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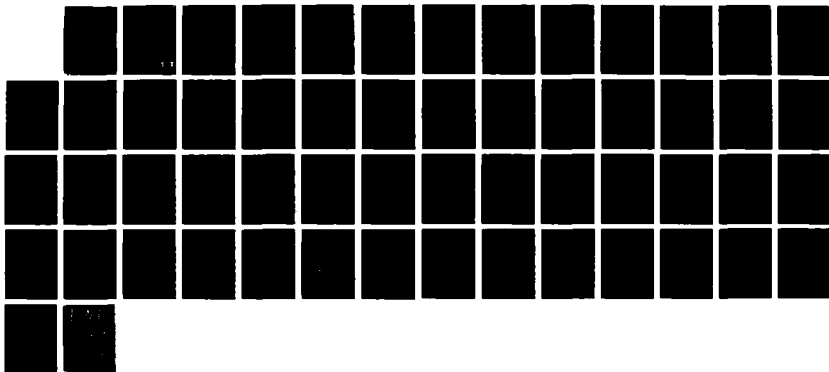
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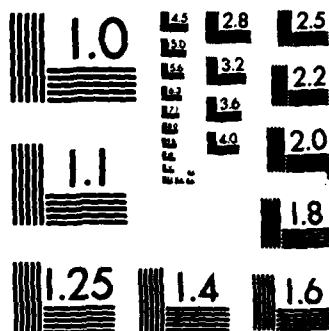
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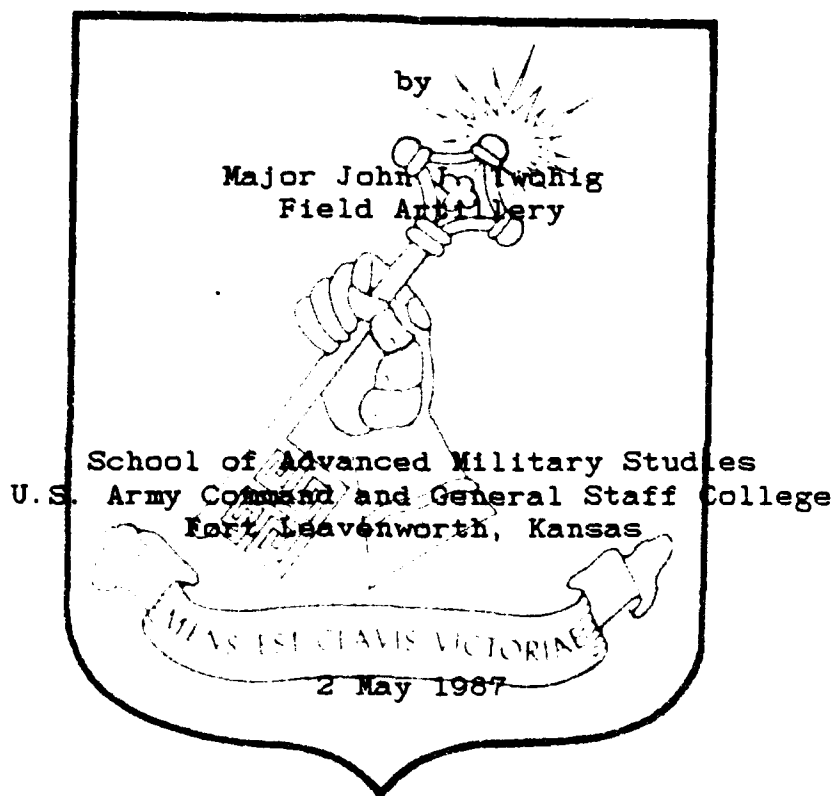
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Playing Second Fiddle: Conducting the Operational Art  
in a Secondary Theater of War with a Passive Aim



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concentrate superior combat power in an attempt to destroy the enemy's center-of-gravity. This paper suggests that it may be possible to simply neutralize an enemy capability thus protecting ones own center-of-gravity. Additionally, the commander in a secondary theater of war must understand his role in the overall context of the war. This understanding will allow him to design a campaign that will not only accomplish the passive aim but also complement the actions in the primary theater of war.

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ABSTRACT

PLAYING SECOND FIDDLE: CONDUCTING THE OPERATIONAL ART IN A SECONDARY THEATER OF WAR WITH A PASSIVE AIM, by Maj John J. Twohig, U.S. Army, 49 pages.

This paper examines the implications for planning and conducting operations in a secondary theater of war that has a passive aim. After developing a framework for analysis, this paper investigates the British (June 1940 - February 1941) and the German (February 1941 - March 1942) campaigns in North Africa. The two campaigns are of particular interest to today's commander who has a primary focus on Europe while trying to plan for a Southwest Asian scenario.

This paper concludes that the requirements (to determine what military conditions must be produced to achieve the strategic aim, to sequence actions to achieve that military condition and to apply the allocated resources to accomplish those actions) do not change with the assignment of a passive aim. However, the operational commander assigned a passive aim in a secondary theater of war may determine that it is not required nor desirable to concentrate superior combat power in an attempt to destroy the enemy's center-of-gravity. This paper suggests that it may be possible to simply neutralize an enemy capability thus protecting ones own center-of-gravity. Additionally, the commander in a secondary theater of war must understand his role in the overall context of the war. This understanding will allow him to design a campaign that will not only accomplish the passive aim but also complement the actions in the primary theater of war.



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## INTRODUCTION

FM 100-5 explains that the operational commander determines what military conditions must be met in the theater of war to achieve the assigned strategic aims. The commander must properly sequence those actions which are most likely to produce the desired outcome. Moreover, he must determine how best to apply the allocated resources in order to achieve the proper sequence of actions.<sup>1</sup> It is performing these actions that constitute operational art. The essence of operational art "is the identification of the enemy's operational center-of-gravity - his source of strength or balance- and concentration of superior combat power against that point to achieve a decisive success."<sup>2</sup> However, are there special implications that must be considered when one attempts to conduct operational art in a secondary rather than primary theater of war?

During World War II both the allies and the axis powers were confronted with conducting campaigns not only in the theater of war where the major war aim was being prosecuted but in secondary theaters as well. The allies were initially faced with this problem in the Mediterranean and Middle East Theater of War. Here the British were confronted with the problem of preserving the integrity of their territory and vital interests. Meanwhile, in the primary theater of war the British were defending the United Kingdom from heavy air

action and possible invasion by Germany. Germany was also confronted with this dilemma in North Africa. Germany attempted to strengthen the position of their Italian allies while focusing their primary efforts on preparing for and conducting the invasion of Russia. The Allies faced additional secondary theaters of war in their successful attempt to retake Burma and in the Italian campaign (June 1944 to April 1945).

Further examination of these World War II campaigns reveals that two had positive aims. A theater of war with a positive aim "calls the act of destruction into being."<sup>3</sup> It seeks to destroy the enemy force, seize the enemy's territory and/or destroy the enemy's will to resist.<sup>4</sup> In the China-Burma-India Theater Field-Marshal Slim was required to clear Burma and reestablish land communications with China from the spring of 1944 to the spring of 1945.<sup>5</sup> With the inception of Overlord Italy changed from a primary to a secondary theater of war for the Allies during the June 1944 to April 1945 time period. However, the aim remained positive: the destruction of German forces in Italy.<sup>6</sup>

The remaining two campaigns had a passive or negative aim. Clausewitz explains that a passive aim in a theater of war has as its purpose to keep "territory inviolate, and to hold it for as long as possible. That will gain...time, and gaining time is the only way...(to)...achieve...(this)...aim."<sup>7</sup> The British aim in North Africa from June 1940 to February 1941 was to protect Egyptian territory from Italian incursions from Libya.<sup>8</sup> The Germans were confronted with a

similar problem from February 1941 to June 1942 in North Africa. While German efforts focused on Russia, Field Marshal Rommel was required to defend Tripolitania from further British incursions.<sup>2</sup>

Current commanders developing campaign plans for Korea or Southwest Asia must consider the impact that a general war in Europe would have on their campaign planning. By analyzing World War II secondary theaters of war implications and insights can be developed that may assist current operational commanders in their campaign analysis, planning and execution.

