STUDY PROJECT

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NORTH AFRICAN CAMPAIGN: A CASE STUDY

BY

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United States Army

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### Abstract
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NORTH AFRICAN CAMPAIGN: A CASE STUDY
AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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After months of disagreement between British and American war planners regarding the feasibility of a cross-Channel invasion in 1942, President Roosevelt accepted the British strategy and approved the invasion of North Africa. This paper will show that the British strategy, while largely political, was the correct strategy; on the other hand, the American position for an early cross-Channel invasion was not practicable in view of the Western Allies war posture in 1942. The United States experienced difficulties in executing the North African landing, even though relatively unopposed. This revealed that they were unprepared for a cross-Channel landing against well-trained German forces. I will show that the United States was logistically unprepared to support a modern mechanized force; additional training and planning were needed in airborne, combined, and amphibious operations. The North African Campaign provided the laboratory to test equipment and correct major deficiencies in the employment and control of air assets. Further, it demonstrated to US military leaders and soldiers the importance of what would be decisive at Normandy--air superiority. Finally the North African Campaign was not only a significant military victory; as well, it provided Allied military leaders and soldiers the operational, tactical, and logistical foundation for future Mediterranean operations and the assault on "Fortress Europe."
CHRONOLOGY

11 June 1940  France Surrenders (South France & Empire unoccupied)
13 July 1940  British navy sinks French ships at Oran
25 September 1940  British/Free French landing at Dakar fails
28 February 1941  Germany begins sending troops to Africa
11 June 1941  British/Free French occupy Syria/Lebanon
22 June 1941  Germany invades Russia
7 December 1941  Japanese bomb Pearl Harbor
7 January 1942  British propose North African Campaign (Operation Gynmast)
11 March 1942  US propose Operations Bolero/Sledgehammer/Roundup
30 May 1942  Molotov meeting in Washington
11 June 1942  British 8th Army loses at Tobruk
24 June 1942  Operation Gynmast resurrected
30 June-3 July 1942  First battle of El Alamein
24 July 1942  US approves North African Campaign renamed Operation Torch
18 August 1942  Operation Jubilee the Dieppe raid fails
13-15 August 1942  Churchill’s meeting with Stalin
31 Aug-7 Sep 1942  Battle of Alam Halfa
5 September 1942  Casablanca, Oran and Algiers landings approved
23 Oct-4 Nov 1942  Second battle of El Alamein
8 November 1942  Anglo-American forces land in North Africa
13-24 January 1943  Casablanca Conference
24 January 1943  Unconditional surrender demand
22 February 1943  Battle of Kasserine
13 May 1943  Axis forces in North Africa surrender
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INTRODUCTION

After months of disagreement between British and American war planners about how to engage the Germans on the Western Front, the British position prevailed. The Western Allies then hastily planned, organized, and executed Operation Torch—the invasion of North Africa. This paper will show that the British strategy, while largely political, was the correct strategy. Further, the American position for an early cross-Channel invasion was not practicable because of the Western Allies war posture in 1942. In fact, the United States experienced difficulties in executing the landings even though relatively unopposed. Their poor performance shows that they were unprepared for a cross-Channel landing against battle-hardened German forces. The United States was not logistically prepared to support a modern mechanized force. Additional training and planning were needed in airborne, combined, and amphibious operations. The North Africa Campaign provided the laboratory to test equipment and to correct major deficiencies in the employment and control of air assets. Further, it demonstrated to US military leaders and soldiers the importance of what would be decisive at Normandy—air
superiority. Finally the North African Campaign was not only a significant victory, it provided Allied military leaders and soldiers with the operational, tactical, and logistical foundation for future Mediterranean operations and the Normandy invasion.

The British first proposed a North African landing (Operation Gymnast) in January 1942. However, the United States war planners believed the key to victory was to build-up forces in England (Operation Bolero), then to launch them on a cross-Channel invasion (Operation Roundup). If required, a smaller operation in mid-1942 would prepare the way for Operation Roundup (Operation Sledgehammer). In July 1942, the British persuaded the United States to approve the North African Campaign, renamed Operation Torch. Many US war planners believed the approval to be "motivated more largely by politically than sound strategic purposes."1 On 8 November 1942, Anglo-American forces landed in North Africa to seize the ports at Casablanca, Oran, and Algiers. These initial and follow-on forces would secure Morocco and Algeria, then push eastward toward Tunisia. Simultaneously, the British 8th Army would continue its westward movement from Egypt, eventually trapping Axis forces between these two pincers in Tunisia.
On 12-13 May 1943, the surrounded Axis forces surrendered, thereby ending the North African Campaign. The Axis loss of over 250,000 soldiers in North Africa and the earlier loss of 100,000 soldiers at Stalingrad put them in a very precarious position. Except for their last great offensive at Kursk, Germany was now inevitably doomed to be squeezed into submission by the Allies superior manpower and resources, just as the Union had closed in on the Confederacy using elements of the "Anaconda" plan during the American Civil War. With the fall of North Africa, the Allies could continue the British indirect approach to isolate Germany. When Germany was sufficiently weakened, the Allies would then launch a direct cross-Channel assault. The British had lured the United States into their initial strategy, aided by politics and logistical and force constraints. The problems encountered during the campaign would clearly demonstrate that the Allies had made the correct choice. The modest success of Operation Torch served in fact to pave the way for the grand success of the invasion of Normandy. More importantly, Operation Torch could have averted an early disaster for the Allies—a hasty major operation that the Americans advocated well ahead of its time.
CAMPAIGN DECISION

On 10 May 1940, German forces invaded France. They smashed French and British forces—sending the British retreating across the English Channel and forcing France to surrender. Under the surrender terms, Southern France would not be occupied and the French were allowed to establish their own government for the unoccupied territory. The World War I French hero, Marshall Petain was the leader of the Vichy government and Admiral Darlan his deputy. French North Africa would be virtually independent, but military loyalties would tie it to the Vichy government. However, North Africa remained a concern to the British and Americans. If it was occupied by Axis forces, they would control the Mediterranean. The Axis could also use African ports for submarine bases—especially Dakar, which sat astride the shortest shipping route between Brazil and Africa. These bases would jeopardize shipments from the United States to Britain and Russia and virtually isolate Britain from its Middle East oil supply.

In September 1940, Free French forces under General Charles de Gaulle and British forces tried to capture Dakar. The attempt failed, severely damaging General de Gaulle and
the British creditability with the Vichy, especially in French Africa. In September, there were rumors supported by political overtures that Germany would move through Spain to capture Gibraltar and then occupy North Africa. In the same month Libyan-based Italian forces began a campaign to defeat the Egyptian-based British forces, thereby threatening the Middle East. Britain's major oil supply resided in the Middle East, and Germany's vital Rumanian oil fields were not far away. With Britain's and Germany's sources of oil so close together, it was inevitable that they would fight to control the region. North Africa thus became a grave concern for both the Axis and the Allies.

