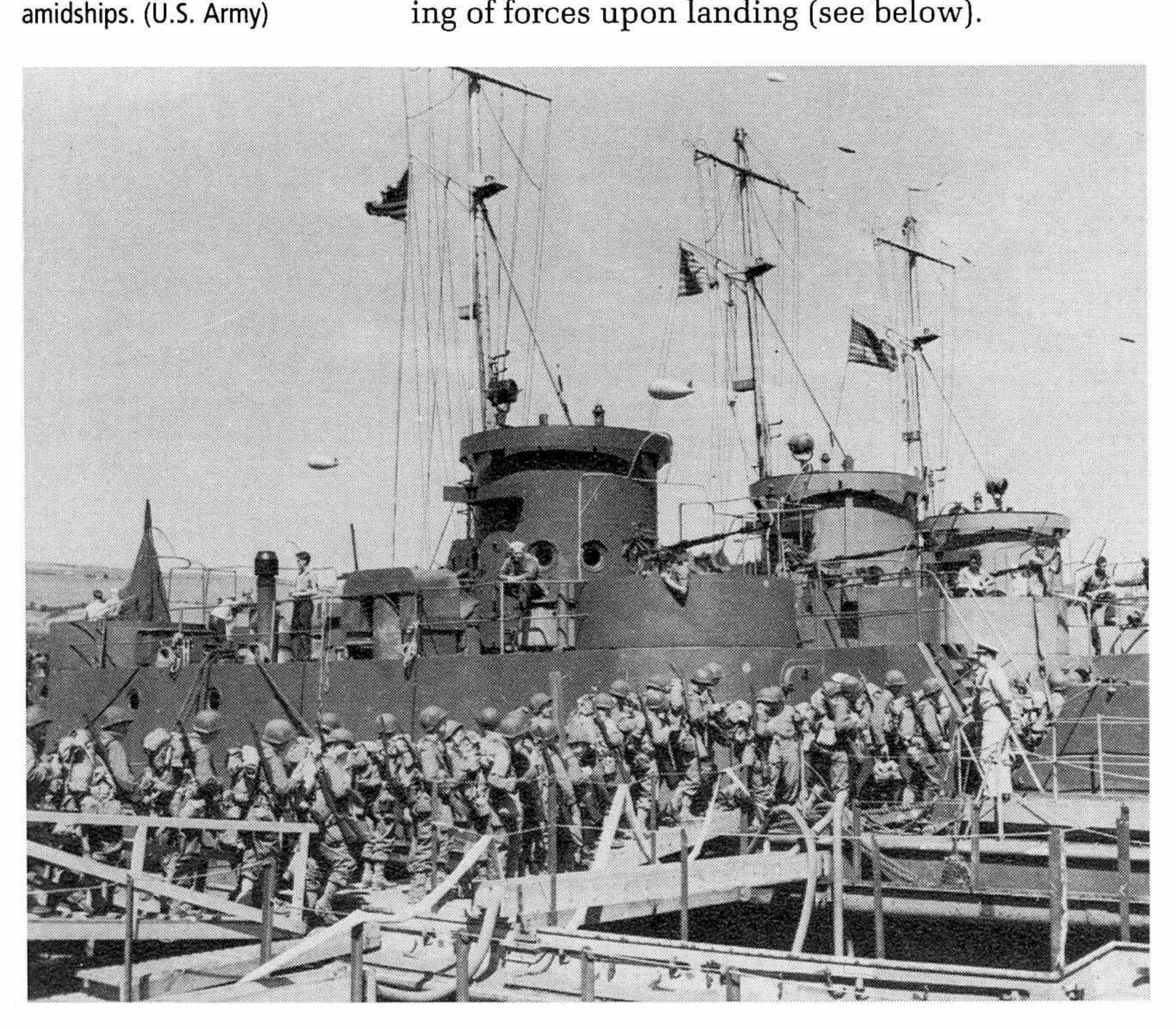
9.

"OVERLORD": THE GREATEST ASSAULT

Below: American soldiers board an LCI(L) at an English port for the assault on Normandy. The Normandy landings, despite the short distances from the embarkation ports to the assault beaches, stand as the largest amphibious assault in modern history. The LCI(L)s here are from the No. 351–1139 series with a rounded conning tower/bridge and 20-mm gun mount forward of the tower; No. 1–350 had a square tower with 20-mm gun

A FTER their success in North Africa and Italy, the Allied leaders began the final planning and rehearsals for the invasion of France and the liberation of Europe. Initially, two invasions were considered, the main landings in north western France in Normandy and simultaneously a smaller landing in the southern part of the country, on the Mediterranean coast. A total of 36 Allied divisions would be available in the United States and England by mid-1944 for employment in the coming campaign, with another ten available after withdrawal from the Italian campaign.

The impetus to mount the cross-Channel invasion in Normandy with all possible forces would cause a delay in the southern operation. Plans for the main assault forged ahead as men and supplies poured into the limited area and ports of southern England. This geographical overloading soon created problems in maintaining any degree of secrecy, thereby providing more momentum to the projected landings. But geography would impose yet another, more important constraint on the coming cross-Channel invasion – the positioning of forces upon landing (see below).



Formal planning for the cross-Channel landing began in March 1943, with the appointment of Lieutenant-General F. E. Morgan as "Chief of Staff to the Supreme Allied Commander." While no Allied commander had yet been designated, Morgan, a veteran British tank commander, soon organized his COSSAC headquarters and with a small staff began drafting the necessary tons of paperwork to undertake what would be history's largest amphibious assault.

By January 1944, as Allied operations in Italy reached their peak, all the force commanders for the Normandy invasion were in Britain to begin final arrangements. Earlier, Churchill and Roosevelt had agreed that the nation providing the majority of the forces for the invasion would name the overall commander. Significantly, Churchill had already told Field Marshal Sir Alan Brooke that he would be commander of the cross-Channel invasion.

Most Americans assumed that General George C. Marshall, the U.S. Army Chief of Staff, would command but Marshall was surrounded by controversy because he was being mentioned for the Republican presidential nomination (as was General MacArthur) to run against Roosevelt in November 1944; if he were sent to Europe it could be seen as a political move by Roosevelt to destroy his possible candidacy.

Roosevelt told an obviously disappointed Marshall that he would remain as Chief of Staff of the Army. Marshall quoted Roosevelt as closing the discussion with: ". . . I didn't feel I could sleep at ease if you were out of Washington."¹

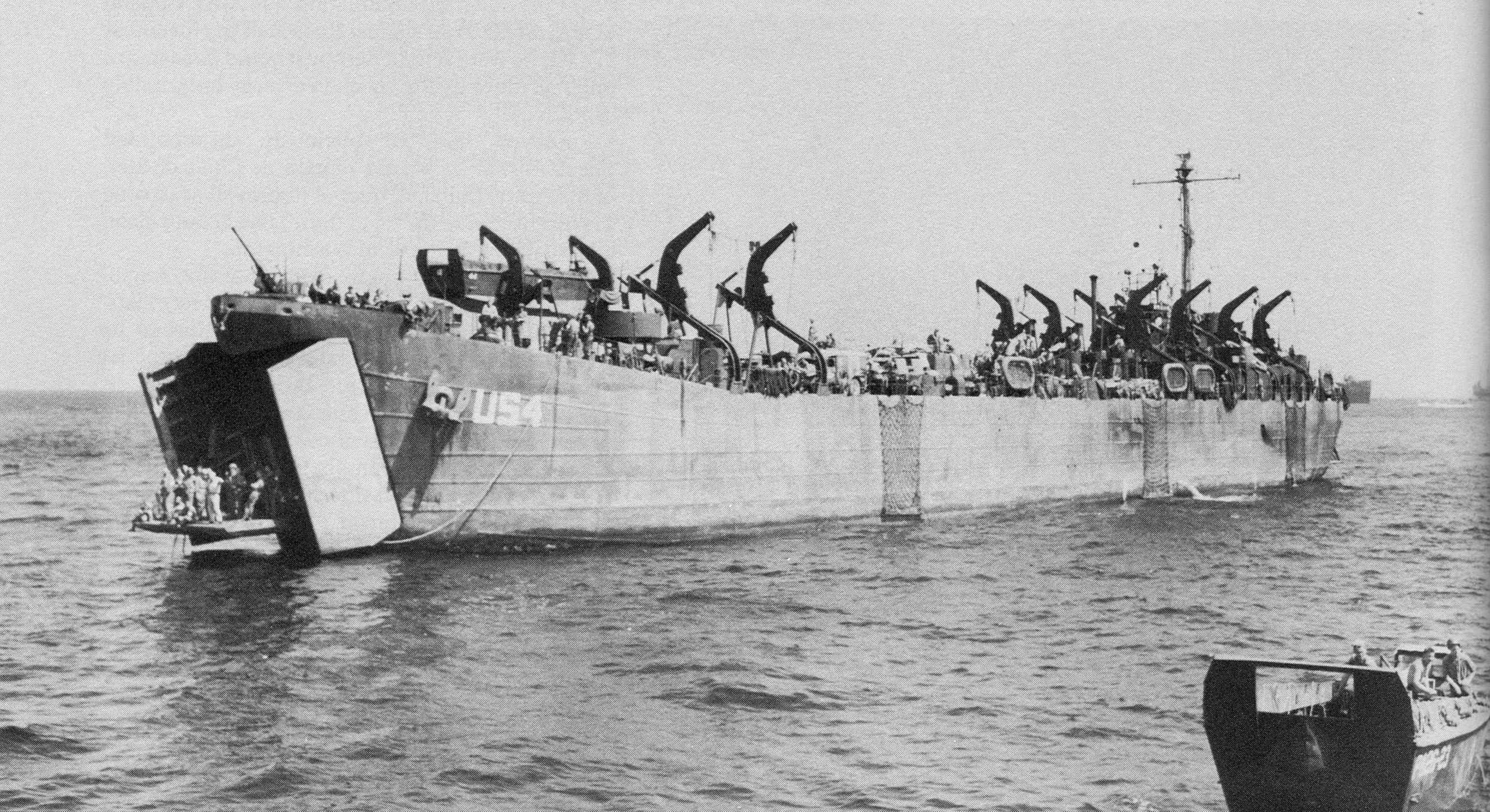
The obvious choice to command the Anglo-American invasion would be Eisenhower. "Ike" had feared that if Marshall came to Europe he ("Ike") would be sent back to Washington; he let it be known that he would rather command an army under Marshall in the coming assault than return to the capital. Eisenhower would write that Roosevelt had told him that he had originally planned to give the invasion command to Marshall and that the senior officers should rotate to share the burdens and honors of staff and command duty.²