Examination of the four campaigns indicate that each accomplished to some degree the assigned strategic aims. However, success in a secondary theater is not only measured by accomplishment of assigned aims, but also with respect to two other considerations. The first consideration is the impact operations in the secondary theater has on the drain of resources from the primary theater. Secondly, the actions as well as the desired end state in that secondary theater of war should complement the primary theater of war. The British campaign in North Africa and the Allied campaign in Burma may have been more successful in accomplishing their aims than either the German campaign in North Africa or the Allied campaign in Italy. Additionally, the Allied campaign in Italy and the German campaign in North Africa may have been conducted in such a manner that they drew off significant resources from the primary theater

without providing a corresponding benefit at the strategic level.

This paper will investigate campaigns that had a passive/negative aim. Moreover, the two campaigns to be studied are of particular interest to today's commander who has a primary focus on Europe while trying to plan for a Southwest Asian scenario. Specifically, the purpose of this paper is to determine what are the implications for planning and conducting operations in a secondary theater of war that has a passive/negative aim.

#### FRAMEWORK FOR ANALYSIS

In order to answer the primary research question two campaigns will be analyzed: the British campaign in North Africa 1940-1941 and the German campaign in North Africa 1941-1942. Initially, an overview of the campaign will be developed to provide the strategic context, the assigned strategic aims, resources available, significant events during the campaign, as well as the achieved end state. Next, the following questions will be used as the basis for analysis of the campaign:

Was the campaign successful?

What does this campaign tell us about the assignment of aims, allocation of resources and imposition of restrictions for a secondary theater of war with a passive aim?

What impact does the assignment of aims, allocation of resources and imposition of restrictions have on the manner in which the commander conducts operations in this type of theater?

After both campaigns have been investigated,

British East Africa. In September 1940 the Battle of Britain was in full swing with the British anticipating a German invasion. Meanwhile, the Italian Army, located in Libya, attacked east across the Egyptian border against a much smaller British army. Additionally, Hitler was developing plans for the invasion of Russia.<sup>13</sup>

Because of its strategic location, the Middle East was a region of vital importance to both the Allies and Axis powers (Appendix 1). Specifically a failure of the Allies to maintain control of this region would have resulted in:

1. Making available a direct route for the linking up of German and Japanese forces. This would close a ring around China and Russia preventing allied support efforts.

2. Turkey would be isolated.

3. The Allied southern supply route to Russia would have been closed.

4. The Caucasus, Iraq and Iran oil fields would be secured by the Axis.

5. The air route across Africa to the Middle East, India and China would be closed.

6. The shorter sea route through the Mediterranean Sea to India would be closed (Suez Canal).

7. The base from which the allies could strike at the soft underbelly of the Germans would be lost.<sup>14</sup>

The key to the Allied control of the Middle East was British held Egypt.<sup>15</sup> One of the four possible invasion routes for the Germans was from Libya through the Western Desert

implications of conducting operational art in a secondary theater of war/operations with a passive aim will be developed, to include the relevance of these implications for current operational commanders.

In order to provide a common framework for the investigation of this subject the following definitions have been developed:

A Secondary Theater of War/Operations is that geographical area "upon which the parties may assail each other."<sup>10</sup> However, military operations in this theater of war/operations are not the principal concern of the nation. There exists at the same time a primary theater of war/operations where the majority of the nation's attention and resources are directed.

A theater of war/operations with a Passive Aim has as its purpose holding "territory inviolate, and to hold it for as long as possible" in order to gain time. "The positive aim ... that will get him what he wants from the peace negotiations, cannot yet be included in his plan of operation. He has to remain strategically passive, and the only success he can win consists in beating off attacks at given points."<sup>11</sup> For the operational commander "it might be said, his positive aim is to hold what he has."<sup>12</sup>

Success in a Secondary Theater of War/Operations will require that the following three conditions be met:

- a. Achievement of the assigned aim for the theater of war/operations.
- b. The ability of that secondary theater of war/operations not to draw off significant resources from the primary theater of war/operations.
- c. The ability of that secondary theater of war/operations to conduct operations and design an end state that complements the primary theater of war/operations.

#### THE WAR IN NORTH AFRICA: STRATEGIC CONTEXT

By 25 June 1940 Hitler's campaign in Western Europe had been completed. Holland, Belgium and France had been overrun. In July Italy began the attempted conquest of

into Egypt. British control of this area had been weakened with the collapse of France eliminating Syria as a buffer in the North. Additionally, the disastrous loss of British equipment at Dunkirk translated into a serious shortage of equipment for the Middle East.<sup>16</sup>

#### BRITISH CAMPAIGN IN NORTH AFRICA: JUNE 1940 TO FEBRUARY 1941

General Sir Archibald Wavell had been the Commander-in-Chief Middle East since June 1939. He was charged with preserving as far as possible the integrity of Allied territory and defending vital interests. By June 1940, in view of the serious situation in the west, the Mediterranean forces were strategically on the defensive. However, there was allowance for limited tactical offensive operations against the Italians when possible.<sup>17</sup>

Wavell translated this strategic aim into the following operational aim for his new Western Desert Force commander, General R.N. O'Connor: "Take command of the Western Desert Force with the task of protecting Egypt from Italian attack."<sup>18</sup> O'Connor was to dominate the frontier and when possible conduct tactical raids to cut the enemy's land communications. The objectives of these raids were to be varied in order to puzzle and harass the Italians. However, men, vehicles and materials were to be husbanded in preparation for the expected Italian offensive into Egypt.<sup>19</sup> "O'Connor was therefore limited to choosing between the tactical offensive and the tactical defensive."<sup>20</sup> To accomplish the assigned mission O'Connor was given the 7th

Armoured Division and the 4th Indian Division, both of which were at significantly less than full strength.<sup>21</sup>

When on 11 June Italy declared war on France and Britain, General O'Connor was employing a covering force consisting of part of an armored brigade and a (combat) support group. The covering force dominated the desert along the frontier through a series of raids and active patrolling.<sup>22</sup> By the end of July General O'Connor withdrew all the tanks of the covering force to conserve this critical asset for the major Italian offensive.<sup>23</sup>

The Italians continued to operate their armored formations in spite of the difficulties in maintaining that equipment in the desert environment. Additionally, the maintenance problem was compounded by their long and difficult lines of communication. Meanwhile, the British were husbanding this critical resource.

By holding their armored formations in reserve the British were not only preparing for the expected Italian attack, but also gaining in relative strength with respect to the Italians. The British would have to their credit the increased benefit of waiting.<sup>24</sup> Additionally, the British realized that at this stage of the campaign it was more important to protect their own center of gravity than it was to try to attack the Italians'.