Germany began sending forces to Africa in February 1941 to save the Italian Army from being destroyed by the British 8th Army. On 22 June 1941, with two divisions now deployed to North Africa, Germany invaded Russia. The Russians sacrificed troops, equipment, and territory for time. Finally, in December the Soviet Army stopped the Wehrmacht on the outskirts of Moscow, then launched a successful counter-attack. On 7 December, Japanese carrier based aircraft bombed Pearl Harbor, bringing the United States into the war. Concurrently, the British and Americans were
preparing for a December planning conference (Arcadia) in Washington. In preparing for the conference, the British Joint Planning Staff wrote:

We hope that the offensive against Germany will take the form of large scale land operations on the Russian front, large-scale bombing operations supplemented by amphibious raids of increasing weight from the United Kingdom and a gradual tightening of the ring around Axis-controlled Europe by the occupation of strategic points in the Atlantic Islands, North and West Africa, Tripoli and Turkey. Every opportunity will be taken to try and knock out Italy as an active partner in the war. These operations will be followed in the final phase by simultaneous land operations against Germany herself, from the West by the British, from the South by the United States and from the East by the Russians.

The British were basing their strategy on the "Anaconda" strategy developed by the United States during the American Civil War. Through this strategy, Axis forces would be overwhelmed by superior resources on their perimeter while Germany was attacked by Allied airpower. Once significantly weakened and isolated by the constricting coils, the Allies would then launch a direct cross-Channel invasion. The British leaders felt that once North Africa was occupied, the Western Mediterranean could be secured,
Italy could then be knocked out of the war, the Middle East would be secure, and German-controlled Rumanian oil fields would be vulnerable to air attack. Just prior to the Arcadia Conference, the British 8th Army launched Operation Crusader to destroy the Italian forces in North Africa and to liberate Libya. Elimination of Axis forces from the continent would hopefully encourage the Vichy government to allow the Allies to use their facilities for future Mediterranean operations.

Prior to 7 December 1941, the United States sought simply to provide aid to the Allies. Even as early as 26 February 1941, the United States, with German approval, had entered into a commercial agreement with French North Africa. To supervise its shipments the, United States increased its consulate personnel, headed by Robert Murphy the US Consul General in Algeria. In reality, the increased staff were used to gather information. A year before the United States entered the war and two years before the invasion, information was being gathered on troop strengths and defensive positions. US military planning had already determined that if the United States was drawn into a two front war, Germany would be defeated first. The United States planners entered the Arcadia Conference with no set
strategy except that Germany should be dealt with first.
The Grand Strategy finally agreed upon by the British and
American Chiefs of Staff was essentially the British
strategy. Its principle points included:

(a) The realization of the victory programme of armaments, which first and
foremost requires the security of the main areas of war industry." [i.e. the
United States, the United Kingdom, and Soviet Russia.]
(b) The maintenance of essential communication. [i.e. the defeat of the
U-boats.]
(c) Closing and tightening the ring around Germany. [Sustaining the Russian
front, arming and supporting Turkey, building up strength in the Middle East
and gaining possession of the whole North Africa coast.]
(d) Wearing down and undermining German resistance by air bombardment, blockade,
subversive activities and propaganda.
(e) The continuous development of offensive action against Germany. ["It
does not seem likely that in 1942 any large-scale land offensive against
Germany will be possible....In 1943 the way may be clear for a return to the
Continent, across the Mediterranean, from Turkey into the Balkans, or by
landings in Western Europe."]
(f) "Maintaining only such positions in the Eastern theatre as will safeguard vital interests and to deny to Japan access to raw materials vital to her continuous war effort while we are
concentrating on the defeat of Germany."
To accomplish the occupation of North Africa, the British proposed Operation Gymnast, a joint Anglo-American landing. The British operation proposed that, upon invitation from French North Africa, 55,000 troops would enter the region within 23 days; the United States would provide 150,000 reinforcing soldiers over a six month period. However, the United States military planners wanted to defeat Germany decisively by a cross-Channel invasion. General Eisenhower, Chief of the US Army War Plans Division, wrote:

We’ve got to go to Europe and fight—and we’ve got to quit wasting resources all over the world—and still worse—wasting time. If we’re to keep Russia in, save the Middle East, India and Burma, we’ve got to begin slugging with the air at Western Europe; to be followed by a land attack as soon as possible.

United States planners viewed the proposed African Operation to be "motivated more largely by political than by sound strategic purposes." It was viewed in Washington as protecting British’s interests and territories in the region and in the Middle East.

In late March, American military planners had drafted a plan for operations in Northwest Europe. The plan consisted of three operations: the first was Operation Bolero, the build-up of 48 divisions (30 US and 18 British) and 5800
aircraft in England by the spring of 1943. The advantages of Operation Bolero were expressed in a memo by Eisenhower:

"(1) an eventual attack on Germany from Britain involves the shortest sea routes from the United States; (2) on the Atlantic sea routes naval escort would be concentrated; (3) an Allied build-up in Britain provides a threat which, it was hoped, would prevent Germany from concentrating all forces against Russia; (4) land and/or amphibious operations from Britain could be well supported by plentiful airfields; (5) only from the United Kingdom could the major portion of British combat power be employed; and (6) it would attack the principal enemy (Hitler) while he was engaged on the Eastern Front." Operation Roundup called for the use of these forces for a cross-Channel invasion in the summer of 1943. The plan also included a smaller emergency cross-channel operation (Sledgehammer) as early as the summer of 1942; it would be comprised of mainly British forces, with US participation limited to approximately 4 divisions and 700 aircraft. Its implementation would be dependent upon the situation on the Eastern Front, either good or bad for Germany. On 14 April 1942, the British accepted the American plan. However, they insisted that Operation Sledgehammer be based on two principles:
That there would be no substantial landing unless the forces were there to stay and that it would be executed only on a German defeat in Russia.\textsuperscript{17} This acceptance put the North Africa operation temporarily in the deep freeze. However, events and constraints would quickly return it to the forefront.

The Russians were pressing hard for a second front. Their position was presented by Molotov, the Soviet Commissioner for Foreign Affairs, during secret talks in Washington on 30 May and 1 June. The Russians wanted the Allies to quickly open a second front to relieve pressure on the Eastern Front. But the Allies were not ready to execute Sledgehammer. First, they had neither the landing craft nor the shipping to execute the operation. There was only 238 landing craft in Britain—the operation required more than 2000.\textsuperscript{18} Also, warships and 250,000 tons of shipping would have to be diverted from amphibious training, the Murmansk supply route and other critical operations to execute the cross-Channel invasion.\textsuperscript{19} Nor did the Allies have the forces available to oppose the 25 German divisions in France. Even the US Operations Division believed that a cross-Channel assault in 1942 was not feasible; it would be possible only in early 1943, depending on the Russian
Front and the build-up of forces under Bolero.\textsuperscript{20} The British position was best expressed by Brooke, who observed that the landing craft shortage so constrained the operations size that it would result in the "death, capture or ignominious reimbarrkation of the entire force."\textsuperscript{21} Thus, since the bulk of the troops would be British (and they were not about to repeat Dunkirk), they would not support Operation Sledgehammer. The American's emergency cross-Channel landing (Operation Sledgehammer) was therefore killed because it was too risky and would not accomplish any major objectives. However, the urgent request to open a second front and the political requirement to get America in the war in Europe rekindled interest in North Africa. President Roosevelt felt so strongly regarding early American military involvement in Europe, that he declared that "US ground forces must be put into position to fight German ground forces somewhere in 1942."\textsuperscript{22} While a 1942 cross-Channel operation was impossible, a landing in North African could be accomplished in 1942. The US Joint Chiefs, however, still opposed the North African Campaign because it would draw resources from Bolero, thereby ultimately delaying Roundup.