Having been chosen to head the overall operation, General Eisenhower requested RAF Air Chief Marshal Tedder as his principal deputy,



with British General Bernard Montgomery to lead the British Army and General Omar Bradley to head American ground forces. Admiral Bertram Ramsay, RN, would direct all naval forces and RAF Air Chief Marshal Trafford Leigh-Mallory would command the Allied air forces supporting the invasion. (Admiral Cunningham was not available for Eisenhower's team, having become First Sea Lord, the senior officer of the Royal Navy.) U.S. Lieutenant General Walter Bedell Smith became Eisenhower's Chief of Staff with General Morgan - COSSAC - staying on as his deputy. These men and their staffs were referred to as SHAEF for Supreme Headquarters Allied Expeditionary Force (which absorbed the COSSAC headquarters).

The "Overlord" command team had a good relationship. One major issue, however, was the role of the U.S. and British heavy (strategic) bombers in supporting the landings. At the Churchill-Roosevelt conference in Quebec during August 1943, Leigh-Mallory had been named to command the tactical air support for "Overlord" (at the time he was Commander-in-Chief, RAF Fighter Command). The commanders of the U.S. and British bomber forces objected to being placed under Eisenhower's control, for their bombers could strike at targets beyond those related to the Normandy landings, such as U-boat bases, aircraft and submarine factories, and the V-1 and V-2 missile facilities that were just being revealed. Finally, it was agreed by Churchill and the Allied strategic bomber commanders that Tedder, both Eisenhower's deputy and an RAF officer, would develop the strategic air plan in consultation with



Left: British LCTs and other landing craft in a British port awaiting D-Day. It took the British and Americans years to build up the invasion force in Britain, all the time being called upon to support large-scale operations in the Mediterranean, the Central Pacific, and the South-west Pacific. The production of landing ships and craft in this period was remarkable in view of the simultaneous demands for merchant ships, aircraft carriers, antisubmarine ships, and other naval units. (IWM)

Right: One of the most unusual and most important – craft in the Normandy assault was the landing barge kitchen or LB(K) which provided hot meals for the crews of the smaller landing craft. This is the LB(K).1 with LCVPs and LCMs alongside. In the Pacific the U.S. Navy used larger landing ships for this role, informally referred to as LST(M), the "M" indicating "mother." During its first day on station the LB(K).1 served more than 1,000 hot meals. (IWM)

Left: The availability of LSTs was a key factor in the scheduling of the Normandy landings. This view shows the LST-4 loaded with trucks and tanks. The cargo nets hanging from her sides were used for troops to climb into the LCVPs after they were lowered. Her bow doors are open and the ramp is lowered as she approaches the beach. The LST-4 participated in the landings at Sicily, Anzio, Salerno, and Southern France, earning four battle stars. The LCVP in the foreground is from the Samuel Chase (APA-26). (U.S. Navy)



the bomber commanders, while Leigh-Mallory would handle the actual employment of aircraft, under Tedder's supervision. It was a workable plan and it would prove a successful one.

British and American bombers began pounding the transportation targets in France. From February to June 1944, aircraft of the U.S. 8th and 9th Air Forces and Britain's 2nd Tactical Air Force dropped 76,200 tons of bombs on 80 rail and road targets. Meanwhile, the massive invasion fleet assembled, becoming the mightiest armada ever to have sailed. There would be more than 4,400 ships and landing craft to carry 154,000 troops – 50,000 of which were the actual assault troops from five divisions – plus 1,500 tanks. The accompanying table lists the ships allocated to the assault – mostly from the British and U.S. Navies, but also flying the flags of France, Greece, Holland, Norway, and Poland.

A number of exercises were held off the British coast and beaches as the Anglo-American-Canadian landing force trained for the forthcoming assault. These exercises were marred by tragedy in April 1944, when early on the morning of the 28th a large group of German E-boats from Cherbourg fell on the landing ships of Operation "Tiger," a mock assault on the coast of Devon, on the English Channel. The torpedo boats struck savagely at the landing ships, which were carrying some 30,000 U.S. soldiers, sinking the U.S. LST-507 and LST-531. In the attack and confusion that followed, 749 soldiers, most from the 4th Infantry Division, were killed. Many died instantly in the explosions, but hundreds more drowned, many bodies being washed ashore on the English coast. While all the troops apparently wore life belts, they were worn improperly, causing many of the heavily laden soldiers to tip upside down in the water and drown.

Those bodies that were recovered were buried

in secret and the disaster was hushed-up to avoid the psychological impact on the Allied troops preparing for the invasion. Despite these losses, the army, air forces, and fleets were being readied for an early June invasion, the opening of the longawaited "second front."

Above the invasion fleet, a vast aerial armada of 11,000 fighters, bombers, transports, and gliders would provide protection and supply, including a massive parachute-glider assault behind German lines as the opening act of the landings. Codenamed "Neptune-Overlord" (Neptune would be the naval aspect of the operation), the Normandy invasion promised to be the most ambitious operation of the entire war. In total, nearly 2,000,000 men would eventually be landed in France, supported by 140 major warships and almost 300 minesweepers plus hundreds of lesser craft as well as the 4,000 landing ships and craft.

In addition, the invasion force included ten LB(K)s or landing barges (kitchen). These were small craft fitted with stoves and ovens to provide hot meals and bread to the thousands of British and American sailors in the small craft that were carrying troops and supplies between English ports and the French beaches. When the landing began these floating galleys would each provide hot meals for 500 to 700 men per day and bake up to 1,000 pounds of bread per day. A typical dinner menu would consist of roast pork, cabbage, and baked potatoes, with fruit and custard for desert, sent aboard the landing craft in insulated canisters together with soup, coffee, and tea. Each LB(K) could carry about a week's supply of food for 800 men

Finally, the assault force had two British midget submarines, the *X-20* and *X-23*, the only Allied undersea craft participating directly in Operation "Neptune".³ These submarines sailed from

Portsmouth to serve as beacons for the invasion armada. After spending a day resting offshore on the bottom when D-day was postponed 24 hours, the two craft surfaced off the invasion beaches just before 5 a.m. on June 6. Special, telescoping masts with lights flashing seaward were erected on both submarines to guide in the first landing ships. (Once the landings began they weighed anchor and sailed back to England.)

THE MULBERRY AND GOOSEBERRY PROJECTS

The size of the invasion force, and the need for vehicles, munitions, and provisions for this army in sustained conflict were considerable. Massive amounts of material would have to be brought over the beach, as it would be weeks before a major port could be expected to be captured. Proposals for simple causeways and pontoon-type piers were impracticable because of the exceptional spring tides — as high as 24 feet — and expected storms for that time of year.