The Italian commander, Marshal Graziani, had been given the mission "to strike across the Egyptian frontier and capture Alexandria."<sup>25</sup> "The Italian objective was to drive

the British out of Egypt and establish land communications with East Africa."<sup>26</sup>

The Italians had over 200,000 men in Libya as well as having a significant superiority in aircraft over the British. However, Marshal Graziani procrastinated until September, waiting for a German invasion of Great Britain as the signal to start his attack. Finally, in September Mussolini ordered an Italian attack. On 13 September Graziani attacked sixty miles into Egypt halting at Sidi Barani to reestablish a logistical base and plan for a methodical move on Mersa Matruh and eventually Alexandria.<sup>27</sup>

During October and November the armies lay apart preparing for the long awaited Italian attack on the Delta region of Egypt. Wavell's guidance from Churchill at this time was to prepare for the strong Italian invasion and "if retreat were necessary, ... the western edge of the Delta must be diligently fortified and resolutely held."<sup>28</sup> By the middle of November the 7th Armoured Division and 4th Indian Division were brought up to full strength and Wavell had the 4th New Zealand Division and 6th Australian Division organizing as his reserve behind the Western Desert Force.<sup>29</sup> By restricting the scope of operations to raids and covering force actions, the British continued to gain in relative strength with respect to the Italians. This was accomplished in spite of the priority for men and equipment to be retained in England.

Wavell was hampered by the slow buildup of supplies. The majority of the British armament production would be used

for the defense of the United Kingdom. This situation would not change until January-February 1941.<sup>30</sup>

It was perceived that the Italian advance into Egypt was the first step of an ambitious plan to link up with East Africa. However, the Italian supply lines were being stretched across the Western Desert. It was important that the Italian lines of communication be disrupted to the extent that an advance into Egypt would become impossible.<sup>31</sup>

When it became evident that the Italians were not going to act, Wavell realized that the benefits of waiting were no longer significantly accruing in his favor. Additionally, he realized that he need not risk the integrity of his force by attempting to destroy the Italians. He simply needed to strip away a critical capability from the Italians, thereby limiting their ability to reach the Delta. He chose to attack their lines of communication and forward air bases.

On 22 October Wavell judged that he had enough combat power to conduct a spoiling attack that would disrupt the Italian's planned offensive. The Western Desert Force had the capability for a four or five day raid. The raid was designed to destroy and disrupt Italian forces and land lines of communications. After the raid the majority of the forces would be withdrawn with only a covering force left forward. This attack was designed to support the aim of protecting Egypt by driving the Italians out, as well as crippling their ability to initiate a major offensive toward the Delta.<sup>32</sup>

However, it is important to remember that the major concern of the British continued to be Germany. Not only were resources held in England but forces and resources were diverted from the Middle East to meet the threat in Greece. Specifically, the defense of Egypt and the air support for the Western Desert Forces were significantly reduced. This additional risk in the Western Desert was accepted in view of the political commitment to Greece.<sup>33</sup>

Just prior to initiating the raid on 9 December Wavell realized that an opportunity might occur to convert the successful raid "into an outstanding victory" ... wishing "to make certain that if a big opportunity occurs we are prepared ... to use it to the fullest."<sup>34</sup> However, Wavell had plans in East Africa that would require diverting the 4th Indian Division to the Sudan prior to completion of the five day raid.<sup>35</sup>

Moving by night over open desert the two British divisions attacked the scattered Italian camps between Sidi Barrani and Sofafi. The Italians were taken by complete surprise and by 10 December Sidi Barrani was retaken.<sup>36</sup> Wavell decided to execute the planned reinforcement of the Sudan and ordered the 4th Indian Division to do so on 11 December.<sup>37</sup>

By mid December the Italians had been driven from Egypt. In the three days over 38,000 prisoners were taken along with an impressive amount of equipment and supplies. The British success had a devastating effect on Italian morale and Wavell

realized the need to exploit this tactical success into an operational advantage (see Appendix 2).<sup>38</sup>

"The British paused for two weeks to bring up supplies and then launched an attack on Bardia."<sup>39</sup> Wavell made the decision to replace the departed 4th Indian Division with the 6th Australian Division for the attack on Bardia. Meanwhile, the 7th Armoured Division moved to cut off Tobruk. The Italians had lost over 40,000 men, along with extensive amounts of equipment and supplies.<sup>40</sup>

Once again British concern over German and Italian attack in Greece, as well as Churchill's concerns in the Sudan not only prevented reinforcement of the Western Desert successes but also caused the diverting of aircraft from the Western Desert as well.<sup>41</sup> The tactical successes of the Western Desert Force raised unexpected strategic problems for Wavell.

The Commander-in-Chief had to hold a balance between his various campaigns; the development of the 'five-day raid' into a six weeks' crescendo of victory threatened that balance. How far should Wavell allow himself to be pulled by O'Connor's success? Eight Italian divisions had been destroyed, seventy thousand prisoners and a major fortress taken. But in Cyrenaica there still remained an Italian army of nearly eighty thousand men and nine hundred guns. In Tripolitania there were another ninety thousand, with five hundred guns. In view of the sharpening difficulties of supply and transport in 13th Corps and the wear and tear on the precious tanks, there was a strong case for resting content with a six weeks' raid. But O'Connor had already surrounded Tobruk; and Tobruk would be a valuable supply port. And so Wavell was drawn behind O'Connor's advance.<sup>42</sup>

Wavell had to determine whether continuing the attack in an attempt to complete the destruction of the Italian army jeopardised the British ability to achieve the assigned

passive aim. "He gave his approval to the extension of the campaign to the capture of Tobruk."<sup>43</sup>

Additionally, in London a far more immediate danger was the Greek and Turkey situation. Wavell was well aware of the British war cabinet position. On 11 January Churchill decided that after the capture of Tobruk, resources would once again be diverted from the Western Desert to Greece.

Not only were the resources ear-marked for Greece in the GHQ pool not available, but units were withdrawn from 13 Corps in the middle of operations. These were mainly transport and labour units, and some AA guns. Engineers also were put under orders to move ... Worst of all, RAF units continued to move to Greece or Crete, and we again were the losers. Captured war material also in the shape of guns, ammunition, AA weapons and transport were urgently required by the Greeks; so we lost not only much transport which could have been converted for our own use, but also for a considerable period the transport required to carry or draw this vast quantity of material to Alexandria.<sup>44</sup>

However, the Greek government refused the offer of ground combat forces for the time being. Wavell's "campaign lay under a suspended death sentence."<sup>45</sup> Tobruk capitulated on 22 January. Its garrison yielded 38,000 prisoners, additional supplies and equipment and a small port facility to help ease the land supply problem.<sup>46</sup>

Once again events in the Western Desert must be considered with respect to the changing situation as a whole.

... almost simultaneously with the capture of Tobruk, the encouraging naval and air situation took a turn for the worse ... the progress of the war on the Albanian front, and the prospect of German intervention in Greece ... the result might well have been to put an end to the Operations in Cyrenaica ...<sup>47</sup>

On 21 January the British Chiefs of Staff ordered the capture of Benghazi. The passive aim of protecting Egypt had

temporarily changed into a positive goal of seizing the port of Benghazi along with the destruction of the Italian forces in Cyrenaica. The original political aims "can greatly alter during the course of a war and may finally change entirely since they are influenced by events and their probable consequences."<sup>48</sup> Wavell's advance into Libya had received strategic sanction.<sup>49</sup>

By 3 February it was evident that the Italians were abandoning Cyrenaica. The 6th Australian Division pushed into the Jebel while the 7th Armoured Division advanced across un-reconnoitered desert to cut off the Italian main escape route southwest of Beda Fomm. After several abortive attempts to break out, the Italians surrendered unconditionally.<sup>50</sup>

The Italian's 10th Army had been destroyed and Cyrenaica was occupied by the British. The Western Desert Force had advanced 500 miles, destroyed nine divisions and seized over 130,000 prisoners along with extensive amounts of equipment and supplies. But events in Greece and in East Africa not only killed Wavell's proposed attack to drive the Italians completely out of Tripolitania but resulted in the Western Desert Force units being sent either to Greece or scattered throughout Egypt on miscellaneous duties. Additionally, Cyrenaica was to be defended by a green armored brigade of the 2nd Armoured Division and an Australian Brigade Group.<sup>51</sup>

Even though the eventual British aim would be the defeat of Italy, the immediate aim in the Middle East from June 1940

through 1941 was to defend Egypt.<sup>52</sup> Initial evaluation of the success of the North African campaign from June 1940 to February 1941 reveals that the British not only defended Egypt but also destroyed a numerically superior Italian force. Additionally, the Italians would not be able to threaten the Delta area without significant reinforcement. Moreover, the projected German reinforcement would not be available until early May 1941.<sup>53</sup>

Wavell was able successfully to conduct the campaign in the Western Desert because of his "well-judged adjustment of means to suit the end."<sup>54</sup> Wavell was confronted with matching the limited means provided with the desired end state not only in the Western Desert but for British East Africa, Greece, Palestine, Iran and Iraq as well.

