiral Hewitt.

The bombardments on D-day have already been fully considered in Sections 19-23. During the day 15,900 rounds of 5-inch and above were fired. During the night of 15th-16th the Gun Support Groups withdrew from the area, returning at dawn. On the 16th Admiral Rodgers released the "Delta" bombardment ships, no further gun support being required in that sector, though during that day the Fitch and Hobson of his force, carried out some shoots against targets which were just inside the "Camel" area. In "Alpha" area there were during the 16th some bombardments of points between Cape Nègre and Le Lavandou and "Alpha" gun support ships also co-operated with the "Sitka" force for the reduction of Port Cros. In "Camel" area, bombardments continued on the 16th, the Argonaut and Ellyson being heavily engaged against troops and vehicles inland of the line St. Raphael-Agay, and the Brooklyn also carried out some shoots. Other ships of the force bombarded positions on the extreme right flank of the army and targets near Cannes and Antibes.

On the 17th the "Alpha" and "Camel" gun support ships were released and Admiral Davidson henceforth exercised control over all bombardment forces. He organised his command so that two battleships, two heavy and six light cruisers, and eleven destroyers remained in the assault area, while the others withdrew into reserve at Algiers, Palermo, or Naples, being sent into the assault area to relieve as required. On 17th August. Admiral Hewitt released the Jeanne D'Arc, and Sirius which had been held in reserve at Naples. The American cruiser *Omaha* arrived in the assault area on the 16th.

As soon as the assault commenced, the screening plan was put into operation. The in-shore screens controlled by the Task Force Commanders and consisting, of P.Cs., S.Cs., L.Cs., L.C.C., L.C.V.P. and L.C.M.(S), were established principally to provide smoke protection; the larger craft in addition acted as a screen against U-boats, E-boats and limpeteers and were reinforced by minesweepers at dawn and dusk. The two outer screens were controlled by C.T.G. 80.6 in the Jouett⁴; of these two, the inner, consisting of five destroyers, was concerned with defence against E-boats and U-boats, and also provided anti-aircraft defence of the convoy assembly areas, while the main destroyer screen consisted of all ships not required for other duties and provided cover for the entire assault area except the south-west section of "Alpha" sector where destroyers could not operate owing to minefields in Hyères Roads: this gap was filled at night by a patrol of P.Ts. The original screen, 50 miles in length, was composed of 26 destroyers, but the number naturally varied from time to time. So far as is known no attempt was made by enemy forces to penetrate the screen during the first three days of the operation. The C.-in-C Mediterranean in his despatch gives the opinion that an "endless chain" patrol, which is the normal British practice, would have been more efficient

¹ H. p. 179.

² H. p. 52.

¹ H. p. 227.

² H. p. 52.

³ The Sirius, however, took part in the later stages of the operation, see Section 37.

⁴ This officer, Captain Clay, U.S.N., in addition to controlling the screen and being in command of all escorts, was responsible for the reception and despatch of all convoys.

⁵ M05662/45. C.-in-C. Med. report p. 3.

from the anti-submarine point of view, than this arrangement whereby a number of ships carried out independant patrols. By 18th August, all minesweeping in the assault area having been completed, the sweepers were removed from the command of the Task Force Commanders, and came under the orders of C.T.G. 80.10, Commander Messmer U.S.N., in the Barricade. The heavy programme of sweeping which was then carried out will be considered in the next chapter.

27. The Beaches. Enemy Opposition

Unloading over the beaches was carried out in a very satisfactory manner, the lessons of earlier landing operations having been well learned, and but few complaints were made about congestion on the beaches, which was so prevalent during the Salerno landing. Three naval beach battalions were assigned, one to each sector and a naval liaison officer, appointed to co-ordinate the activities of all three, established his headquarters with the Commander of the Army Beach Control Group near Ste. Maxime. The beaches were well adapted for landing craft though less satisfactory from the Army point of view as the exits often left much to be desired. Twenty-four pontoon causeways with crews were available, twelve for "Alpha", four for "Delta" and eight for "Camel", but they were subsequently redistributed according to the requirements of the sectors. In some places L.S.T. and in most places L.C.T. were able to discharge directly over the beaches so that there was a surplus of pontoons, but this was soon absorbed as ports were captured, for the pontoons were then used there as piers, ramps, and barges.