In addition, any scheme for piers and breakwaters had to be mobile, so that the components could be towed from England to the beachheads, easily assembled in a short time, and able to withstand heavy weather. Further, in view of the size of the assault, each of two planned harbors would be about the size of Gibraltar.

After considering and evaluating a variety of concepts, the Royal Navy developed the Mulberry harbor concept, with credit for the design going to Commodore John Hughes-Hallett, who had been involved in earlier amphibious operations. (Churchill had expressed specific thoughts on this problem during World War I and early in World War II.)

Each Mulberry harbor would have breakwaters consisting of sunken merchant ships and huge concrete caissons, dubbed Phoenix units. After being towed to their proper position the ships and

concrete caissons would be flooded and sunk.

Floating piers several hundred yards long – called Whales – could then be installed for ships to come alongside to unload, with trucks carrying their cargo ashore. These floating Whales were on "legs," to permit them to rise and fall with the tides. Only the Mulberry harbors could permit the massive invasion to be successful without the capture of major ports on the French coast; Mulberry "A" would support the American beachhead at St-Laurent with Mulberry "B" at Arromanches for the British landings.

In addition, another 60 ships would be sunk to provide shallow-water shelters to protect the smaller landing craft from rough seas while they were unloading larger ships, and when they were at rest. The old British battleship *Centurion*, the French battleship *Courbet*, the British cruiser *Durban*, the Dutch cruiser *Sumatra*, and a number of merchant ships would be sunk as the blockships for these so-called Gooseberry harbors.

Some of the components of the Mulberry and Gooseberry projects began their tow from British ports six days before the invasion.

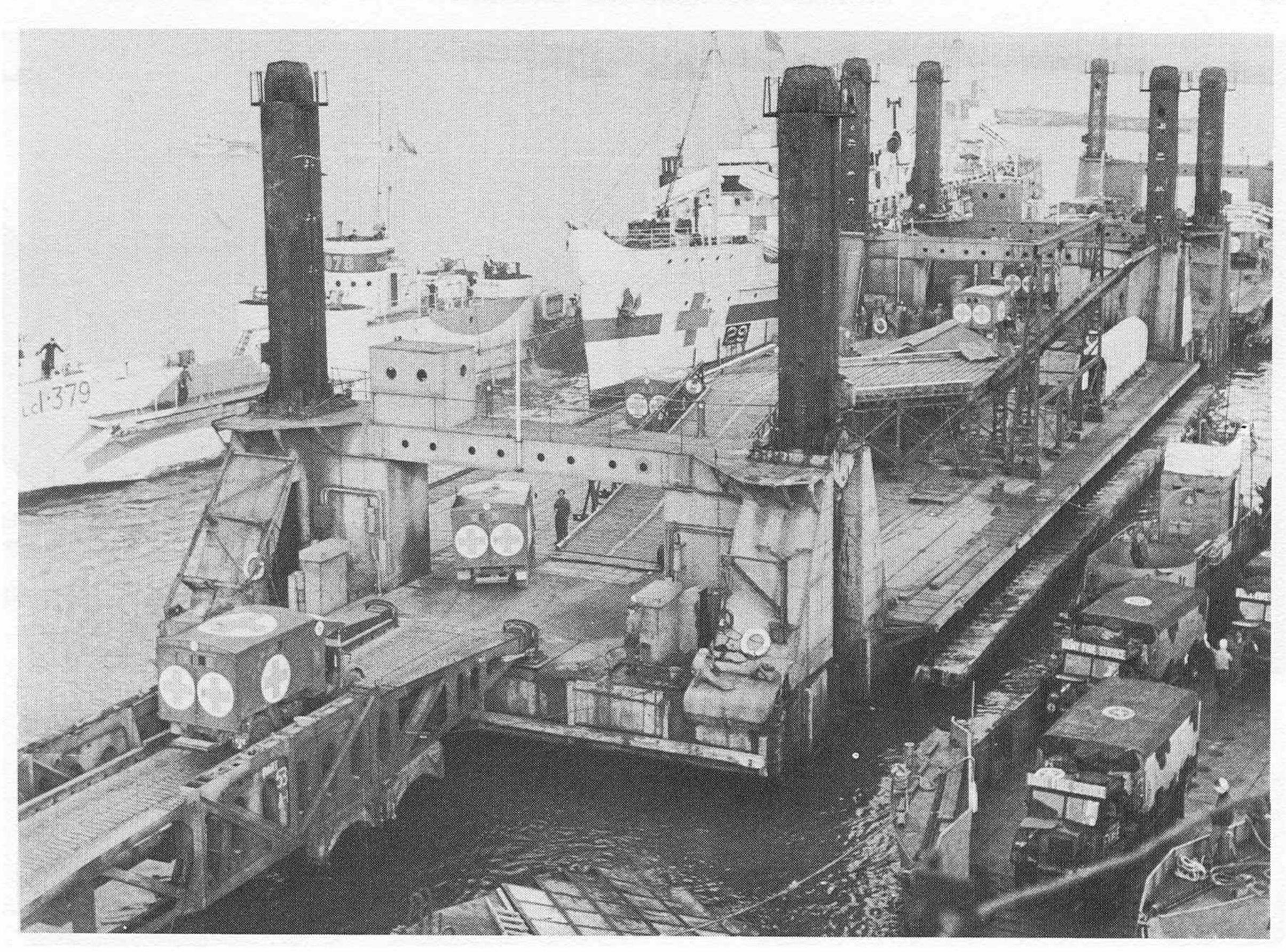
THE ASSAULT PLAN

The Normandy beaches were divided into five areas. The western Utah and Omaha Beaches were given to the Americans, while to the east, the Gold, Juno, and Sword Beaches would be assaulted by British troops. While General Montgomery would be overall commander of the ground forces during the assault, General Bradley would command the American First Army in the landings and General Dempsey would command the British Second Army. It was planned that after the landings General George Patton would arrive with his Third Army to form the U.S. 12th Army Group. When fully ashore the British 21st Army Group would be commanded by General Montgomery.

Below: The MulberryGooseberry projects have been called the greatest engineering feat of the war. While the accolade is questionable, the effort was still impressive.
Causeways like this one stretched up to seven miles to the floating piers moored offshore. Scores of ships were sunk as blockships to protect the invasion beaches. (IWM)



Right: The Germans had expected the Allies to seize French ports as soon as they landed. To avoid this restriction on their plans, the British developed the Mulberry and Gooseberry artificial harbors. In this photo taken after D-Day a hospital ship takes aboard casualties at one of the floating piers. Note the pier design allows for the 20-foot tidal change off Normandy. (IWM)



The major components of the U.S. assault force were the 1st and 4th Infantry Divisions, which would land on Utah and Omaha, respectively, and the 2nd Ranger Battalion, which would come ashore between them, at Pointe de la Percée. Under Dempsey, the assaulting units would be the British 3rd and 50th Infantry Divisions, 8th and 27th Armoured Brigades, the Canadian 3rd Infantry Division and 2nd Armored Brigade, and the British 4th, 41st, and 48th Royal Marine Commandos. (No U.S. Marines participated in the assault.)