Initially, in the Western Desert the British achieved this aim by aggressively patrolling the frontier. Meanwhile the main body of the Western Desert Force gained in strength and experience. Additionally, even after the initial Italian attack sixty miles into Egypt, the British continued to gain in relative strength over the Italians. As Clausewitz points out, the defender

... will also have to his credit the increase benefit of waiting. Even if the attacker has not been weakened enough by his advance to prevent him from attacking ... he may lack the determination to do so ... the reason is partly that his forces are reduced and no longer fresh while his danger has increased, and partly that irresolute commander will completely forget about the necessity of battle once possession of the area has been achieved.<sup>55</sup>

Additionally, Wavell further understood that the Italian

"failure to attack was not ... adequate negative success" for the British "but the time gained was substantial."<sup>56</sup>

Furthermore, "the very lack of a decision constituted a success"<sup>57</sup> for the British from September to December 1940. As long as the Italians avoided the battle the British were prepared to give, the British aim was being accomplished.<sup>58</sup> Wavell realized that this was only a negative success but it allowed him the time to develop the strength for a limited counterattack.

The purpose of the British raid was not total destruction of the Italian forces but to remove the Italian ability to strike Alexandria.<sup>59</sup> The initial limited scope of the raid was appropriate because the desired end state was attainable based on the means available. Additionally, even though the plan entailed a tactical offensive action, the raid fit the overall passive aim of defending Egypt. Even though the British were operationally on the defense, it was important that the Italians were "conscious of its (Western Desert Force) presence" and that the British had "some means of threatening" them.<sup>60</sup>

Operational commanders "must be flexible enough to respond to changes or capitalize on fleeting opportunities to damage the enemy."<sup>61</sup> Additionally, "branches to the plan" ... provide flexibility to anticipate ... "the enemy's likely actions and give the commander a means of dealing with them quickly."<sup>62</sup> Wavell's planning for and conduct of the branch to his plan that allowed him to exploit the tactical success of operation "Compass" is similar to planning and conduct of

operations in any theater of war.

However, certain factors require additional consideration in a secondary theater of war with a passive aim. For the operational commander some factors that should be considered in planning and executing a campaign plan are: determination of whether the risk associated with attacking the enemy's center of gravity will so jeopardize our own that we risk losing the ability to achieve the assigned passive aim and determination of whether our exploitation of success will raise false hope at the strategic level to the point where our actions fail to complement the primary theater of war. For the strategic planner factors that should be considered when assigning aims and allocating resources to a secondary theater of war are: determination of whether the intended action will significantly draw off resources from other critical areas to include the primary theater of war and determination of whether "our position is so secure that this success will not bring further enemies against us who could force us immediately to abandon our efforts against our first opponent"

It is not clear whether the British considered all of these factors in making the decision to exploit the tactical success of "Compass". However, it is obvious that Wavell correctly matched means to ends and did not significantly draw off resources from other areas. Moreover, during the exploitation of "Compass's" initial success Wavell was continually required to draw resources from the Western

Desert for use in Greece, British East Africa and Crete. What resources Wavell was able to provide as replacements were forces and supplies that had already been earmarked for the Western Desert Force.

The manner in which Wavell progressively conducted his exploitation promoted not only destruction of the enemy army but also protection of his own. After each phase of the operation (seizure of Bardia, capture of Tobruk and seizure of Benghazi with the final destruction of the Italian 10th Army) the British made a conscious decision whether to continue the pursuit. The decision whether to continue was based on several factors: forces available and their condition, likelihood of success and the impact on other operations within this and the primary theater of war. Critical to Wavell's decisions to continue was his understanding of the implications of his actions not only for the Western Desert but for the actions within the remainder of the Middle East theater and primary theater as well. Additionally, Wavell advised Churchill of the cost of continued offensive actions in the Western Desert. The effects of these actions on the primary theater were considered before the decision to continue was made.<sup>64</sup>

Whether Wavell's actions raised false hope at the strategic level or not is a difficult question to answer. How far should Wavell allow himself to be pulled by O'Connor's "tactical success"? At what point should the pursuit stop? It was obvious by the rapid success over the two-month march across Libya that the British had the means

to drive the Italians back into Tripolitania. However, based on the commitment to Greece, Turkey, British East Africa, Crete, Palestine, Iran and Iraq could they continue on to Tripoli? Could they maintain control over Cyrenaica? Moreover, should Wavell as the theater commander insist on either seeing the operation through to its logical conclusion (expulsion of Italy from North Africa) or stopping at Tobruk?

As an operational commander Wavell realised that the decision to exploit beyond the limited objective of Bardia needed to be balanced against British responsibilities elsewhere. Additionally, he understood that the decision to exploit past Tobruk rested with the Chiefs of Staff in London not with his headquarters. Consequently, plans that he prepared to seize Tripoli were presented to Churchill for approval. It was at the strategic level that the decision to stop was made. Wavell provided a sound operational plan that estimated the additional resources required along with the expected end state.<sup>65</sup>

One possible criticism of the British success in North Africa was that it drew German forces into the conflict and prolonged the war in North Africa for an additional two years. "On 11 January 1941 a week after Bardia fell, Hitler made up his mind to send German ground forces to Libya."<sup>66</sup> Perhaps "the British unwittingly defeated the Italians too soon. If they had waited six months, Hitler would have been irrevocably committed to his Russian campaign and unable to divert forces to help his hapless ally."<sup>67</sup>

However, there were no indications at that time that Hitler would invade Russia. Additionally, Ultra intercepts indicated that German forces in Tripolitania would not be ready until May 1941.<sup>68</sup> This would allow time to solve the Greek issue and still reinforce the Western Desert. Additionally, the known German mission was to defend Tripoli by acting as a blocking force around Sirte. Furthermore, the decision to assume this risk was made at the Chiefs of Staff level. Wavell as the operational commander was required to execute the decision.<sup>69</sup>

#### GERMAN CAMPAIGN IN NORTH AFRICA: FEBRUARY 1941 TO MARCH 1942

Initially, Hitler had no intentions of becoming involved in North Africa. This area was in Italy's sphere of political influence. In June 1940 it appeared that Britain would soon have to seek terms. However, the British were still very much alive in the fall of 1940. Additionally, the Italian's tentative attack into Egypt in September showed the true nature of her army.<sup>70</sup>

The German high command conducted a feasibility study for the North African Theater in the fall of 1940. It was determined that it would require at least four panzer divisions to insure success. Additionally, the supply problems in the theater were almost insurmountable. In October Hitler's offer for assistance was rejected by Mussolini. The surprise Italian attack into Greece in October only added to the friction between the two axis powers.<sup>71</sup>

Tired of the Italian situation, Hitler turned his attentions to his next major concern, the invasion of Russia. The campaign in Russia would "place demands upon everything at his disposal, and diversions to any other theater of war in the crucial year of 1941 were to be avoided if possible."<sup>72</sup>

It was clearly evident that the Germans wanted to minimize their efforts in North Africa. The Italian nuisance must be handled with a minimum cost in men and material. This secondary theater of war must not become a major distraction to the primary war effort, Russia.