The reemergence of the North African Campaign was aided
by some serious Allied set backs. On the Eastern Front, the Wehrmacht had inflicted over 250,000 casualties on the Russian Army in the first two months of their summer offensive. The offensive was threatening the Caucasian oil fields and thrusting toward Stalingrad. Stalin desperately wanted a second front opened to divert German troops and equipment from the Eastern Front. Simultaneously, in June alone, the Western Allies suffered their worst month in shipping losses; over 800 thousand tons were lost to German U-boats. Additionally, the US victory at Midway on 4 June had a negative impact on the European theater, as additional materiel and resources were diverted to the Pacific to accelerate offensive operations. The situation in North Africa was also desperate. The British 8th Army launched an offensive on 11 June that not only failed but also resulted in Rommel's Afrika Korps capturing Tobruk and pursuing the British to the gates of Cairo. By 25 June, the British 8th had lost almost 75,000 men and 600 tanks. What the British had feared was just short of becoming reality— the annihilation of the British 8th Army, which would open the way for the Axis to take Egypt and the Middle East. The loss of the Middle East would cut the British vital oil supply and enable the Germans to threaten the
Russian Caucasian oil fields from the south. Now the stage was set for the North African Campaign.

In July, meetings were held in London to finally determine the Western Allies strategy. US military planners were still set on a cross-Channel operation, while the British believed that it was impossible at this time. General Alan Brooke, the British Chief of Staff, believed that to be victorious the Allies should attack the Axis on the boundaries, while pounding its heartland with airpower:

Brooke's grand design for victory over Nazi Germany was to bomb the Third Reich day and night, establish a naval blockade of German ports, keep the enemy off balance with commando raids and clever deceptions that would force Hitler to garrison some 2000 miles of European coastline, strike at German morale with a propaganda blitz, encourage rebellion from within, and conduct military operations on the fringes of the Fuhrer's empire. Brooke proposed launching this strategy with an invasion of Algeria and Morroco, two occupied French colonies in Northwest Africa. When these combined pressures indicated a weakening of German strength and morale, then--and only then--should the Allies launch a massive assault across the Channel and aim for the heart of Germany.25

This British position did prevail, mostly because it was the only course of action that could be executed in 1942. On 22
July, President Roosevelt approved the landing in North Africa, now renamed Operation Torch.

One last event would demonstrate the decision a wise one—a large-scale cross-Channel raid at Dieppe (Operation Jubilee). The raid was to be executed on 8 August 1942 by a multi-national force of 6058 troops transported in 252 ships. The mission was to destroy German gun batteries and installations along a 15 mile stretch of beach. The raid resulted in 3623 soldiers being killed, captured or wounded; additionally, 106 Royal Air Force planes and 33 landing craft were lost. The raid confirmed what many, especially the British war planners had always believed—that a cross-Channel invasion in 1942 and maybe 1943 would have had the same results only on a much larger scale. A few days after the raid, Churchill traveled to Russia to tell Stalin that the Western Allies would not launch a cross-Channel invasion in 1942, but would instead invade North Africa. Churchill masterfully convinced Stalin that the North African Campaign was better for the Russians than a cross-Channel invasion. So convincing was Churchill that Stalin summarized the benefits as:

First, [the invasion] would hit Rommel
in the back; second, it would overawe Spain; third, it would produce fighting between Germans and Frenchmen in France; fourth, it would expose Italy to the whole brunt of the war. Churchill added it would also shorten the Persian supply route to Russia by opening the Mediterranean to Allied shipping. With Stalin now appeased, the Western Allies final political hurdle to the North African Campaign had been cleared.
CAMPAIGN PREPARATION

On 25 July 1942 at the London Conference, the Allies initially agreed that Operation Torch would consist of a landing on the western coast of Morocco and Algeria. Later the British wanted to eliminate the landing in Morocco and execute all landings closer to Tunisia—Oran, Algiers, and Bone. (Figure 1) The British wanted to capture Tunis as soon as possible to prevent the Axis from using it to counter the Allied landing. Their second front concept required trapping the Afrika Korps between the British 8th Army and Operation Torch forces in Tunisia. The US wanted the operation to be defensive, because they feared that the French would resist and that Casablanca had to be taken to insure a line of communication other than the one through Gibraltar. With Casablanca in Allied hands, the invading forces could still be supplied even if the Germans moved through Spain and captured Gibraltar. Finally on 2 September the US proposed the following landings:

A. Casablanca (US Troops): 34,000 in the assault and 24,000 in the immediate follow-up to land at the port,
B. Oran (US Troops): 25,000 in the assault and 20,000 in the immediate follow-up landing at the port,
C. Algiers (US and British Troops): in the beach landing 10,000 US Troops followed within an hour by British Troops to make the landing secure.33

The initial objective was to secure operating bases at Oran, Algiers, Casablanca and later in Tunisia to support the occupation of French Morocco, Algeria and Tunisia. The Allies ultimate objective was the "complete annihilation of Axis forces now opposing the British forces in the Western Desert."34 With the Axis forces eliminated in North Africa, the Allies would then be able to execute future operations in the Mediterranean. The British approved the American plan on 6 September 1942, only 47 days before the first convoys were to sail.

The invasion would be split into three task forces (Western, Central and Eastern) under the overall command of General Eisenhower.35 The Air Command was divided into two commands: Western Air Command would support the Western and Central Task Forces, while the Eastern Air Command supported the Eastern Task Force and also the Central Task Force.36 The Western Task Force commanded by MG Patton would sail from Norfolk, Virginia, as part of the Western Naval Task Force under the command of
Operation Torch points of attack.
Rear-Admiral Hewitt. Its mission was to execute three landings at Port Lyautey (Medhia), Fedala and Safia, then to seize the port facilities and airfields in and around Casablanca. (Figure 4)\textsuperscript{37} The port of Safia was important because it was the only one where medium tanks could be landed, and the port at Casablanca had the largest capacity of any port in North Africa. The Western Task Force was provided three regimental combat teams from the 3rd Division; two regimental combat teams from the 9th Division; one armoured combat command; one armoured combat regiment; and one armoured combat team.\textsuperscript{38} The landing force totalled 31,000 Americans. The Western Naval Task Force consisted of one carrier, three auxiliary carriers and an air group from another carrier; four submarines; two battleships; five cruisers; 34 destroyers; an anti-submarine ship and 8 minesweepers; and the assault convoy of 31 transports and auxiliary ships.\textsuperscript{39} Air cover for the landing would be provided by 136 naval aircraft from the four US carriers.\textsuperscript{40} Once the French airfields were secured, 240 fighters and 114 bombers would be flown in to support follow-on operations to secure French and Spanish Morocco and Western Algeria.\textsuperscript{41}