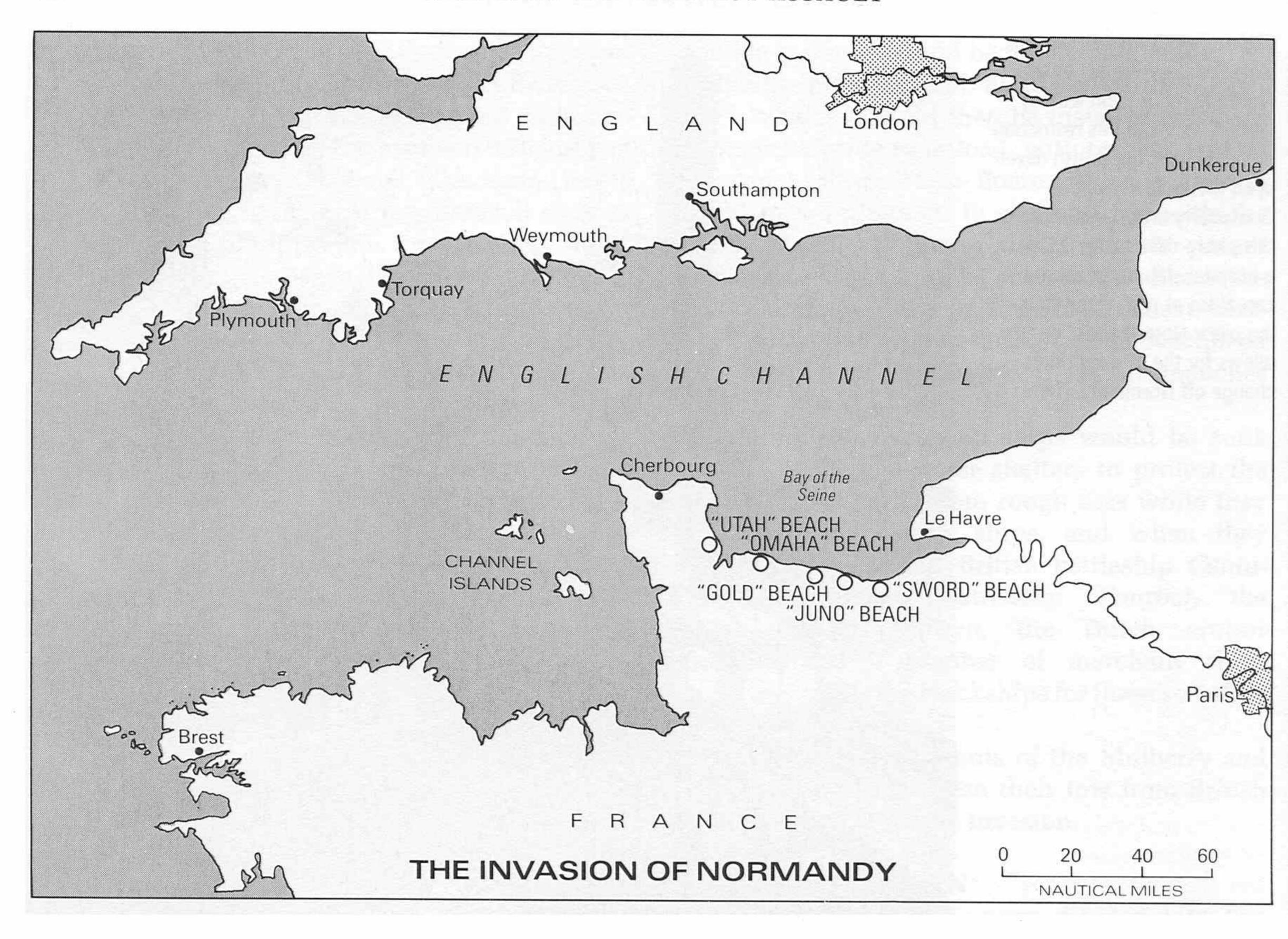
Arrayed against the oncoming invasion was an impressive force of German troops and machines with many ingenious inventions to stop the invasion in the water and on the beaches. Subsurface traps to tear the bottoms from landing craft, massive coastal batteries, and extensive fortifications would form Hitler's defenses, all commanded by Field Marshal Irwin Rommel who believed, with Hitler, that the Allies would land in Normandy, and not elsewhere on the French coast, most likely, it was thought, at a major port. Some members of the German high command disagreed with this view, and there was also disagreement concerning the stage at which reserve formations should be released to the local commanders for defense of the beaches. Would the Allies first feint a landing, or make a raid to distract the German high command and force them to commit the reserves too early? These were critical questions for the German high command, attesting to the potential flexibility of amphibious warfare.

The Germans – using engineer troops and French labor – continued to strengthen the Atlantic Wall, as some called it. Concrete bunkers, barbed wire, mines, underwater obstacles, and coastal artillery were emplaced to hinder if not stop an assault from the sea.

The date of the invasion was also debated, some of Hitler's generals believing it would come in May. When no attack came in May, the Germans relaxed, and as the weather worsened in the Channel, they believed that the invasion would not come for several weeks. Eisenhower postponed the invasion once, from June 5 to the following day, because of poor weather in the Channel area, but by the evening of June 5 the huge fleet was approaching the French coast, preceded by U.S. and British paratroops who would drop from the skies that night. Any further delay would force the landing ships and craft to return to port, imposing a delay of at least several weeks.

LANDINGS IN NORMANDY

The scope of the massive Normandy landings precludes in-depth discussion in an overview such as this. Shortly after 1:30 on the morning of June 6, 1944, two divisions of U.S. Army paratroops took-off from England. From nine airfields, 822 C-47 Dakotas carried 13,000 men of the U.S. 101st and 82nd Airborne Divisions and dropped them in scattered sections over sleeping French towns behind the American beaches; the British 6th Airborne Division was parachuted behind Sword



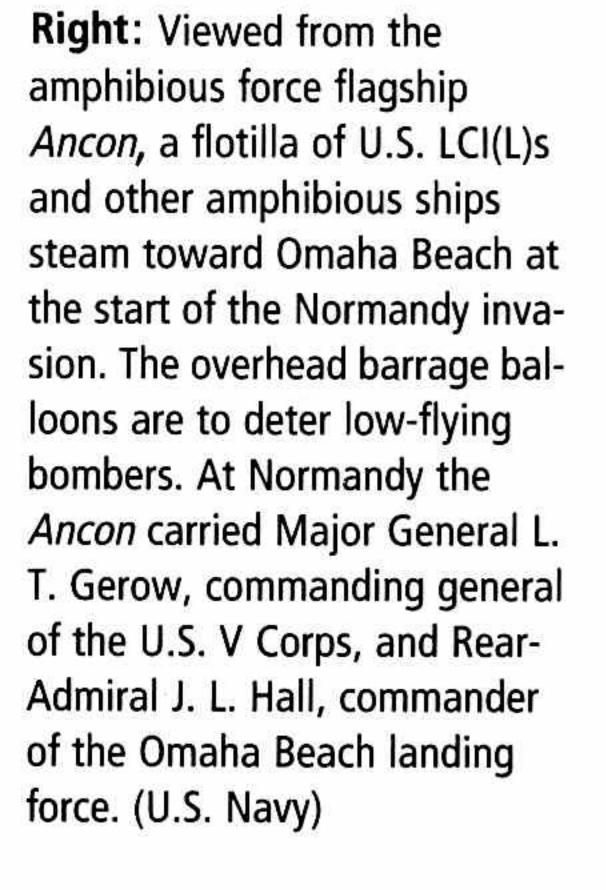
Beach. It was the beginning of D-Day, the long-awaited invasion of France. The paratroopers' objective was to secure bridges and roads, to hold them for advancing Allied armies and to deny them to the Germans.

In the ships of the invasion fleet, the men clambered down the nets to their landing craft bobbing crazily in the rough, choppy seas. Forming up presented several problems, not the least of which, was simply coming together. Escort vessels assigned as control boats tried to locate their positions while the assault boats endeavoured to form up and get

underway. In the dark, heavy seas the task was extremely difficult.

The American sector of the invasion – the landings on the western Utah and Omaha Beaches – immediately had trouble with poor visibility and the fact that two of the control craft for the Utah landing were sunk by mines. German defenses, especially the formidable network of coastal batteries with 110 guns of 75-mm to 280-mm in size also caused concern.

Over the beaches, the aircraft of the spotting pools gave directions to the cruisers and battle-