By January 1941 the rapidly deteriorating Italian situation in North Africa could no longer be ignored. On 11 January, Hitler, with Mussolini's agreement, sent a blocking force (the 5th Light Division) to Tripolitania in mid-February. Additionally, he directed the Fliegerkorps to Sicily to attack the Royal Navy in the Mediterranean.<sup>73</sup> By 7 February, "the fast retreating Italian Army was cut off by the British... only weak and demoralized Italian troops now stood to prevent a British invasion of Tripolitania."<sup>74</sup>

To the Germans, North Africa was secondary in importance for two reasons. "Germany was a continental power and had only a weakly developed navy."<sup>75</sup> Initially the German aim for North Africa was to rescue the Italians who were in danger of being driven out of Africa.<sup>76</sup> Consequently when General Rommel was assigned as commander of Deutsches Afrika Korps, his assigned strategic purpose was to "conduct

an 'offensive defense' to act as a blocking force around Sirte."<sup>77</sup> Afrika Korps was meant to be only a blocking force to sustain Italian morale and to protect Libya from further British incursions.<sup>78</sup> "This Corps was to be under the Italian Commander-in-Chief in North Africa, General Gariboldi, but it was to be employed operationally as a single formation under Rommel."<sup>79</sup>

It should have been clear to Rommel that his instructions required him to tailor a campaign that would maintain a viable Axis presence in Tripolitania. The forces provided to him by Hitler were equipped to conduct an active defense around Sirte. "Hitler intended the Afrika Korps to be a stone wall. Rommel made it an avalanche, moving under laws of its own."<sup>80</sup>

While visiting Berlin on 19 March, Rommel received instructions for the conduct of the defense of Tripolitania. He was to concentrate on the defense of Tripolitania and only plan for the recapture of Cyrenaica. Rommel was not advised of the planned invasion of Russia.<sup>81</sup> Hitler did not advise Rommel of the incursion into Russia for fear of dampening Rommel aggressive spirit. However, in doing so Hitler failed to provide a critical part of his intent for the North African campaign. Perhaps if Hitler had provided the rationale for the economy of force effort in North Africa, Rommel would have developed a more realistic campaign plan.

Disregarding his instructions, Rommel launched an attack against El Agheila on 24 March (see Appendix 3). Upon discovering how weak the British positions were, Rommel

boldly pressed the attack. Under the original command agreement Rommel had the authority to appeal Italian orders to German Army Command (OKH) and Hitler in Berlin. Rommel use this link to thwart General Gariboldi's attempts to stop his advance across Cyrenaica.<sup>22</sup>

"The British attempts to delay, first around Agedabia to cover Benghazi and then on the line Derna-Mikili to cover Tobruk, were foiled by the faster and more powerful German tanks of the 21st Panzer Division ... the Germans ... thrust with two main spearheads, one forcing its way through the Jabel toward Derna the other dashing via Msus across the open desert toward Tobruk."<sup>23</sup> By 11 April the British had been driven out of Libya except for the Tobruk garrison. Rommel launched a hasty and poorly prepared attack on the Tobruk garrison on 10 April. This first attack failed. After being reinforced by the 15th Panzer Division, Rommel's second attempt on 30 April also failed. The remainder of the German forces now occupied positions vicinity of Bardia and Salum.<sup>24</sup>

For the remainder of the year, Rommel was to be on the defensive. He could not pursue into Egypt until Tobruk was taken and German strength was built up. Additionally, supplies and reinforcements were limited because of the June invasion of Russia as well as the British successes at interdicting the German and Italian sea lines of communication.<sup>25</sup> A German High Command inspection of Rommel's situation around Tobruk revealed that the Afrika

Korps was operationally over-extended. Additionally, the units were tactically strained and could not be adequately supported logistically. Even though Rommel's siege of Tobruk was given approval by OKH the limited strategic aim of defending Italian territory was reinforced.<sup>66</sup>

The British forces were under pressure by Churchill to strike back. Consequently, Wavell conducted two ill-prepared counterattacks. The first, called "Brevity", was designed to relieve Tobruk in May 1941. It was a miserable failure. In June operation "Battleaxe" was launched. Its objective was to destroy the German panzer units, relieve Tobruk and eventually continue on to Tripoli. "After suffering heavy tank losses, particularly from 88-mm guns, the British began to withdraw."<sup>67</sup>

From June to November 1941 there was a lull in the desert. Both sides utilized this pause to build up for planned offensive actions. "Rommel had developed his 15th and 21st Panzer Divisions into an effective desert-trained armored force... a new unit, the German 90th Light Infantry Division was being formed. The Axis frontier defenses had been strengthened."<sup>68</sup>

The British, reinforced by American tanks, planned a short "left hook" to relieve Tobruk. "Crusader" kicked off on 18 November and completely surprised the Germans. Over the next two weeks of the battle both sides employed forces in piecemeal, independent and uncoordinated actions. "Rommel threw away his chance to destroy the dispersed British armor in a characteristic gamble to finish the battle quickly."<sup>69</sup>

His mad "dash to the wire" failed to disrupt the British and put his force in jeopardy of being destroyed. Rommel was able to break through south of Tobruk and withdrew to the Ber el Gobi-El Adem line. By 12 December Rommel had reached the Gazala line. As it became evident to Rommel that he would be encircled, he retreated to the El Agheila position on 31 December. "Rommel now rested and refitted ... back where he had started nine months before (see Appendix 4)."<sup>20</sup>

Much to the shock of the Italian and German high commands, as well as to the British, Rommel launched an aggressive attack on 21 January 1942 (see Appendix 5). The British were caught off balance and fell back rapidly to avoid disaster. Rommel captured valuable stocks of supplies especially at Benghazi. By the end of January Rommel had been made a field marshal and the British had succeeded in establishing a defensive line south from Gazala. The Gazala line was weak, but the Germans needed time to reorganize. Rommel made no attempt to attack the British position for the next four months.<sup>21</sup>

On 11 June 1941, Hitler had ordered the drafting of Plan "Orient" (see Appendix 6). The intention of this plan was the eventual link-up of an advance through the Caucasus region with an attack into Egypt.<sup>22</sup> The attack through Egypt could not be seriously considered until victory in Russia was within reach.<sup>23</sup> However, "the Axis powers now had to defeat the British and, if possible, seize the Middle East before effects of American intervention became overwhelming."<sup>24</sup>

At this time Rommel's assigned aim ceased to be passive. Hitler made the decision that Malta had to be taken after which Rommel was to seize Tobruk and make preparations for an advance to the Nile.<sup>95</sup>

Although the assigned strategic aim for a theater of war may be greatly altered during the course of the war based on "the influences of actions and their consequences,"<sup>96</sup> the change must be realistic and the new aim attainable. The new German aim of striking at the Delta may not have been realistic based on the resources available and the difficulties in maintaining the long lines of communication in support of the advance.<sup>97</sup> "Rommel exercised an almost hypnotic influence on Hitler, which practically precluded an objective estimate of the situation."<sup>98</sup> It became evident that Rommel's "propaganda machinery" and poorly linked tactical successes were redefining Hitler's policy in a direction it originally did not want to go and toward an end state it could not realistically obtain.<sup>99</sup>

Even though plan "Orient" called for the linking up of an advance through the Caucasus with a push through Egypt, the German aim in North Africa from February 1941 through March 1942 remained to sustain the Italians and protect Tripolitania from British invasion.<sup>100</sup> Evaluation of Rommel's North Africa campaign from February 1941 to March 1942 reveals that he was able to prevent the Italian disintegration, as well as British incursion into Tripolitania.