The Central Task Force commanded by MG Fredenhall would
sail from England as part of the Central Naval Task Force under the command of Commodore Trowbridge. Its mission was to conduct three landings in and around Oran and Arzue. (Figure 5) This operation would later include an airborne operation to seize two key airfields (Tafaraoui and La Senia) south of Oran. The airfield of Tafaraoui was especially important because it was the only hard surface airfield from the Atlantic to Algiers. The Central Task Force was provided the 16th, 18th, and 26th Regimental Combat Teams; the 1st Armoured Combat Command; and the First Ranger Battalion. The landing force totalled 18,500 American soldiers. The operation included an airborne assault by the 509th Parachute Infantry Battalion. The battalion would be flown from England 1600 miles to assault and capture the two airfields so Allied aircraft could be moved from the packed airfields at Gibraltar. The Central Naval Task Force consisted of one carrier and two escort carriers, one battleship, three cruisers, 13 destroyers, two submarines, other support ships and 34 transports. Air cover for the landings would be provided by 130 fighters and 30 torpedo bombers from seven British carriers. However, these same aircraft would also support the Eastern Task Force landings at Algiers.
Once the airfields were secured, 320 fighters and 57 bombers would be flown in to support the follow-on mission to secure Algeria and maintain the line of communications with the Eastern Task Force.48

The Eastern Task Force, commanded initially by MG Ryder, would also sail from England as part of the Eastern Naval Task Force under the command of Admiral Burrough. Its mission was to seize the port and airfields around Algiers. (Figure 6)49 The Eastern Task Assault Force was provided the US 39th and 168th Regimental Combat Teams; the British 11th and 16th Brigades; and the Allied 1st and 6th Commandos.50 The Eastern Naval Task Force consisted of one carrier and one escort carrier, four cruisers, thirteen destroyers, three submarines, other support ships and 25 transports.51 Once the airfields were secured, 162 fighters, 72 bombers, 20 maritime strike-recce, and 6 photo-recce aircraft would be flown in to support their follow-on mission to thrust eastward to capture the port at Bougie and the airfield at Djidelli, then into Tunisia.52

For the follow-on missions, command would shift to the British 1st Army Commander, LTG Anderson.

Morocco is dominated by the Atlas Mountains; they stretch northeastward over 1000 miles from the Atlantic.
Ocean in southern Morocco, almost to the Mediterranean coast. (Figure 7) The Atlas Mountains along with the Er Rif Mountains of Spanish Morocco create a natural barrier, cut by only the Taza Gap, between Eastern Morocco and Algeria. The coast line is rugged; it offers no natural harbors, and strong winds cause heavy swells and surf, making landings precarious. The artificial ports of Safi, Port-Lyautey and Casablanca were essential, with Casablanca the key port. The limited railroad system consisted of a standard gauge main line.

The Algerian coastline was dominated by the ports of Oran, Algiers, Bougie, Philippeville and Bone. Algeria is dominated by high plateaus with steep-sided valleys and large rocky areas. Movement is principally confined to roads or railroads, except along the coastal rim. Vehicular movement from west to east is limited to the coastal road and one parallel interior route. These roads were capable of handling approximately 25 ton loads; most other roads would not handle heavy traffic even in dry weather. Along the main routes, it was 458 miles from Casablanca to Oran, 270 miles from Oran to Algiers, and 540 miles from Algiers to Tunis.

Tunisia, like Algeria and Morocco, presents war
fighters with a challenging terrain. Cross-country movement along the coast was favorable, but in the interior, movement was confined to primitive roads through the passes. The interior was dominated by rocky alluvial plains connected by gorges and high mountains. The principal interior ranges were the Western and Eastern Dorsals. These dominating ranges would force operations along roads or railroads linking the towns, from north to south, of Beja, Le Kef, Thala, Kasserine, and Gafsa in Western Tunisia; with Mateur, Port du Fahs, Faid, and Gabes in Eastern Tunisia; to the critical coastal towns of Bizerte and Tunis. The main railroad and highway followed the coastline from Tunis to Algeria.

The war planners were uncertain whether the French would fight or welcome the Allies. Consul General Murphy believed that the French would resist an Anglo-American landing. To gain French support, the United States had been negotiating for months with General Giraud, a prominent soldier whose opposition to the Vichy government and escape from a German prison camp made him a symbol of French defiance. While it was uncertain if these negotiations would succeed, the Allies were convinced that the Americans should execute all the landings because it was certain that
the French would oppose the landings if executed by Free French or British forces. The Vichy forces had not forgotten the 13 July 1940 British naval attack on French warships at Oran and Mers-el-Kebis to prevent the fleet from falling into German hands. The French remembered the 2000 casualties (1000 killed) they suffered with the sinking of one battleship and two destroyers, and the beaching of another battleship. Nor had they forgotten the British and Free French operations against Dakar and Syria, especially since many French officers and soldiers defeated in Syria were now in North Africa.

But there was a good chance the French would not—or at least, not totally—oppose American landings. However, if the French did fight, the Allies would be confronted with a significant fleet of warships, aircraft, coastal and port defenses, and soldiers. The French Fleet had three capital ships, seven cruisers, 28 destroyers, and 15 submarines berthed at Toulon; the Battleship Richelieu and three cruisers at Dakar; and the Battleship Jean Bart, one cruiser, seven destroyers, and eight submarines at Casablanca. The Vichy forces had 185 bombers, 218 fighters and 83 recce aircraft; while the Axis had 240 bombers, 231 fighters and 129 recce aircraft to oppose the
French ground forces in North Africa totalled about 120,000: 55,000 in Morocco, 50,000 in Algeria, and 15,000 in Tunisia. There were approximately 140 tanks and armoured cars in Morocco, 110 tanks and 60 armoured cars in Algeria, and 20 armoured cars in Tunisia. There were also 12 units of motorized light artillery, and each colony had one antiaircraft artillery regiment.

Indeed the French had a formidable force with which to oppose the Allied landings. The pressing question to the Allies was whether the French would use these forces against the landings. On the night before the landings, the Allies negotiated with General Giraud. They urged him to use his influence to persuade the Vichy forces not to fight. But he basically presented a wait-and-see attitude. To further complicate the situation, Admiral Darlan, the Commander-in-Chief of Vichy Armed Forces, would be in French North Africa during the invasion. As Petain's deputy, Admiral Darlan had earlier sent Rommel 1000 trucks, 100,000 tons of wheat and 4 million gallons of gasoline. Thus, Admiral Darlan's presence in North Africa did not indicate French acceptance of the Allied landings.