All L.C.T. were retained in the assault area for unloading purposes; these and the army DUKWS were augmented by 218 L.C.M., 170 of which were loaded on merchant ships and the remainder on the two L.S.G. and one L.S.C., though most of the latter (48 craft) were released and left the area with their parent ships on 18th August. The L.C.M. were mainly used for unloading vehicles, and were found to be better than L.C.T. for this purpose. The crews of these craft, of the L.C.T., and the repair personnel, established an enviable record in maintaining the craft in service under arduous conditions over a long period.1 The main difficulty encountered on the beaches was shortage of labour and of vehicles to transfer stores from the beaches to the dumps, while crews of merchant ships were not always as co-operative as might have been expected. A shortage of cargo nets in the store ships was another factor of delay, while dunnage thrown overboard by ships at anchor off the shore and wire rope and lines discarded by L.S.T. as they approached the beaches constituted obstacles to the landing craft.3 So far as shortage of vehicles and of labour was concerned, the fault lay with the Army, in fact the facilities provided by the Navy for delivery of cargo to the beaches far exceeded the capacity of the Army to unload and transfer it from the beaches to supply dumps; on this account one of the Task Force Commanders recommended that the Navy should take over the responsibility of handling all stores as far as the supply dumps. Admiral Hewitt however disagreed with this.4

In spite of these difficulties 86,575 men and 12,520 vehicles were landed during the first three days, besides over 46,000 tons of stores. On 16th August, the French armoured brigade and the two divisions of the French 2nd Corps commenced landing, the former over "Delta" beaches and the latter over

"Alpha." On this day both Fréjus and St. Raphael were captured and work commenced on preparing the latter port to receive ships and craft. In "Delta" sector Blue beach was closed, but the port of St. Tropez was opened to traffic. In "Alpha" sector Red beach was cleared of mines and reopened and exits were constructed, while on 17th August, "Camel" Red beach was opened. On 17th August, the C.-in-C. Mediterranean closed his advance headquarters at Ajaccio and returned to Naples.

Enemy opposition was surprisingly light. The small amount of gunfire has been commented on in the sections dealing with the assault on each sector, and the solitary air raid on 15th August, has been described in Section 23. On 16th August at 2050 five Junkers 88 escorted by four fighters approached St. Tropez and dropped anti-personnel bombs on the "Delta" beaches, the resulting casualties being 14 killed and 36 wounded. On the same day at dusk the American destroyer C. F. Hughes, stationed in the eastern sector of the screen, reported that a glider bomb fell near her. Next day two enemy fighters approached "Alpha" area at 1900 but were driven off, one being destroyed, and at 2138 a Junkers 88 came in low and fast but was shot down by U.S.S. Champlin. At 2040 occurred the biggest raid so far, when six Junkers 88 dropped bombs near St. Raphael and Ste. Maxime without doing any damage. The allied naval losses during the first three days were:—sunk; 1 L.S.T. and 2 L.C.V.P. by glider bomb, 2 L.C.V.P. by gunfire, 2 P.T., 1 Y.M.S. and 1 M.L. by mines; damaged: 6 L.C.T. by gunfire, 3 L.C.T., 8 L.C.I., 1 L.C.C., 5 L.C.V.P., 1 M.L. and 1 B.Y.M.S. by mines or under-water obstacles, 1 S.C. by a run-away drone, and H.M.S. Brave and 1 L.C.T. in collision. No day to day figures are given for naval personnel casualties but they were extremely small.

With the close of 17th August, the first phase of operation "Dragoon" came to an end.