Initially, it would appear that Rommel successfully

pursued his assigned strategic aim. However, the manner in which he accomplished the original strategic aim caused significant problems for the Germans. At the same time Rommel was prosecuting the African campaign, the Germans were planning and/or conducting the following operations:

"Felix" - the seizure of Gibraltar; "Marita" - the attack on Greece; "Attila" - occupation of the remainder of France; "Sealion" (eventually "Shark" - the dummy invasion) - the planned invasion of England and "Barbarossa" - the surprise attack of the Soviet Union.<sup>101</sup>

Rommel's headlong rush into Libya forced Hitler reluctantly to divert a portion of the forces originally designed for "Barbarossa". Hitler did not intend to expend significant amounts of resources in support of the North African campaign. Nothing was to interfere with "Barbarossa". However, that did not prove possible. North Africa eventually demanded a substantial effort at the expense of the Russian Campaign. To say that Rommel's actions decided the outcome of the Russian Campaign would be incorrect, however, they significantly affected its course.<sup>102</sup>

Rommel had created more of a "stir" than Hitler had hoped for.

Down the long boot of Italy, across a perilous sea, and across hundreds of kilometers of barren country ran the overstretched lines of communications at the far end of which the turbulent general clamored loudly for more- more fuel, ammunition, weapons, equipment and troops.<sup>103</sup>

Rommel's strategic guidance from GHO had provided three key elements necessary to plan and execute a campaign that

would achieve the desired end state. Rommel had been given a clearly defined strategic aim. He received adequate resources to accomplish that aim. Additionally, he was advised of the limitations imposed on the use of the allocated resources. However "by establishing operational aims far in excess of available resources, Rommel had accepted an unjustifiable operational risk."<sup>104</sup> Rommel had so endangered his own center of gravity that he risked losing the forces ability to accomplish the assigned passive aim.

Rommel failed properly to align his operational objectives with the assigned strategic aim for several reasons. First, Rommel's plan for defending Tripolitania from further British incursion rapidly turned into a major offensive to retake Cyrenaica and drive the British out of Egypt. However, it became clear that these tactical successes could not be sustained operationally. The resources allocated were not sufficient to support Rommel's operational plan.

The second reason for Rommel's operational failure was his failure to understand how his operations fit in the overall strategic plan. Hitler had failed to inform Rommel of the planned summer invasion of Russia. By not providing the rationale for the passive aim in North Africa, Hitler had failed clearly to explain his intent to Rommel. When Rommel heard of the invasion of Russia, it was already too late.<sup>105</sup>

Rommel's tactical successes soon became a problem for

GHO. Rommel not only failed properly to link his tactical successes to achieve a realistic operational goal, but he continually skirted attempts by his chain of command to enforce the limitations placed on his operations. Rommel's side stepping of the chain of command by going directly to GHO and in some cases Hitler added to the difficulty of developing an accurate estimate of the North African situation. This was compounded by the almost hypnotic effect Rommel's successes had on Hitler. These two factors obscured the fact that an advance into Egypt could not be supported logistically. The final result was the changing of a realistic passive aim of protecting Tripoltania to an unrealistic advance across North Africa in an attempt to drive the British out of Egypt.<sup>106</sup>

### CONCLUSIONS

FM 100-5 states that there are three basic requirements for the operational commander: determining what military conditions must be produced in the theater to achieve the strategic goal; sequencing actions to produce that military condition and applying the allocated resources to accomplish that required action.<sup>107</sup> In contrasting the British and German experience in North Africa with the requirements of FM 100-5, there appears to be no significant difference in what was required of those operational commanders who were assigned passive aims in this secondary theater of war. Moreover, both the British and the German commanders made "fundamental decisions about when and where to fight and

whether to accept or decline battle."<sup>108</sup>

Additionally, FM 100-5 emphasises the necessity to identify "the enemy's operational center-of-gravity . . . and concentrate superior combat power against that point to achieve a decisive success."<sup>109</sup> However, this may not be required nor desirable in a secondary theater of war with a passive aim. Clausewitz points out that "the very lack of a decision constitutes a success"<sup>110</sup> for a commander with an assigned passive aim. In a secondary theater of war with a passive aim, the accrued benefits of waiting not only further the attainment of the aim in that theater but can also complement the achievement of the aim in the primary theater. The British campaign in North Africa was conducted in such a manner that it not only accomplished its assigned aim but complemented the British main effort, the Battle for Britain. Meanwhile, the German campaign in North Africa detracted from the German invasion of Russia.

How can the operational commander in a secondary theater of war properly align his campaign plan with the assigned passive aim? A possible solution is for the operational commander to determine whether he can accomplish his assigned aim by simply protecting his own center of gravity. Moreover, the operational commander may determine that he need not attack the enemy's center of gravity to achieve this aim. It may be possible to neutralize an enemy capability thus preventing the enemy from successfully attacking his (operational commander's) center of gravity.

By conducting a successful five day raid the British were able to disrupt/destroy Italian logistical support and forward basing of aircraft. The loss of these assets eliminated any chance for a successful Italian incursion into Egypt. However, Rommel's failure properly to align his operational objectives with the assigned passive aim exposed his own center of gravity, risking the loss of his force's ability to accomplish the assigned passive aim.

Guidance to the operational commander should provide the strategic aims to be accomplished, adequate resources to accomplish that aim and clearly stated limitations on the use of assigned resources.<sup>111</sup> In both the British and German examples all three elements were present. Why then did Rommel fail while the British were successful?

The reason for the British success lies with Wavell's and O'Connor's appreciation for how their operations fit in the overall British strategic plan for prosecuting the war. Rommel did not have a similar appreciation. Why is it necessary for the operational commander in a secondary theater of war with a passive aim to understand the overall strategic context of the war?

Because an understanding of the whole facilitates the handling of the part, and because the part is subordinate to the whole. . . . If there are serious defects or mistakes in taking the situation as a whole and its various stages into account, the war is sure to be lost . . . .<sup>112</sup>

This understanding on the part of the operational commander will allow him to design a campaign plan that will not only accomplish the assigned passive aim, but also

complement the actions in the primary theater. Additionally, this understanding may prevent the design of a campaign plan that would significantly draw off resources from other more critical theaters.

A problem that faces the strategic planner in regard to a secondary theater of war with a passive aim is whether and when to change that aim to a positive one. There are several factors which impact on this decision. First, have conditions at the strategic level changed that require/allow a change in aim? A possible example would be where success in the primary theater has freed resources that can now be used in the secondary theater. Secondly, have conditions in the secondary theater changed that require/allow a change in aim? A possible example would be the disintegration of the enemy force that permits a change of mission with little or no required increase of resources.

It is clear that the British in deciding to change from a passive to a positive aim considered the impact subsequent operations would have within the secondary theater as well as at the strategic level. However, it is unclear whether this same process occurred on the part of the Germans or whether it was simply a situation of "the tail (Rommel) wagging the dog (German strategic planning)". It is imperative that limited tactical successes reinforced by a commander's "propaganda machinery" not become the main reason for the change to a positive aim.