The logisticians were busy trying to sort out the requirements for the different task forces and to insure
that the required materiel got to the right location to meet the very tight schedule. They were being called upon to provide 700,000 different items—including such diverse things as ratcatchers, alarm clocks, goggles, fumigation bags, steel safes and other miscellaneous items. They had to determine whether to deliver 10 million gallons of gasoline ashore in 5 gallon cans or to land it in bulk by tankers. They also had to contend with the requirement for 38 million pounds of clothing and equipment and 22 million pounds of food. The supply build-up, especially for the British-based forces, was jeopardized by U-boat sinkings. Moreover, entire shiploads of equipment, parts and supplies were being lost in a tangled logistical pipeline. Materiel sent to England earlier could not be found or easily removed due to poor inventory and warehousing procedures. Newly arriving materiel further aggravated an already chaotic logistical system.

Training for the operation was intense, but it revealed serious problems. The 2nd Armored Division’s final amphibious exercise conducted in the Chesapeake Bay on 10 October was a fiasco. Even though aided by a lighthouse, the assault boats were scattered for miles up and down the Maryland coastline. All the forces could not be accounted
for until noon. The 1st Infantry Division, practicing in Scotland, experienced similar problems in amphibious operations. General Eisenhower observed one landing executed by supposedly the best trained division in the US Army; he was appalled by what he saw. Assault craft became lost; once ashore the soldiers didn't know what to do, nor did they know how to use some of their equipment, such as the bazooka. In fact, the bazooka was so new that none of the soldiers had been trained to fire their primary anti-armor weapon. Thus US troops would hit the beaches inadequately trained in amphibious operations; they did not know how to use some of their equipment.

Operation Torch was launched amid several real problems. How would the French react? Would the right equipment—in the right amounts, in the proper state of readiness—be in the right places? Would the invading soldiers lack of experience and poor training prove fatal? When would they learn to use critical weapons?
THE AMPHIBIOUS OPERATION

The Oran and Algiers convoy started departing as early as 20 October to meet their assault rendezvous on 7 November. Despite the major threat of submarine attacks, only one ship was damaged by a U-boat's torpedoes. On the evening of 7 November, as the Allies were preparing for the early morning assault, the message "Allo Robert-Franklin Arrive" was broadcast over the London BBC. Upon hearing this message signalling the impending Allied landing, agents and French officers manning the resistance organizations seized power stations, communication centers, police stations, and rail and road centers. Simultaneously, Murphy went to see General Juin, the senior army officer in North Africa, to inform him that the invasion was being executed at the specific request of General Giraud. General Juin deferred making a commitment until he checked with Adm. Darlan who was visiting in Algiers. Admiral Darlan responded; "I have known for a long time that the British are stupid, but I'd believed the Americans were more intelligent. Apparently you have the same genius as the British for making massive blunders." This convinced Robert Murphy that the Allies landings would be opposed.
Now instead of being held in reserve, certain units such as the Casablanca Division rushed to their defensive positions under instructions to "resist any invaders with every means at your disposal." Thus the coup had failed and the French would resist the landings.

The landings at Algiers themselves were unopposed. But resistance was encountered trying to secure garrisons, forts and airfields. The western landings were hampered as inexperienced landing craft operators got lost, scattering and entangling units along 15 miles of coastline. Engines broke down and assault boats sunk because they were Unseaworthy. The eastern assault force landings were two hours late due to a heavy offshore fogbank. Then inexperienced navigators scattered the assault troops. The direct assault on the Algiers harbor was successfully executed by only one-half the assault troops, since one ship was forced to withdraw after sustaining severe damage. A ceasefire effective at 7 PM between US General Ryder and General Juin, representing Admiral Darlan, ended French resistance. However, the fight with Axis forces was just beginning as German air activities increased with numerous bombings.

The landings east and west of Oran were virtually
unopposed, but the frontal assault on the Oran Harbour was heavily opposed. (Figure 9) The landings at two sites were hampered by sand bars and soft sand. Sand bars not only forced soldiers to disembark early, but several landing craft were lost due to damaged rudders and propellers. The loss of landing craft delayed follow-on landing and logistical operations. Once ashore, tired soldiers were further hampered by soft sand. The direct assault on Oran, just as at Casablanca and Algiers, was to prevent the French from sabotaging the crucial port facilities. The Oran assault failed when both of the assault ships were sunk and over 75% of the assault troops were either killed or wounded. This failure allowed the French ships to escape; likewise the harbor's docks and berthing facilities were sabotaged. The US Army's first combat airborne mission also was unsuccessful. Of the 39 C-47s that left England, only 32 reached Algeria as strong winds, inexperienced navigators, and an incorrect homing frequency resulted in three landing in Spanish Morocco, one landing at Gibraltar, one crash-landing near Oran and two landing in French Morocco. (Figure 10) The remainder landed at Sebkra D'Oran, where after consolidating all the fuel into three C-47s, split up with the majority going overland and the
others by air to accomplish their mission. Both groups were attacked; suffering substantial casualties. But the airfields were eventually captured by the landing forces and not the paratroopers. Thus the first US airborne operation was a total failure. While the landings east and west of Oran were virtually unopposed, the Oran harbor defenses continued to resist. After sinking the two frontal assault ships, the shore batteries continued to score hits on Allied ships, slowing down unloading operations. At 1230 PM, 10 November the French formally surrendered to General Fredenhall.84

The landings at Safia were highly successful despite soft sand at one beach and high cliffs at another. (Figure 11)85 The direct assault on the harbour was also quite successful in securing the installations and cutting off the French in their barracks, despite one ship running aground due to heavy fire.86 However, a non-combat accident delayed some landings up to six hours. Additionally, landed tanks were inoperative due to mechanical problems, and ship-to-shore communications was non-existent. The Southern Attack Group captured Safia with the loss of only 10 soldiers and 9 landing craft.87 The Northern Attack Group’s landing at Medhia did not go well. (Figure 12)88
The first waves were almost two hours late due to fire from coastal guns. Confusion and inexperienced navigators resulted in waves hitting the beaches out of sequence and landings up to five miles from their designated site. Subsequent assault waves were attacked on the beaches by shore batteries and aircraft. Heavy surf on the 9th halted landing operations, but supply and equipment shortages forced resumption, resulting in many landing craft being swamped or stranded. Again ship-to-shore communications broke down, further confusing an already chaotic situation. Finally on 11 November the French defenders at Port Lyautey, under orders from Admiral Darlan, ceased resistance.

The assault by the Central Attack Group at Fedala for Casablanca was the most important and, therefore, the strongest. The landings started an hour late, with a heavy surf and falling tide wrecking numerous landing craft. By daylight, 62 out of 116 assault boats had been destroyed. Again inexperienced navigators landed miles from their objective. Eventually the Casablanca operation was halted due to the loss or damage to equipment during the landing, total chaos at the landing sites, and the loss of over half the landing craft. Naval combat was fierce: the Allied Fleet sank
two French destroyers and severely damaged one cruiser, two destroyers and the battleship Jean Bart. The loss of communication equipment and inexperience of personnel within the Western Task Force detracted from the operation. The Western Task Forces' communication system was so inadequate that Patton was unable to communicate with Eisenhower until 10 November. On 10 November Admiral Darlan directed that all French forces in North Africa cease resistance. However, French forces at Casablanca continued to resist until early on the 11th.