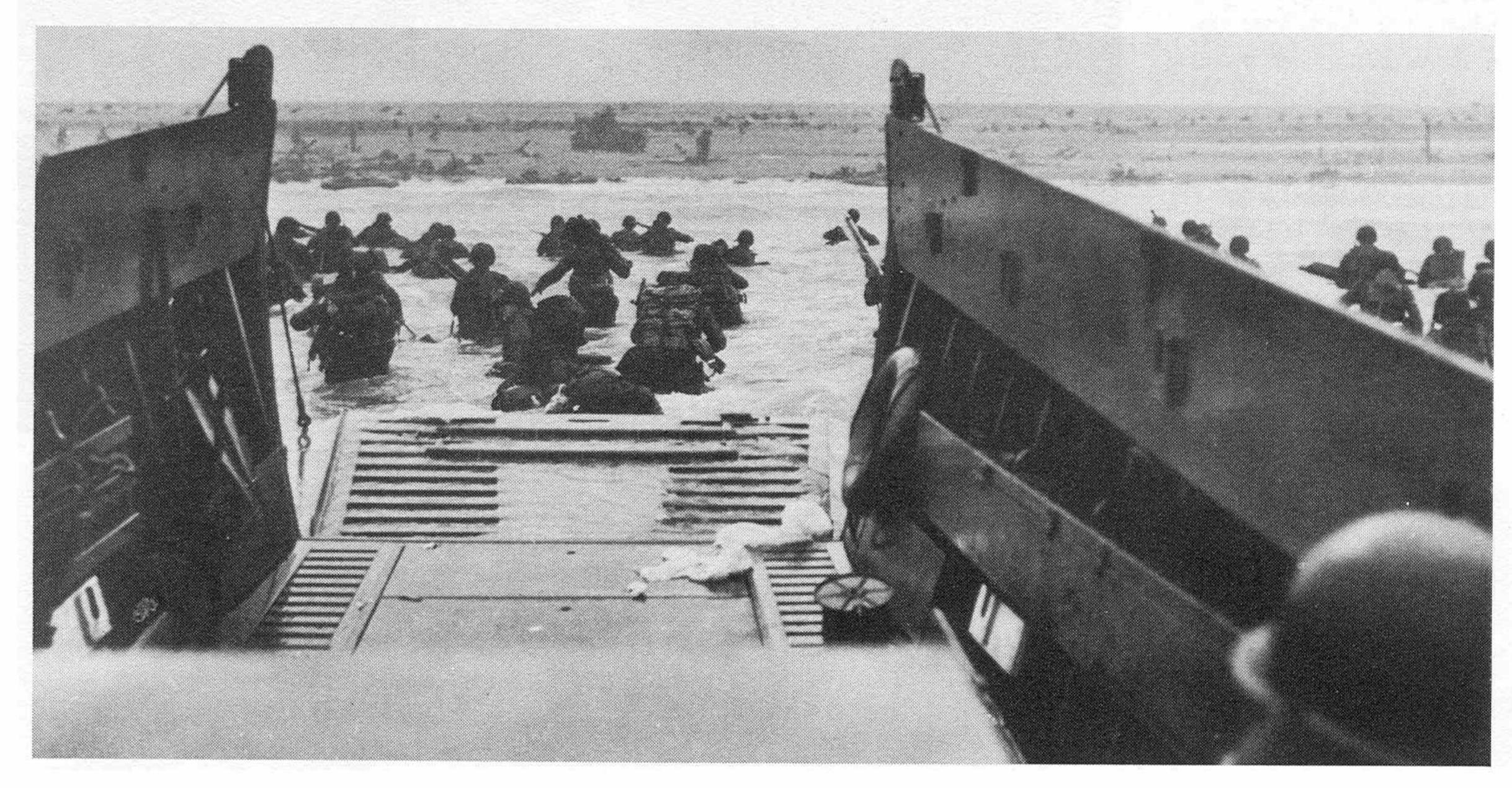




Right: U.S. soldiers en route to the Normandy assault in an LCT. The initial landings were carried out by British, U.S. and Canadian soldiers and Royal Marines. No U.S. Marines were present except as ships' companies in U.S. battleships and cruisers which stood offshore on June 6 and provided bombardment for the assault. (U.S. Army)



Right: This was the view of the Normandy beach as the first assault waves arrived on June 6, 1944. These U.S. soldiers were brought ashore in an LCVP manned by U.S. Coast Guardsmen. Casualties were heavy at Omaha.



ships. British and American aviators flew constantly from Britain during the initial assault, including an unusual U.S. Navy squadron flying land-based British Spitfire Mk Vb fighters on gunfire spotting missions. From the aerial spotting reports, American and British warships pounded German shore positions as the first groups of landing craft approached their respective beaches. In one experiment, eight LCT(A)s carried amphibious tanks ashore with the first troops instead of waiting for a follow-on wave.

Despite initial concern, the Utah landings, beginning at 6:30, were relatively successful, thanks to heavy bombardment by ships and aircraft. However, on Omaha – "Bloody Omaha" – the story was very different. The Germans had implanted extensive underwater beach obstructions which ripped open the fragile bottoms of the assault craft, leaving the heavily weighted troops to struggle in the water, desperately trying to find

their footing before they drowned. Many did not make it.

The German defenders also took full advantage of Omaha's terrain and fired down at the beach from behind their concrete walls or rows of wooden pilings. The amphibious tanks brought with the first wave foundered and offered no protection. The ten-mile stretch of Omaha became a killing-ground for the American infantrymen who struggled in the pounding surf and dark, wet sand.

Some tanks did manage eventually to come ashore and as they left their LCTs they fired into the German positions, but the initial phases of the American assault were difficult at best. For two hours the men who did get ashore were pinned down by German fire. Even destroyers that ran in as close as 1,000 yards to shore could not offer effective fire support.

Throughout the assault phase U.S. battleships, cruisers, and destroyers standing offshore fired

thousands of rounds at German defenses. In a contest between the battleships *Arkansas* (BB-33) and *Texas*, armed with 12- and 14-inch guns, respectively, and "Battery Hamburg" with 11-inch guns, the U.S. dreadnoughts fired 264 main battery rounds while U.S. destroyers fired 552 5-inch rounds at the German battery. Only a single "lucky hit" from the *Texas*, which knocked out one of four 11-inch guns, had any effect on the steel shields and concrete casemates of the battery, but the naval gunfire did destroy scores of lesser guns and observation positions.

Finally, toward late morning, as wave after wave of Americans were landed, the tide seemed to turn

as those who made it onto the beach worked their way inland to destroy the German positions, eventually taking the gunners prisoner. As the naval gunfire and sheer tenacity of the U.S. troops began to take effect, the situation on Omaha stabilized; the U.S. 5th Corps sustained 2,000 casualties in contrast to 210 on Utah.

THE BRITISH BEACHES

To the east of Utah and Omaha, the Gold, Juno and Sword Beaches were the targets for the British Second Army. As with the American sector, paratroops preceded their comrades in the boats with a drop by the British 6th Airborne Division to

Right: The chaos of an amphibious assault is evident in this view of Omaha Beach following the landing. The banner at right is for beach identification. This photograph, taken on or shortly after June 6, shows dead soldiers awaiting burial (left and center), supplies, and stranded landing craft. These include an LCVP from the USS Thurston (AP-77), the U.S. *LCT-199, LCT-555*, and LCT-638, and the British LCT(A)(5)-2421. The soldiers at right rest on a DUKW. (U.S. Army)





Below: U.S. LSTs and a variety of other amphibious and cargo ships pour troops and material into the Normandy beachhead. Barrage balloons float overhead; some have been hauled down onto the deck of LSTs. Several landing craft have been stranded by the receding tide. Note the vast numbers of vehicles required by a modern army; most of those in this view are half-tracks. (U.S. Coast

of HMS Warspite bombard
German coastal positions during the Normandy invasion on
June 6. Battleships of both the
United States and Britain were
invaluable in this role. Although
supplemented by rockets, guns,
and mortars on smaller fire support ships and landing craft,
only the dreadnoughts could
provide the "heavy punch" to
destroy major coastal fortifications. (IWM)

Guard)



capture the important bridges over the Caen Canal and the Orne River, thereby protecting the assault forces from German reinforcement.

The first wave for Sword Beach, the eastern-most beach, hit at 7:30 a.m., one hour after the Americans, which gave additional time for prelanding bombardment by ships and aircraft. The first assault waves – men of the British I Corps – struggled ashore and headed straight for the German guns.

The landing on Gold Beach was more bloody than on Sword, but the armor accompanying the assault forces quickly cleared safe paths up the beach, firing into the fortified houses and pill-boxes from which German gunners threatened the landing. On Juno Beach, between Gold and Sword, the troops – nearly all Canadian – stormed the beach behind their tanks and gained a solid foothold.

By the end of the day, the Allies were firmly entrenched on French soil. The only major threat on D-Day from the German forces poised to throw the Allies back into the sea came when a *Panzer* tank battalion drove a spearhead to the sea between the British 3rd and the Canadian 3rd Divisions. Allied air attacks made it impossible for the Germans to use roads to bring up infantry to exploit the armored thrust, and the Germans were thrown back. Ahead lay several weeks of moving into the French countryside, but it was clear that the Germans had failed to throw the invaders back in the decisive first 24 hours and were now completely on the defensive.