The operational commander plays a key role in this decision. He must accurately portray the situation in his

theater to the strategic decision makers. He must also determine what additional resources are required to accomplish the new aim. The strategic decision maker can then decide whether this change will provide the desired strategic end state.

### IMPLICATIONS

This study arrived at several conclusions that are applicable to today's commander who is required to conduct operational art in a secondary theater of war with a passive aim.

1. The commander must understand his theater's role in relation to the overall strategic context of the war. The commander can then design operations that will not only accomplish the assigned aim but complement actions in the primary theater.

2. When a secondary theater is assigned a passive aim, the "essence of operational art" in that theater may not necessarily be "attacking the enemy's center of gravity". It may be more appropriate for the commander simply to protect his own center of gravity by stripping away an enemy capability that prevents the enemy from being successful in that theater.

3. The commander must accurately portray the cost of future operations to the strategic decision maker prior to executing those operations. Additionally, an operational commander should develop branches and sequels to these

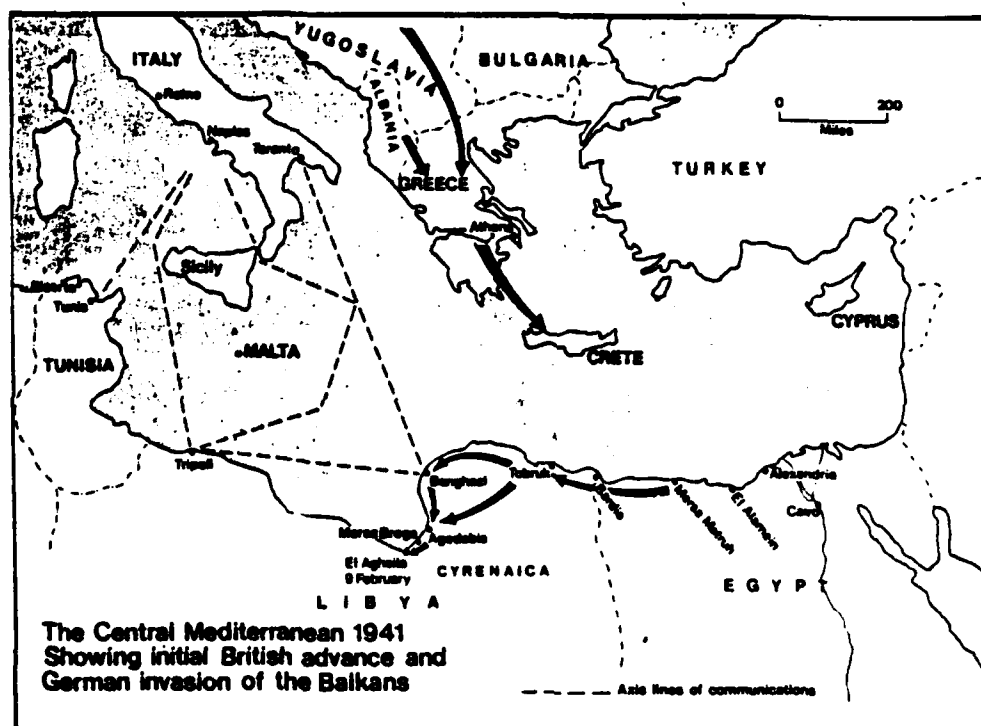
operations in the event previously allocated resources are diverted to the primary theater.

4. The strategic decision if and when to change from a passive to a positive aim should consider these two factors. First, the decision should be based on an accurate estimate of the situation by the operational commander. Secondly, the strategic decision maker must determine if conditions at the strategic and operational level require/allow a change in aim. The decision should not be based solely on limited tactical success within the secondary theater.

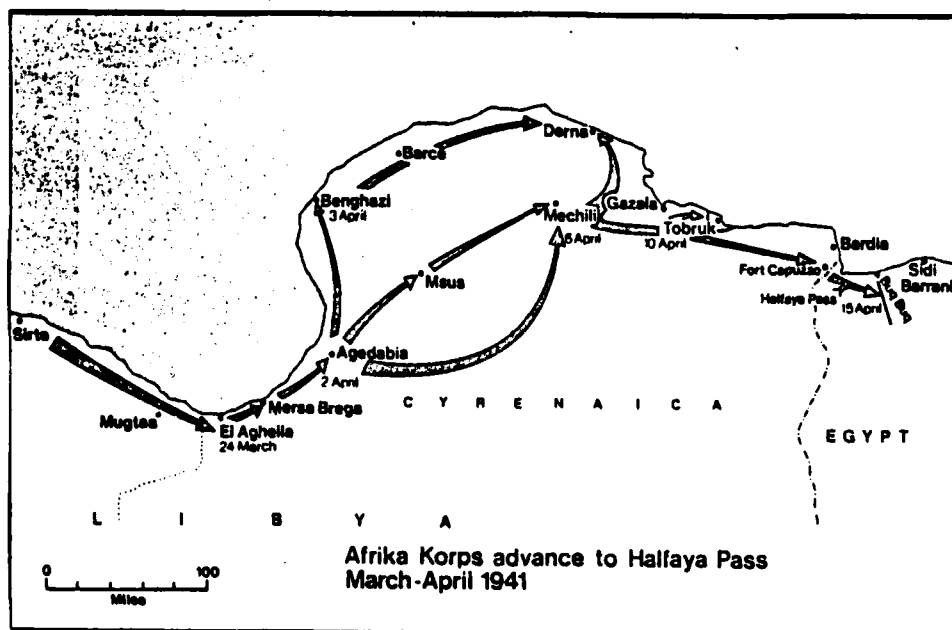
# Appendix 1. North African Theater of War<sup>113</sup>



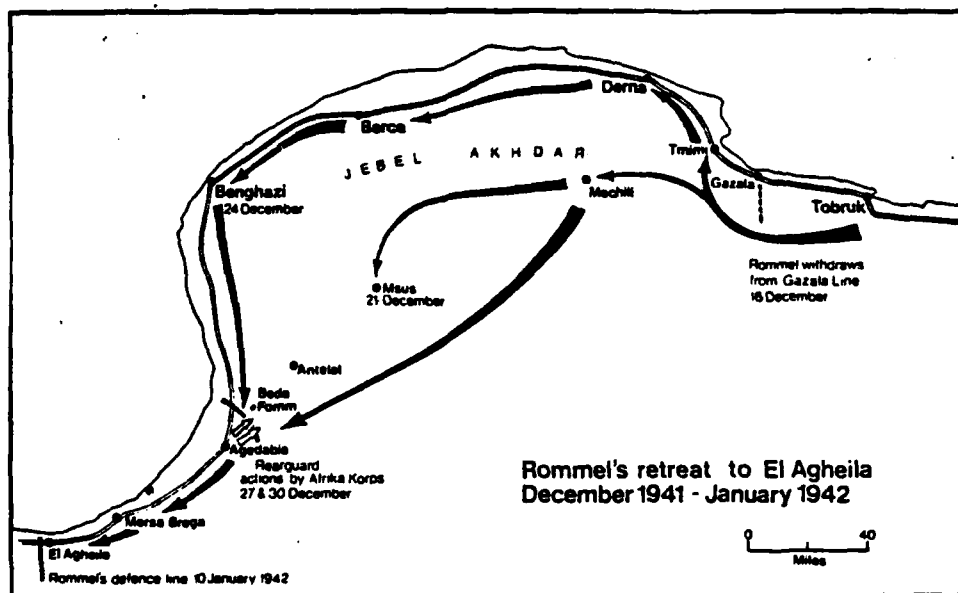
Appendix 2. British Advance: June 1940 to February 1941