To obtain additional port facilities and airfields to support the British 1st Army's rapid advance to Tunisia, the Allies planned to assault Bougie on 9 November. Unfavorable weather delayed the landings until the 11th. While the French did not oppose the landings, the force was immediately bombed by German bombers based in Sicily and Sardinia. The assault force lost three transports and one antiaircraft ship, and one monitor was damaged. The next day despite heavy bombings, two British destroyers landed the British 6th Commandos at the Port of Bone, placing the Allies only 185 miles from the Port of Tunis.

In spite of being caught totally by surprise, the Axis forces quickly reacted to Operation Torch. The Germans had
followed the Allies’ build-up in England and knew that an operation was imminent. However, they believed that a landing at Dakar was the object of these forces. The Germans also were deceived into believing that the convoys entering the Mediterranean were in fact for the besieged Malta. On 7 November Hitler informed Mussolini that he thought the Allies would land 4 or 5 divisions at Tripoli or Bengasi to destroy Rommel from the rear. But Mussolini believed the landings would be on the coast of French North Africa. However, the Germans quickly recovered from these intelligence failures by immediately reinforcing their forces at Bizerte and Tunis. While the Germans failed to stop the French forces’ withdrawal to the mountains, they quickly seized the Tunis airport and by 11 November landed 100 planes and 500 troops from Sicily, Italy and Sardinia. These aircraft plus the bombers based at Sicily and Sardinia continually pounded the Allies forward units and bases. This Axis air offensive—coupled with a lack of supplies, transport, and torrential rains—slowed the Allied advance; allowing the Germans time to build up forces in Tunisia. Reacting to the French surrender in North Africa, ten German and six Italian divisions swept into unoccupied France on 14 November. On 27 November the
French scuttled one battleship, seven cruisers, twenty-four destroyers, ten submarines, and nineteen other ships at Toulon and other French ports to prevent them from falling into German hands.101

The four day conflict in French Northwest Africa had cost the Americans 1404 casualties--556 killed, 837 wounded and 41 missing.102 The British sustained approximately 300 casualties, while the French losses were estimated at over 700 killed, 1400 wounded and 400 missing.103 American generals would later admit that the French decision to fight allowed the Allies to gain battle experience before taking on the combat-forged Wehrmacht.104 Thus the United States' inadequately trained forces were able to gain valuable experience underfire, but fortunately against an equally untrained opponent that didn't totally oppose the landings. This landing— with its major problems due to inexperience, communication failures, inadequate equipment—would probably have met the same fate of the Dieppe raid had it been launched across the English Channel.

On 22 November Admiral Darlan and General Clark signed a mutually acceptable agreement, thus paving the way for French North Africa to co-operate with the Allies.105 The Allies now controlled all the ports and airfields in North

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Africa from Bone to Dakar. The next phase was to rapidly occupy Tunisia and thereby trap the Afrika Korps between the 8th British Army and the Operation Torch forces. The problems that would delay the Allies' advance into Tunisia allowed the Axis to build up forces, which eventually would result in a larger prize for the Allies.

It was due to the Allies' original advance on Tunis from Algiers in November 1942, that Hitler and Mussolini were encouraged to send a stream of reinforcements there, across the sea, where the Allies were eventually able to trap them (almost a quarter of a million troops) six months later, and put two Axis armies in the bag--thus removing the chief obstacle to their later jump from Africa into Southern Europe.106

The Germans started building up a second front in Tunisia to prevent early occupation by the Allies. Kesselring requested and would receive a new ground commander (General Arnim) and three divisions—the 10th Panzer, Hermann Goering, and 334th Infantry Divisions.107 Hitler had begun to keep his promise to Mussolini that he would send him some of the best German divisions, along with the best tanks, with which to advance from Tunisia westward to destroy the Allied-French North African positions in the Mediterranean.108
THE TUNISIAN OPERATION

This phase of the North Africa Campaign would last from the end of November 1942 until all Axis forces surrendered in May 1943. Prior to the Allies' first advance, the Germans strengthened and expanded their beachheads at Bizerte and Tunis, using their air forces to keep the Allies off balance. Due to the rapid Axis buildup, the Allies changed the Tunisia operation from an all-British to a combined operation. Mobile American units began to be shifted from Oran and Algiers to Tunis. This shifting of forces increased traffic on an already overtaxed transportation network, increased fuel consumption above estimates, and necessitated movement of additional supplies to support these new units. This increased traffic further deteriorated the extremely poor roads, stranding badly needed supplies at the ports. The Allies were so short of trucks, that a special shipment of 4500 2 1/2 ton trucks were sent from the US. Service support personnel were so scarce that infantry units were pulled from Algeria to perform support functions. The main rail supply route was from Algiers to Souk el Arba, with delivery time varying from four to nine days. In comparison, the
Axis forces had good interior lines of communications and were within 20 to 25 miles of their supply bases.

Close air support for the allied operations would be provided from airfields at Souk el Arba (80 miles from Tunis), Bone (135 miles from Tunis), and Youks-les-Bains (155 miles from Tunis). Based on the aircrafts', principally fighters', limited range, these distances would severely limit the on-station time of aircraft support. Conversely, Axis airfields were within miles of the front lines; this gave them a definite advantage in the employment of close air support.

By the time that the Allies launched their attack on 28 November, the Axis had built up their forces to 15,575 German and 9000 Italian troops. The offensive—executed by the 78th Division and elements of the 6th Armoured Division—was launched to prevent the uniting of the Bizerte and Tunis bridgeheads, to capture Tunis, to cut the supply line from Italy to Bizerte, and eventually to overwhelm the defenders. Operation Torch would end with the capture of Bizerte.

The Allies began the attack on 25 November with a thrust toward Djifna and the main thrust toward Djedeida to split the German forces. Mud, stiff Axis resistance, and
RACE TO TUNISIA
NOVEMBER-DECEMBER 1942

GERMAN TROOPS
MOVE IN
STARTING 9 NOV. '42

Front Line as of 24 Dec. '42

MEDITERRANEAN SEA

CAPE SERRAT
Mateur
Tbourba
Tunis
Bizerte

BR. FIRST ARMY

CAFE BON

GULF OF HAMMAMET

ALGERIA

TUNISIA

Sousse

Pichon

Fondouk

Thala

Faid

DORSAL

WESTERN

SIDI-BEI-ZID

FR. XIX CORPS
IN PROCESS OF ORGANIZATION

GULF OF GABÈS

MARETH LINE

CHOTT DJERID

Gabès

SOUK AHRAS

327 DISTRICT

MALET

MILES

0

60

0 KM

60

0
Axis control of the air temporarily ended the Allied
offensive on 30 November. Through the first four days, the
Axis had controlled the skies over the battlefield. General
Eisenhower's intention did not change:

My immediate aim is to keep pushing hard
with a first intention of pinning the
enemy back in the Fortress of Bizerte
and confining him so closely that the
danger of a breakout or a heavy
counteroffensive will be minimized.
Then I expect to put everything we have
in the way of air and artillery on him
and to pound him so hard that the way
for a final and decisive blow can be
adequately prepared. While that
preparation is going on, we can clean up
the territory to the south. In this
plan, our greatest concern is to get the
air going efficiently on inadequate,
isolated airfields.116

This temporary pause in the Allied offensive coupled with
the Axis desire to expand their bridgeheads led to a German
counterattack on 1 December. The Allies were turned back
with considerable losses by the Axis counterattack. Again
the Axis had controlled the air; their strafing and bombing
of ground forces was acknowledged to be largely responsible
for the Axis success. The Allied air situation was to the
point that General Eisenhower reported to the Combined
Chiefs of Staff on 3 December that he would halt "air
operations in the forward areas, except for bomber attacks
on ports and hostile lines of communications with occasional fighter attacks against existing airfields," for seven or more days. If completed on schedule, the attack to capture Tunis and isolate the remaining Axis forces in the Bizerte stronghold would be renewed on 9 December.