28. The Carrier Force

The Carrier Force (T.F.88) was commanded by Rear-Admiral Troubridge. flying his flag in the Royalist. The force was divided into two groups, T.G.88.1. under the direct command of Admiral Troubridge, consisting of the Royalist Delhi, Attacker, Emperor, Khedive, Searcher and Pursuer escorted by the Troubridge (D.24), five British destroyers and one Greek destroyer. Rear-Admiral Durgin, U.S.N., in the *Tulagi*, commanded T.G.88.2 which comprised the Caledon, Colombo, Stalker, Hunter and the two American carriers Tulagi and Kasaan Bay, escorted by six American destroyers. The British carriers had embarked squadrons numbers 807, 809, 879 and 899 ("Seafires") 881 and 898 ("Wildcats") and 800 ("Hellcats"), while each of the American ships carried a squadron of "Hellcats"; each carrier accommodated about 24 aircraft. In addition twelve night fighters were based at Casabianda and Solenzara in Corsica, to be flown on to the carriers if necessary. The task of the Carrier Force was to provide the greatest possible fighter protection over the beaches, to supply spotting aircraft for the bombardment groups, to send close support missions and to provide for its own protection against enemy aircraft and U-boats. Owing to the weakness of the enemy's resistance, the functions of protection and spotting tended to become less important and the emphasis was aid on strafing and bombing.

The Carrier Force arrived off the assault area in the early morning of 15th August, and the first aircraft took off at 0610. The patrols first carried out their bombing or strafing missions and then patrolled over the beaches. Once they had left the carriers the aircraft came under the orders of the Air

¹ H. p. 337.

² H. p. 337.

³ H. p. 337.

⁴ H. p. 338.

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Task Force Commander, Brigadier-General G. P. Saville. The carriers operated during the day in an area about thirty miles south of the beaches. The two groups of ships worked independently but generally kept within visual signalling distance of each other. The wind was light all day, but deck landings were made without difficulty. Conditions ashore were not very favourable, especially early in the day, for low clouds made accurate bombing difficult. Altogether 170 sorties were flown on D-day from T.G.88.1.1

The system of control was that on each flight taking off, the Fighter Direction Officer of the Carrier Force notified the air control ship in the assault area of the type of aircraft and other particulars, also the targets on which the aircraft had been briefed. When the patrol reached the assault area its leader called in to the Ulster Queen, if on a patrol mission, or to the Catoctin, if on an offensive mission, for confirmation of targets or assignment of a new mission. While in the forward area, the flight remained under the control of the forward control ship, to which the aircraft reported their departure from the area on the completion of the mission. The control ship then informed the flagship of the Carrier Force of the release of the mission and the fact that it was on its return journey.2 Later in the operation when the Air Commander had left the flagship and had established headquarters ashore, the Royalist assumed control of the offensive missions.

Our aircraft encountered no enemy fighters and in general the enemy's anti-aircraft fire was not heavy, so casualties were small. Two of the Pursuer's aircraft were obliged to land in the sea owing to shortage of fuel, the pilots not having been able to locate the Carrier Force. The pilots were picked up by a Catalina at 1250 and were taken to Ajaccio where they obtained transport to Casabianda airfield. Next day they flew off to the ship in two spare aircraft arriving back at 1700.3 The last aircraft landed on at 2035 upon which the Carrier Force retired southward.

During the day each group of carriers had kept in compact formation near a previously decided "datum point" with the destroyers disposed so as to give a maximum of anti-submarine protection while permitting them readily to assume close anti-aircraft stations if necessary. Normally the carriers turned into the wind together for flying off or landing on, except when only one or two aircraft were involved; on these occasions the carrier concerned would leave the formation escorted by one destroyer and manoeuvre as necessary to recover or launch the aircraft. The two American carriers had a two knot advantage in speed over the British and Admiral Durgin at times found that this factor made it difficult to keep his formation closed up at high speeds. The carriers sustained no attack from the enemy, but during the night flares were dropped near the force without subsequent developments. The three flight deck L.S.T., which were equipped with G.C.I., had arrived in the assault area as scheduled and they launched their aircraft at 0930, assisting during the day as fighter control ships, while after dark they controlled the night fighters. The Fighter Defence Tender was in charge of anti-aircraft defence and air raid warnings; owing to the passivity of the Luftwaffe the tender found little employment of this nature, but she also controlled the defensive fighter patrols.