Meanwhile, massive quantities of vehicles, equipment, munitions, and provisions were being carried across the Channel to exploit the Anglo-American landings. The needs of the growing armies were insatiable. After only 24 hours there were 66,000 troops on just the two American beaches; at the end of a week there were almost 250,000 Americans ashore. The British buildup was similar. The Allies could not count on the capture of a port in the first weeks of the invasion, and hence they brought ports with them —

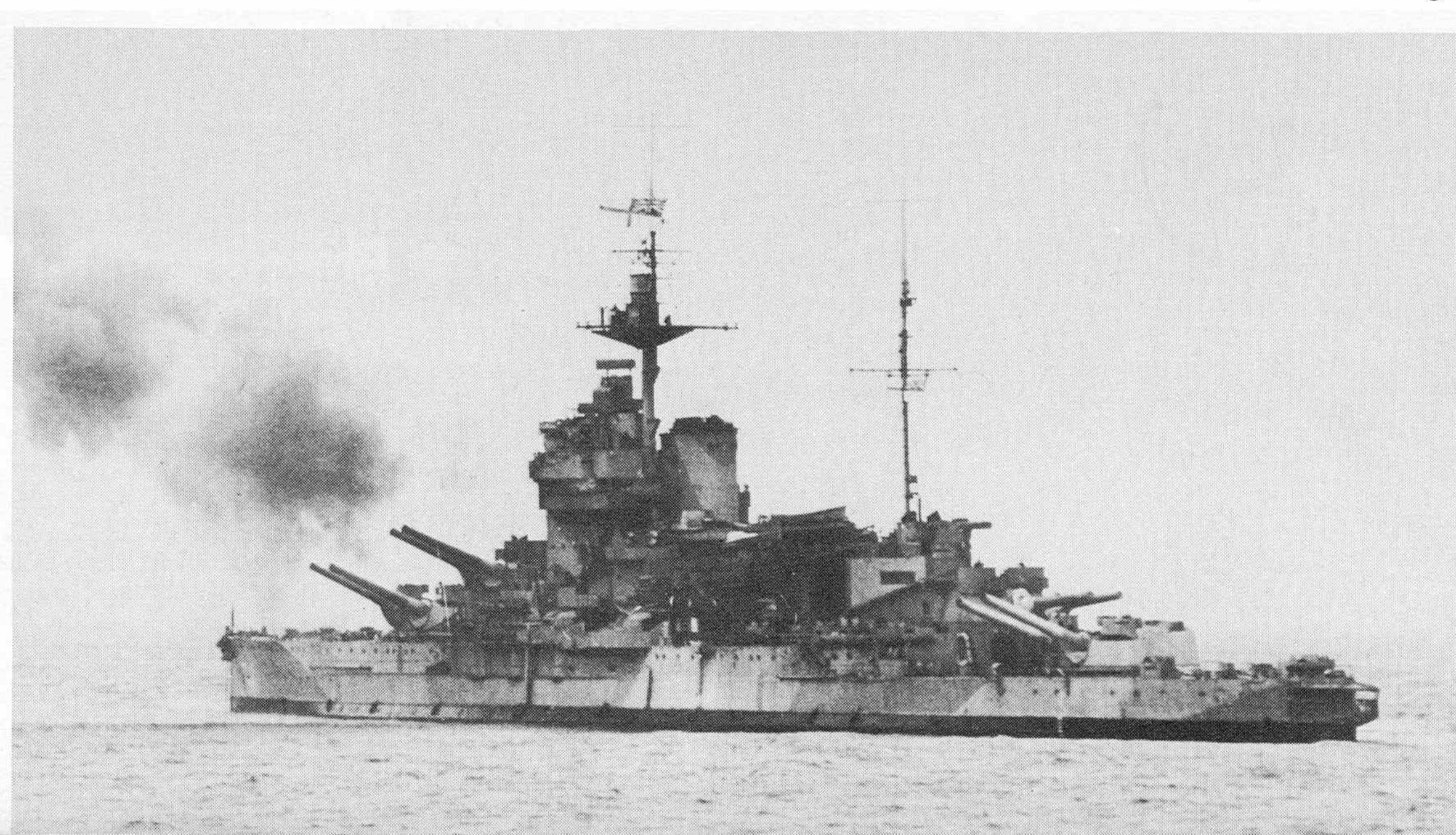
the Mulberries. By June 18, less than two weeks after the assault, the combined daily cargo moving across Omaha-Utah was averaging about 14,500 tons.

The beachhead was struck by a major storm which lasted from the night of June 18 until June 22. The winds and high seas destroyed Mulberry "A" off Omaha Beach and damaged the British Mulberry. Scores of ships and hundreds of landing craft were sunk or damaged, and an American division, forced to wait out the storm aboard ship, eventually came ashore sick and exhausted. Loss of the Mulberry harbors, the British one soon being repaired with components from Mulberry "A," temporarily disrupted the flow of supplies, but these were soon coming across the beaches at increasing rates.

Indeed, weather was the major threat to the invasion force. German naval and air forces achieved few successes. The only naval contact in the invasion area during D-Day came when four German torpedo-boats attacked the eastern task force launching 18 torpedoes. They sank a Norwegian destroyer, and then left without inflicting other damage. Two U.S. destroyers, the Corry (DD-463) and Meredith (DD-726), struck mines and sank, as did several landing craft and the 173-foot patrol craft PC-2161. The mass of German shore batteries inflicted only one ship loss on the Allies, sinking a British LCI. Similarly, the Luftwaffe was ineffective. The first significant damage by air attack was on June 7 when a bomb hit the headquarters ship *Bulolo*, and the following night the British frigate Lawford was sunk by bombs.

During the coming days German submarines and torpedo boats did sink several LSTs and escorts, but without affecting the invasion. In return, British anti-submarine forces sank two U-boats during the week after D-Day.

Twenty days after D-Day U.S. troops reached the outskirts of Cherbourg and on the night of June 23–24 the Germans evacuated the port. Although



Below: Four years after Hitler

planned to invade England in

thousands of German soldiers

landed on British shores – as

Germans debark from a British

after being captured during the

Normandy assault. (U.S. Coast

LCT at a British port shortly

Operation "Sealion",

prisoners of war. These

Guard)

the Germans wrecked the harbor, it was soon made partially usable. Ships carrying cargo were soon unloading, with some LSTs arriving with rails fitted on their tank deck and carrying rolling stock which could be used to move supplies along the rebuilt French railway lines.

History's largest and most complex amphibious assault was, in every sense of the word, a success. While the subsequent operations ashore are beyond the scope of this book, a key aspect of the landings was to be a major detriment to the battle for France and the drive toward Germany. Historian Russell Weigley has noted:

"... from the beginning of the American reinforcement [of Britain], when plans to invade Europe had barely begun to be formulated, the Americans entered Britain from the west and erected their cantonments mainly in western Britain. Lines of supply and reinforcement would most conveniently run to the western flank in Normandy. Furthermore, as the first OVERLORD plan stated: 'Lines of communication will be simplified if the British-Canadian forces are based on ports nearest the United Kingdom. In consequence, United States forces should normally be on the right of the line, British-Canadian forces on the left.'"⁶

By the time the situation was recognized, it was far too late to change over. Thus, as the battle for France developed, the American forces, with more resources, especially armor, and more aggressive commanders (in particular Bradley and

Patton), would be on the right side of the Allied drive, where the Bocage country with its intricate pattern of hedgerows would severely restrict U.S. movement. To the left, the British forces (under Montgomery) lacked the resources and the aggressiveness to exploit the more open country before them.

Ships and Craft Participating in Operation "Neptune," June 6, 1944

Type	British	U.S.	Other	Total
Warships				
Battleships	.1	2		7
Monitors	4 2	3		7
Cruisers	2 17	3	– 2 French	2
Ciuiscis	17	3	The state of the s	23
Fleet Destroyers	46	34	1 Polish 2 Norwegian 4 Polish	80
Hunt-class			1 1 011011	
Destroyers	21	()	1 French 1 Norwegian 2 Polish	25
Midget Submarines	2	4 0	NAME OF CORPORATIONS	2
Sloops	14		8 5-3	14
Frigates and				
Destroyer Escorts	53	6	4 French	63
Corvettes	63		3 French 2 Greek 3 Norwegian	71
Patrol Craft		18	_	18
ASW Trawlers	60	-	c am a	60
Minelayers	4	1,5	_	4
Minesweepers Coastal Craft (including Motor	262	25		287
Torpedo-Boats)	360	111	13 Dutch 8 French 3 Norwegian	495
Seaplane Carriers	1	14 7 - 1 ,	-	1
LANDING SHIPS AND CRAI	FT			
Command/				
Headquarters Ships	10	2	20-A	12
Attack Transports	_	10		10
Landing Ships				10
Infantry	55			55
Landing Ships Dock	12	: :		12
Landing Ships Tank	130	143		236
Landing Craft				
Assault	448	54	a 	502
Landing Craft Control and	7929.32	H-1200122-2		*
Headquarters	11	15		26
Landing Craft	400	225		020.4980
Infantry	130	118	2 1_1	248
Landing Craft Tank	607	230	=	837
Landing Craft Flak	18	11		29
Landing Craft Gun	9	16		25
Landing Craft Support	0E	26		404
LCT (Rocket)	85 36	36	·	121
LCP (Smoke)	36 106	40	0 3 174 .	36 154
Miscellaneous small	106	48	_	154
landing craft,				
barges, trawlers	*	*		1,850

^{*}Not identified according to nationality.
(Table derived from Captain S. W. Roskill, RN, *The War at Sea*, Vol. III, Pt. II (London: HMSO, 1961), pp. 18–19.)