At the same time, Rommel's Afrika Korps was being hard pressed by the British 8th Army. In December, meetings were held to determine Axis strategy. Hitler's preoccupation with the Eastern Front and insistence that the Mediterranean was an Italian theater of war did little to resolve the situation in North Africa. Rommel's proposal was to execute a fighting withdrawal from Tripoli to Tunisia; from there, he could launch an offensive towards Algeria. While his proposal was being studied, it was decided that the bulk of the reinforcements and supplies would be sent to Tunisia.

On 22-23 December, the Allies commenced their second attempt to capture Tunis. The attack met with determined German resistance and failed. By the end of December the Allies concluded that they had lost the race with the Axis in Tunisia and would commence an immediate reorganization of
forces during the rainy season. The bulk of the US forces were in the mountainous central region principally due to the deterioration of the French forces. Intelligence reports projected that the Axis forces would launch an attack through one of the four passes on the Eastern Dorsal. On 14 February, the Axis confirmed this intelligence assessment by launching a two-pronged attack by Von Arnim at Faid and by Rommel at Gasfa. (Figure 18)120 After initial success Rommel’s plan was to attack through Kasserine then to turn westward to Tebessa and on to Bone. However, Axis higher headquarters decided that once Rommel cleared Kasserine the Afrika Korps would attack northward toward Le Kef. By 21-22 February, the Axis offensive stalled when the Allied defense stiffened along the Western Dorsal. While the Axis offensive had penetrated 120 miles and inflicted the American forces with their first defeat at Kasserine, it had accomplished no decisive results.

The Allies were now ready to conclude the battle for Tunisia. On 20 March, General Montgomery’s 8th Army attacked the Mareth line south of Gabes, while General Patton’s forces attacked to regain the Eastern Dorsal. By the end of March, under heavy Allied pressure, Axis forces
BATTLE OF KASSERINE PASS
14 - 22 FEBRUARY 1943

Front Line 14 February 1943
Front Line 21-22 February 1943

Souk Ahras
Le Kef
Fondouk
Maktar
Thala
Shhiba
Sbeitla
VON ARNIM
FAHID
Fériaoua
17 FEB. '43

AFRIKA KORPS

10TH PANZER DIV.

21ST PANZER DIV.

CCB 1ST ARM. DIV.

U.S. 1ST DIV.

BR. 26TH ARM. BRIG.

BR. 1ST GD. BRIG.

THREAT

TO BIZERTE
TO TUNIS
TO SOUSSE

EASTERN

TO B&FAX

El Guettar

0 MILES
0 KM
30

59
were fighting a withdrawal to Tunis. On 22 April, Axis forces had constricted to within 60 miles of Tunis. On 7 May, Allied forces captured Bizerte and Tunis. Then on 13 May, the Italian Army surrendered, ending all hostilities in North Africa. (Figure 19)121

The Allies successful North African Campaign resulted in the surrender of 250,000 Axis soldiers. Thus the region was delivered from Axis influence, and the Middle East was secure from the west. The Axis African Campaign had cost them 950,000 soldiers killed or captured; 2,400,000 tons of shipping; 8000 aircraft; 6200 guns; 2550 tanks and 70,000 trucks.122

Operation Torch finally proved to be a strategically sound military action. It forced the Germans to form a second front. It allowed the Allies to gain military experience, momentum, and logistical wherewithal to successfully conduct complex amphibious and combined operations. It eventually led to a decisive defeat for the Germans. But, most important, it became a harbinger of the D-Day invasion of Normandy—that cross-Channel direct attack the Americans knew would be decisive, but did not know would take more time and experience.
CONCLUSIONS

The North African Campaign was politically motivated. President Roosevelt wanted to get US soldiers involved in the war against Germany; Russia wanted a second front, and Britain saw it as a strategic objective. Based on resource availability and the British refusal to sacrifice their soldiers at another Dunkirk, Operation Torch was the only executable operation to fulfill these political objectives. While the North African Campaign was successful, it clearly demonstrated how much the Allies had yet to learn about amphibious and airborne operations. Heavy casualties were avoided only due to a half-hearted resistance by the French defenders. A 1942 cross-Channel landing against the 25 German divisions stationed in France would probably have met with the same fate as the Dieppe raid. The difficulties the Allies experienced in the invasion of Sicily again demonstrated that a 1943 landing in France would probably have been unsuccessful. The invasion of Sicily revealed the Allies inability to adjust to bad weather, their inexperience, and their poor coordination during the beachhead phase. While the price paid for these lessons was greater than at North Africa, it would have been
disastrous on the beaches of Normandy. Similarly, the Allied leaders gained more experience during the invasion of Italy when they were almost driven back into the sea.\textsuperscript{124} Thus the lessons learned from the North African Campaign and the follow-on Mediterranean operations were invaluable preparation for a successful cross-Channel invasion. Rommel recognized the Allies' maturity into an effective fighting force. Just before the Normandy invasion, he stated: "Bearing in mind the numerical superiority of the enemy striking forces, their high state of training and tremendous air superiority, [German] victory in a major battle on the Continent seems to me a matter of grave doubt."\textsuperscript{125}

The North African Campaign confirmed for the Americans what the British and Germans already knew: Control of the air is a necessity to successfully execute amphibious and land operations. The British believed they could not invade France, just as Hitler believed in 1940 he couldn't invade Britain, without control of the air.\textsuperscript{126} The North African ground and air operations were mutually dependent because the ground forces needed air support to advance and the air forces needed the ground forces to obtain advance airfields.\textsuperscript{127} The short range and misuse of Allied
fighters consistently resulted in the Axis controlling the air over the battlefield. The Axis control was so complete that Eisenhower acknowledged that the First Army advances were halted by the enemies "strafing and dive-bombing." Eisenhower later halted the offensive to allow time for the full employment of air power. Just as Rommel had learned in North Africa, so now had the US military leaders grasped that successful deployment of massed armor was dependent on control of the air. In 1942 or 1943, the Allies' control of the air during a cross-Channel invasion was not guaranteed. However, by 1944, the Allies had developed long-range fighters that would rule the sky over Normandy.