The Carrier Force was back in position by daybreak (16th August) and the first aircraft was flown off at 0610. Sorties were made regularly according to schedule and the force again withdrew during the night. As the operation progressed, it became evident that little air defence of the beaches was required and this function was taken over by shore based aircraft when landing strips had been laid out on 19th August; at the same time there was less call for spotting aircraft, and so fighter bomber and armed reconnaissance missions became the most important duties of the carrier borne aircraft. On 17th August, aircraft from the Emperor and Khedive took part in the attack on the fort at Port Cros, which was partly protected from the ships' gunfire by the lie of the land, and had been resisting for three days. The aircraft dropped 500 lb. bombs on the fort which soon after surrendered. The "datum point' for the carriers' operations was changed each day, and on 18th August, the operating area of the carriers was moved to the westward and further inshore. By this time the missions flown were mainly up the Rhône valley and owing to the short range of the Seafires, it was necessary for the carriers to approach the coast as much as possible. Had the enemy's air force been active, this would have been a dangerous move, but as it was, the only danger apprehended was from minefields, which obliged the force to remain outside the hundred fathom line. On 19th August, a flight from the Emperor was returning from an attack on a railway yard when, while crossing the Rhône estuary, two E-boats were sighted and attacked; one was destroyed but the other though repeatedly hit, managed to escape.1 The same day an aircraft from the Pursuer piloted by Sub-Lieutenant R. Banks, R.N.V.R., was shot down between Orange and Avignon. The Pilot succeeded in ditching his aircraft in the Rhône; evading the Germans he joined up with the "maquis" and finally after many adventures returned to his ship at Maddalena on 28th August.2

29. On 19th August, Admiral Troubridge with T.G.88.1 retired to Maddalena to refuel the ships and rest the crews, leaving Admiral Durgin in command, and returned to the assault area on the 21st, when T.G.88.2 retired to Maddalena for a spell, arriving back on the 24th. On 20th August, one of the Hunter's aircraft, whose pilot had been badly wounded and was probably unconscious, crashed on landing and brought down the H.F./D.F. mast, causing the death of six ratings and of the pilot himself.3

Strikes were carried out against the retreating German columns with much effect, the Emperor's aircraft making a particularly successful series of attacks on 21st August, by which time the carriers were operating at a point 25 miles south of Marseilles. During the ensuing days aircraft penetrated as far as 120 miles up the Rhône valley, causing havoc to the long columns of retreating enemy vehicles. General Saville in a message to Admiral Troubridge said that he had personally counted 202 destroyed enemy vehicles near Le Luc and St. Maximin. On 24th August, T.G.88.1 retired to Maddalena followed by the Stalker and Hunter from T.G.88.2 on the 26th. On 27th August, the British carriers were released from the operation by Admiral Hewitt, and the force sailed for Alexandria. The American carriers left the assault area on 29th August, on which day Task Force 88 was dissolved. The Air Sea Rescue Service functioned admirably and between 10th August and 29th August

¹ The sorties were made up as follows: Spotting 32, Reconnaissance 6, Fighter Bomber 76, Beach Cover 32, Force Cover 24. Seafires made 66 sorties, Hellcats 42 and Wildcats 62. (M057950/44 App. B.) No figures are available for T.G.88.2.

² H. p. 270.

³ M010202/44 R. of P. Pursuer p. 3.

⁴ H. p. 194.

¹ M010202/44 R. of P. Emperov. p. 4.

² M010202/44 R. of P. Pursuer App. J.

³ M04533/45 R. of P. Hunter p. 5.

⁴ H. p. 270.