THE INVASION OF SOUTHERN FRANCE

While the main invasion of Normandy established the growing Allied armies in western Europe, the invasion of southern France, originally meant to keep German attention divided between operations in the north and in the south, also became a point of contention among the Allies. The American commanders wanted the southern France landings to proceed while the British leaders feared that the ongoing Italian campaign would be jeopardized. At first, the invasion of the French Riviera was intended to coincide with "Overlord", but the southern operation was postponed in order to give full attention to Normandy. By the time Operation "Anvil-Dragoon" was finally launched on August 15, 1944, it was too late to distract the Germans from the main, northern invasion.

At American insistence, the southern invasion was mounted complete with a carrier task force – seven British and two American flattops – under British Rear-Admiral T. H. Troubridge, who had gained amphibious support experience in the "Torch" operation two years before.

The "Anvil" assault force comprised 880 ships and 1,370 landing craft which staged out of Corsica, arriving off the southern French coast by 10 p.m. on August 14. A commando group of French, Canadian, British, and American troops made a preliminary landing and set up roadblocks on coastal and inland arteries. Following the parachute drops – 5,000 men from 396 transport

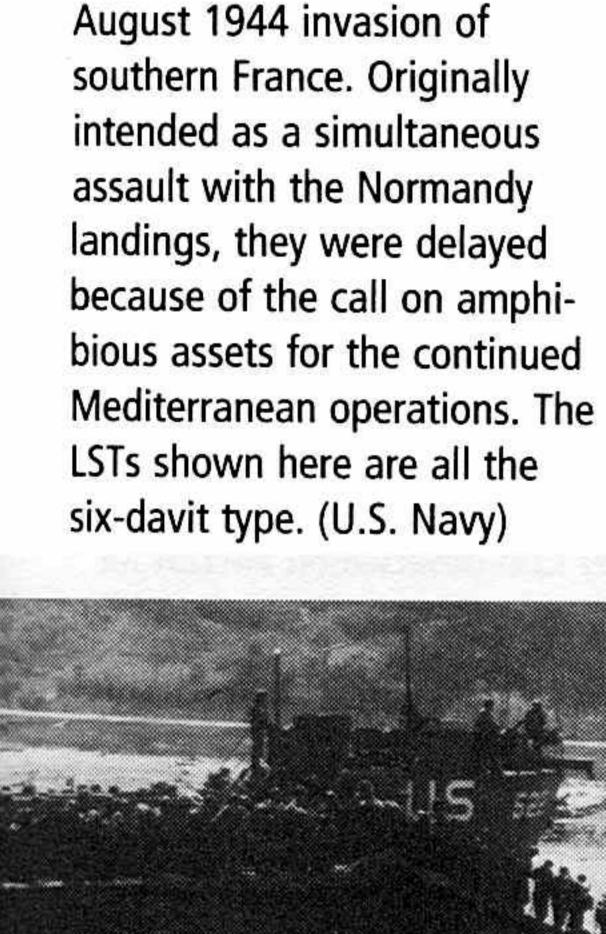
planes – and a sweep by 125 minesweepers, 1,500 land-based bombers hit the beach areas for 90 minutes. This was the first time in the Mediterranean theater, that so much emphasis had been given to pre-landing bombardment and preparation.

H-Hour was at 8 a.m. on August 15, and the first of seven waves drove onto the beaches behind the DUKWs and LSTs. By 9:10 all of the initial waves were safely ashore. The desultory German defense occasionally tried to score a hit. A Dornier 217 bomber with a glider bomb sank the *LST-282* causing 40 casualties, but these attempts were few and of no import.

The main "Dragoon" landings near Toulon were made by two divisions from the Free French First Army and the U.S. Seventh Army. Within three days, the invaders had secured 40 miles of beach, and within eight days, with relatively light casualties, the important port of Marseilles. The southern ports were important because they eventually allowed the massive influx of men and matériel that kept the Allied drives going through France and ultimately Germany itself.

By August 17 about 30,000 troops and 5,000 vehicles had come ashore, and 2,800 Germans had been taken prisoner. The one-two punch of "Overlord" followed by "Anvil-Dragoon" rendered the German position in France untenable and signalled the beginning of the end for the Nazis.

In two years the Allies had learned much about amphibious operations in the European-Mediterranean theaters. From the chaos and poor planning at Dieppe, and the unwieldy, yet successful landings of "Torch" in 1942 and southern Italy in 1943, to the meticulously arranged, massively supported invasions of Normandy and southern France in 1944, amphibious operations at last emerged as effective, carefully orchestrated weapons. Cooperation between Allies, the availability of sufficient amphibious shipping and landing craft, and pre-invasion bombardment by naval gunfire and aircraft nearly always ensured a successful landing. However, on the other side of the world in the Pacific, these and other lessons had to be learned.