In preparation for the Normandy invasion, the Allies would also concentrate bomber attacks on German fighter production, thereby cutting monthly production from 1500 to 600. This effort, plus Allied air attacks on airfields, would leave the once mighty Luftwaffe little to control the sky over Normandy. This crippling of the Luftwaffe and the Allies' dominance of the air would be the "greatest adverse morale factor to the German troops in Normandy." The Allies also completely destroyed the German transportation system essential for the sustainment and movement of
German forces opposing the Normandy landings. Rommel recognized that the "Allied superiority in the air alone has again and again been so effective that all movement of major formations has been rendered completely impossible, both at the front and behind it, by day or night."132 "[A]s Rommel had feared, lack of airpower also doomed German hopes of defeating the Allies."133

On 1 September 1939, Germany attacked Poland with 77 panzer and infantry divisions, thousands of tanks and armored personnel carriers, and 4200 planes.134 The United States Army at this time had a total of 130,000 soldiers, no armored divisions or airborne units, and only 1000 largely antiquated planes.135 By 7 December 1941 the US Army had swollen to over 1.5 million soldiers, the bulk of which were ill-trained and ill-equipped.136 The "Sleeping Giant’s" industrial base was still ramping-up to equip these new soldiers. There was also insufficient experienced cadre to train these new soldiers. Prior to the North African Campaign, American soldiers continually demonstrated their inadequate training. In June 1942, Churchill and other members of his staff observed a military demonstration at Fort Jackson by the 3rd Infantry Division. General Sir Hastings Ismay told Churchill that it would be "murder"
to commit these troops against "Continentsals." General Sir Alan Brooke likewise stated that the exercise was "disappointing." American units and soldiers executing the North Africa Campaign demonstrated this lack of training during their final amphibious exercises in both the United States and Britain. Assault boats had been lost, intermingling units and scattering troops miles from their intended objectives. Once on shore, commanders took hours to reassemble their units, and those units that arrived intact did nothing. Finally in an operation that was so dependent on air-ground cooperation, there had been insufficient coordinated training due to the shortage of equipment and personnel. While the half-hearted French opposition minimized the effects of Allied training deficiencies, the results would have been disastrous against the well trained German divisions stationed in France.

Logistically, the Allies were hard-pressed to provide the 48 million tons of supplies for Operation Torch. It would take two more years to develop the industrial base and logistical infrastructure and shipping to provide the 438 million tons of supplies for Operation Overlord, the Allied invasion of Europe. The Allies build-up for Operation Torch was plagued by lost shipments, either because of an
inadequate logistical system or because ships were sunk by German U-boats. Hundreds of thousands of tons were either at the bottom of the Atlantic or buried too deeply to be recovered in British warehouses. Inadequate warehouses and untrained personnel resulted in supplies and equipment being lost or misplaced. Inadequate accounting procedures led to shipments being misrouted. Ships were loaded, unloaded, and reloaded to accommodate the arrival of late equipment. The shortage of ships resulted in a million ton equipment and supply shortage for the Western Task Force alone. The Allies logistical problems had only just begun as they struggled to off-load and store these supplies on the beaches and in the captured North African ports. Then these huge quantities of supplies had to be transported great distances throughout the inadequate North African transportation network. Just as the tactical decisions could not be carried out due to logistical constraints during the planning; they would also be similarly jeopardized throughout the North Africa Campaign. Shipping shortages dictated the reduction of personnel, equipment, and supplies for the operation. But instead of cutting all forces and equipment proportionally, the tactical planners only cut supplies, service troops, and logistical equipment. This
shortage of service troops and logistical equipment would later result in the diversion of combat troops to perform logistical tasks until the delayed service troops could arrive in North Africa. A special shipment of 4500 2 1/2 ton trucks from the United States would be required to fix the transportation shortage.\textsuperscript{144} The logistical support for Operation Torch offers a prime example of "disorderly planning and brilliant improvisation."\textsuperscript{145} General Marshall stated that for Operation Torch "the logistic situation had been given only cursory examination."\textsuperscript{146} The North African Campaign afforded the American leaders an opportunity to learn the importance of all aspects of logistical support at a small price in this relatively low-risk operation.

While the North African Campaign was largely a political decision, it was none the less the correct decision based on the Allies current war-waging capabilities. The Allies did not possess the shipping required to support massive military operations. They had not eliminated the German U-boat threat from the Atlantic. Allied war production capacity was still not fully developed. And the Allies, especially the Americans, lacked sufficient trained divisions to attack Europe.\textsuperscript{147} Even if the US had been
able to produce the required materiel, there was insufficient time to equip and train these forces for amphibious operations against a determined, battle-tested enemy. The training proficiency displayed during the landing against the French's half-hearted opposition would have resulted in disastrous failure against the 25 German divisions stationed in France. The Allies clearly demonstrated in the Tunisian Operation that even if a cross-Channel landing had been successful, they were totally unprepared to advance any further. After the Allies had failed to occupy Tunisia, Eisenhower observed that the operations "have violated every recognized principle of war, are in conflict with all operational and logistical methods laid down in textbooks, and will be condemned in their entirety by all Leavenworth and War College classes for the next twenty-five years." 

The North Africa Campaign was the first step in the Allies' development of doctrine, tactical and logistical prowess, equipment, and experience to insure success for the ultimate challenge—the amphibious assault on "Fortress Europe" and follow-on land offensive into the heart of Germany. More importantly, the North Africa Campaign afforded the Allies' senior leaders an opportunity to learn
the most crucial aspect of warfare during World War II—amphibious operations. As General Marshall so accurately defined the problem:

The difference between a river crossing, however wide, and a landing from the ocean is that a failure of a river crossing is a reverse while the failure of a landing operation from the sea means the almost utter destruction of the landing craft and personnel involved. My military education and experience in the First World War has all been based on roads and rivers and railroads.... Prior to the present I never heard of any landing-craft except a rubber boat. Now I think about little else.151

Lastly, the North African Campaign would show the American military leaders what the British and Germans already knew—air superiority was essential for amphibious operations and land combat. Following the North Africa Campaign, the Americans revised their air-ground doctrine, developed command and control procedures, built new long-range fighters and established extensive training programs based on lessons learned in North Africa. When the Allies finally invaded "Fortress Europe," they would totally control the air, leaving a devastated German transportation system and an enemy incapable of moving large units without being attacked.152
The North African Campaign can best be described through Churchill's words after the German defeat at El Alamein:

"Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."153

This campaign was indeed "the end of the beginning," for it provided the operational, tactical and logistical foundation for Sicily, Italy, and ultimately Normandy. It provided the Americans their first opportunity to engage German units in land combat. In cooperation with the other Allies, America won a great victory at minimal risk. The Allies had undertaken an operation that brought them a great victory. More importantly, they began laying a foundation that would insure success when they finally invaded Normandy—the largest and most dangerous amphibious operation in history.
ENDNOTES

2. Ibid, p. 17.
4. Howard, p. 11.
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