Below: American soldiers

pares to land jeeps on the

LCI(L)-522 while an LCM pre-

beach during the landings in

Southern France. German resis-

tance was minimal. The eight-

along the beachhead has been

Bottom: U.S. LSTs unload men

and supplies at Yellow Beach

at Pamalonne Bay during the

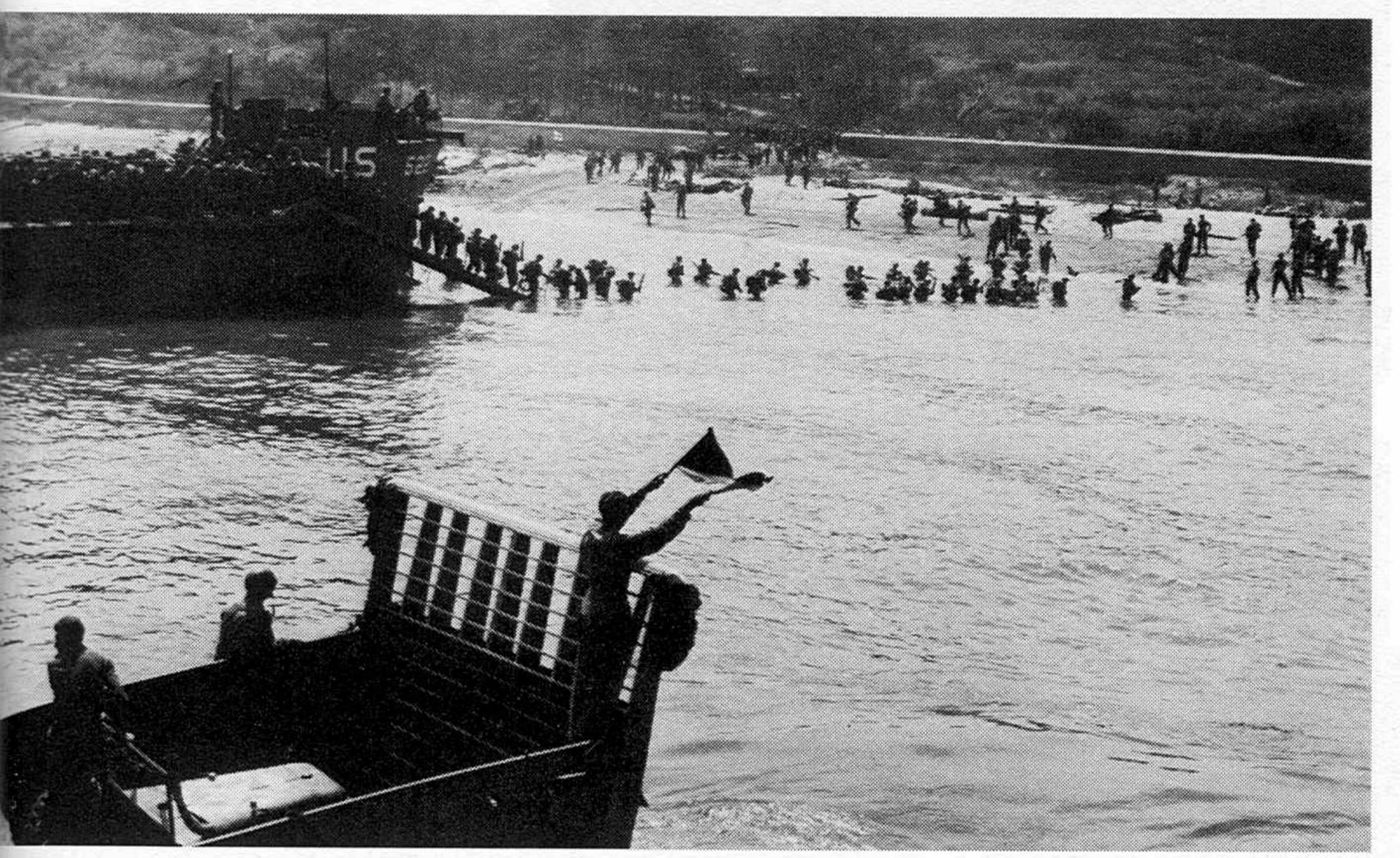
blasted open by engineers to

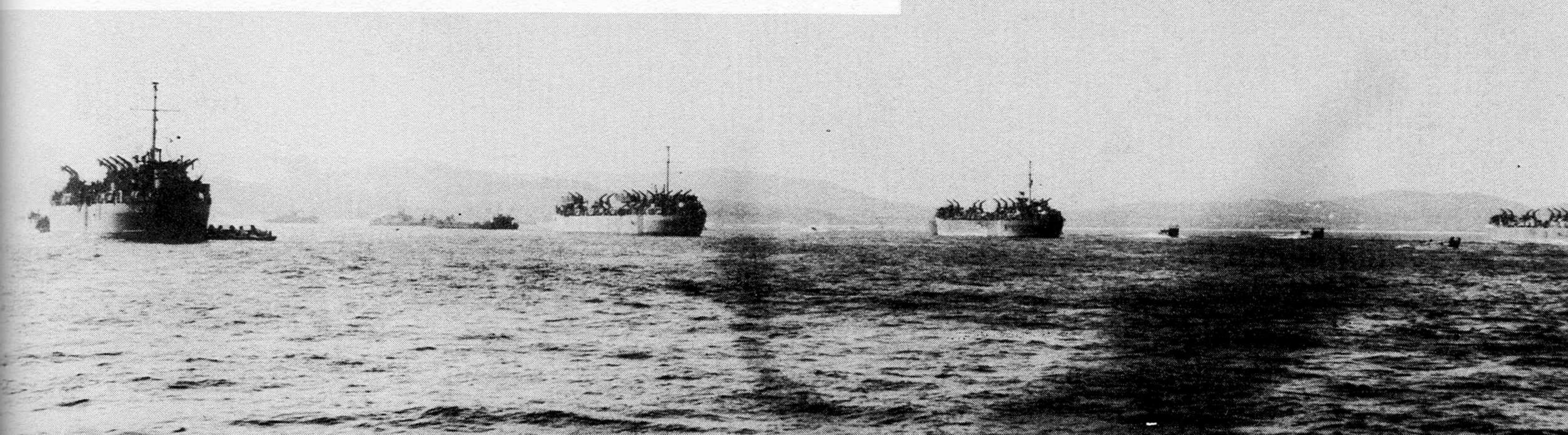
permit the troops to move

inland. (U.S. Army)

foot concrete and steel wall

wade ashore from the



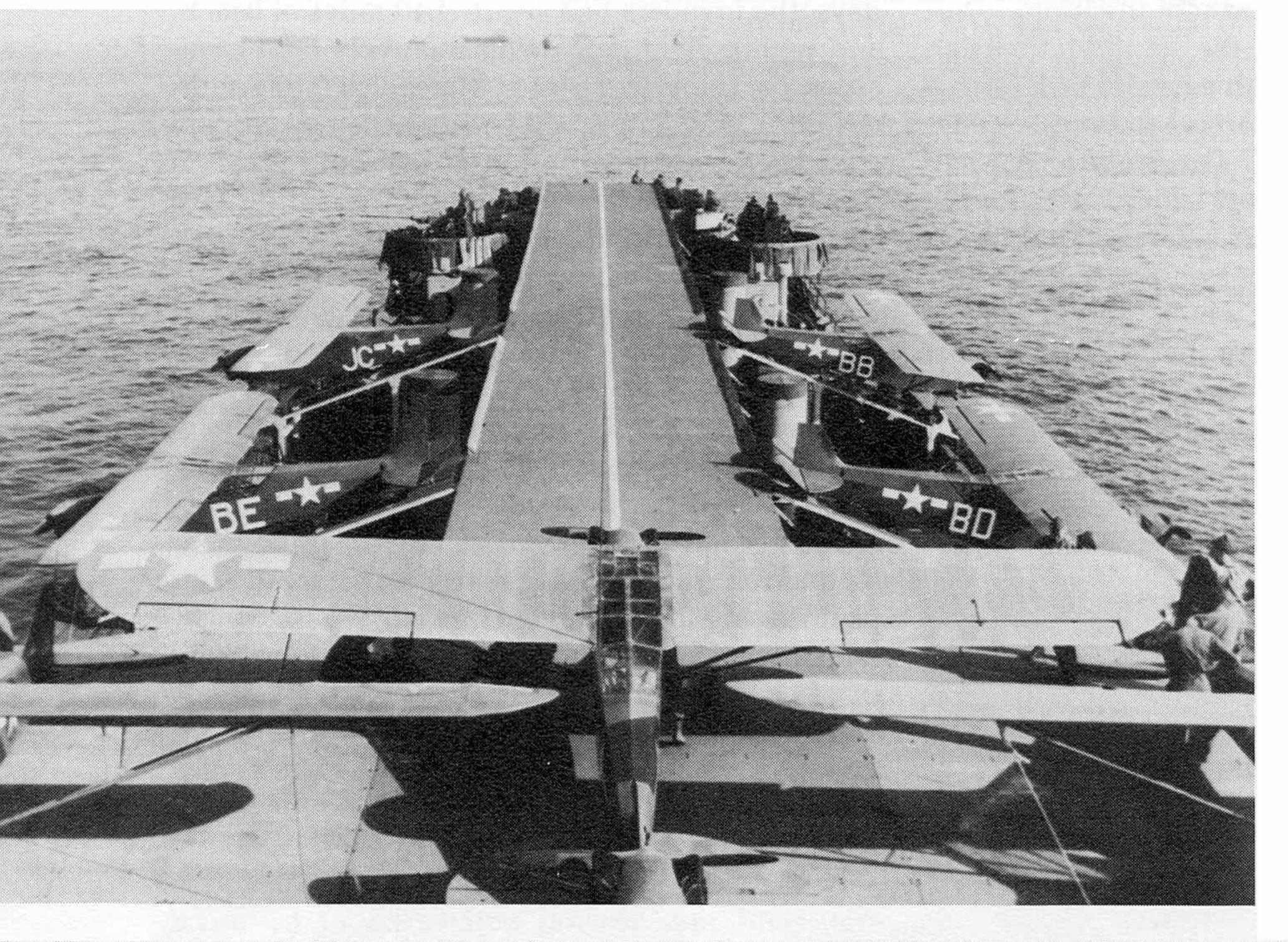




MEDITERRANEAN AFTERMATH

Following "Overlord" the Allies sought to continue operations in Italy because of the large German forces engaged there. Accordingly, under General Alexander's direction, it was decided to employ an amphibious force or five divisions to take Trieste, followed by the capture of the Ljubljana area. While the landing ships and craft could be made available, with the continuing Italian campaign and the massive campaign ongoing in France, no troops could be spared for such flanking operations.

Rather, the amphibious forces that had served so well in the Mediterranean and in the cross-Channel assaults would be shifted to the Pacific war.



Top left: U.S. LSTs unloading at St-Michel in southern France were trapped by the tidal flows. This photograph shows clearly the flat-bottom configuration of the LST. The *LST-983*'s small superstructure is lost in the clutter of LCVP davits, 20-mm and 40-mm gun tubs, railings, and life rafts. The ships have twin propeller shafts and rudders. (U.S. Navy)

Below: For the invasion of Southern France U.S. LSTs were fitted with flight decks to fly off Piper Cub observation aircraft for use by artillery spotters. (In other operations in the Mediterranean and Pacific the light aircraft were carried in larger aircraft carriers.) The take-off deck was 200-feet long and 16-feet wide. The small superstructure is evident here, with the *LST-16*'s LCVP davits empty.

Left: Ten Piper Cubs could be carried on these LST aircraft carriers. As shown here, prior to launching the aircraft were parked on the after end of the take-off deck and alongside the deck. In the Pacific theater LSTs were fitted with a cable launching/recovery system for these aircraft.