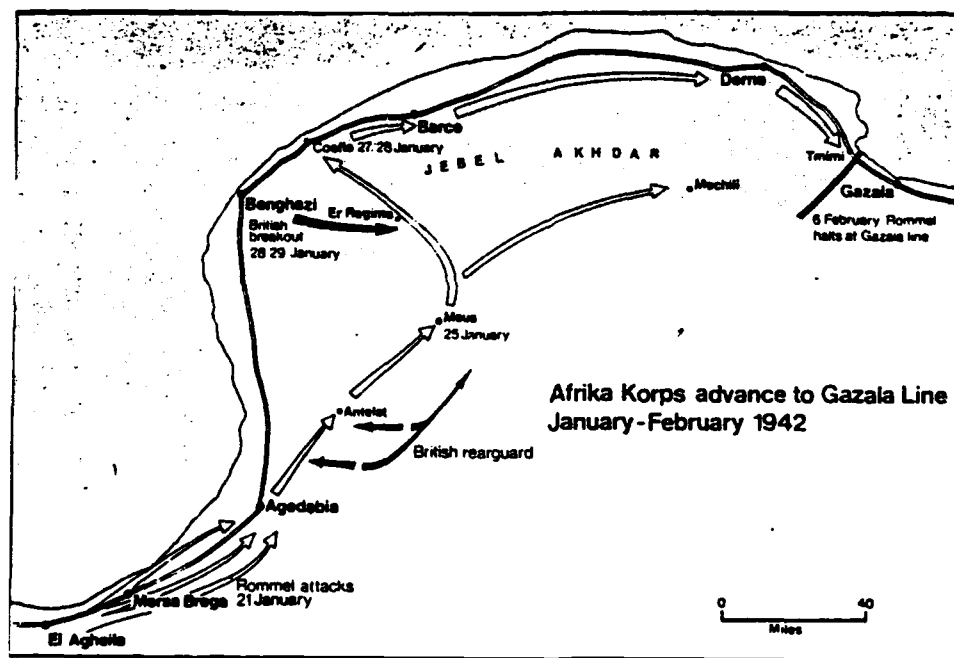
Appendix 3. Rommel's First Advance: March to April 1941



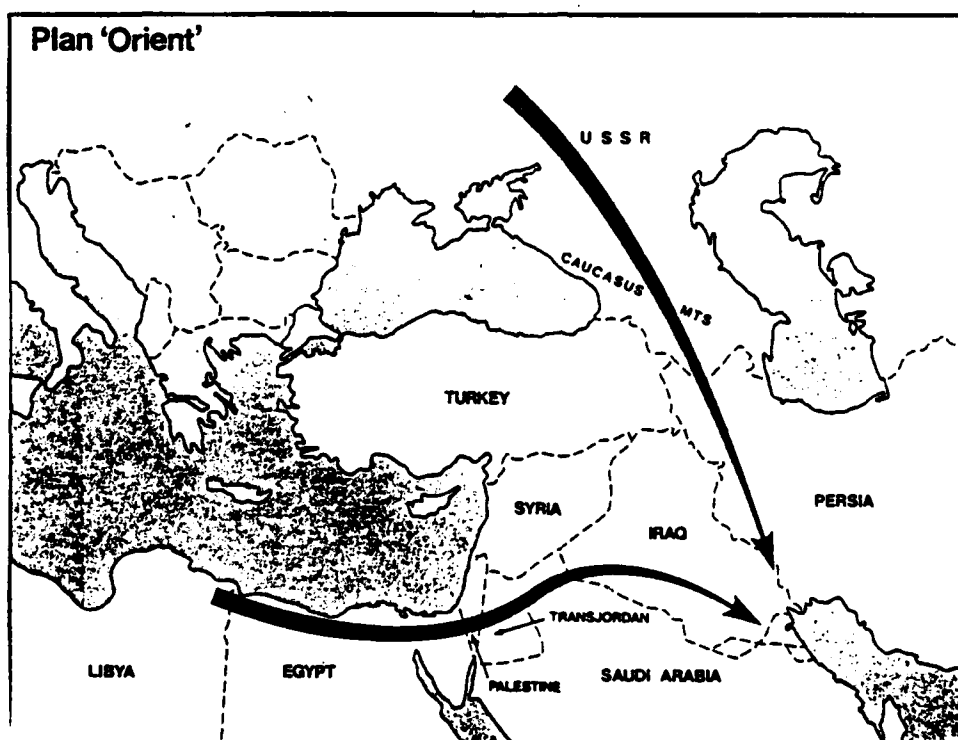
Appendix 4. Rommel's Retreat: December 1941 to January 1942<sup>115</sup>



Appendix 5. Rommel's Second Advance: January to February 1942<sup>117</sup>



Appendix 6. Plan Orientation



#### ENDNOTES

1. U.S. Army, Field Manual 100-5, Operations, (Washington, D.C., May 1986), p. 10.
2. Ibid.
3. Carl Von Clausewitz, On War, trans. and ed. by Michael Howard and Peter Paret (Princeton, New Jersey: Princeton University Press, 1976). p. 92
4. Ibid.
5. Field-Marshal Sir William Slim, Defeat into Victory, (London, 1956), pp. 203-205.
6. Brigadier General Vincent J. Esposito, The West Point Atlas of American Wars, Volume II: 1900-1953, (New York, 1972), pp. 105-107.
7. Clausewitz, p. 614.
8. Correlli Barnett, The Desert Generals, (Bloomington, Indiana, 1982), p. 22.
9. Ronald Lewin, The Life and Death of the Afrika Korps, (New York, 1977), pp. 13-14.
10. Baron De Jomini, The Art of War, translated by G.H. Mendell and W.P. Craighill, (West Port, Conn., 1977), p. 74.
11. Clausewitz, p. 614.
12. Ibid, p. 613.
13. Department of Military Art and Engineering, The War in North Africa, (USMA, West Point, New York, 1951), p. 1.
14. Ibid, p. 2.
15. Barnett, p. 24.
16. Department of Military Art and Engineering, p. 3.
17. L.S.O. Playfair, History of the Second World War: The Medeterranean and Middle East: Volume I, (London, 1954), pp. 23, 85, 99. and W.G.F. Jackson, The Battle for North Africa: 1940-1943, (New York, 1975), p. 20.
18. Barnett, p. 26.

19. Playfair, p. 118.
20. Barnett, p. 26.
21. Ibid, pp. 26-29.
22. Playfair, p. 118.
23. Barnett, p. 28.
24. Clausewitz, pp. 381-382.
25. James Lucas, War in the Desert, (New York, 1982), p. 18.
26. Playfair, p. 207.
27. Barnett, pp. 28-29.
28. Playfair, p. 198., and Barrie Pitt, The Crucible of War: Western Desert 1941, (London, 1980), p. 64.
29. Barnett, pp. 28-29.
30. Playfair, p. 190.
31. Ibid, p. 215.
32. Barnett, pp. 30-31., Jackson, p. 41., and Playfair, pp. 258-260.
33. Playfair, pp. 230-232.
34. Barnett, p. 35. and Playfair, p. 265.
35. Playfair, p. 265.
36. Department of Military Art and Engineering, p. 33.
37. Playfair, p. 271.
38. Department of Military Art and Engineering, p. 6. and Playfair, pp. 265, 273 and 275.
39. Department of Military Art and Engineering, p. 6.
40. Barnett, p. 45.
41. Playfair, pp. 277 and 288.
42. Barnett, p. 45.
43. Ibid.
44. Ronald Lewin, The Chief, (New York, 1980), pp. 78-79.

45. Barnett, p. 47.
46. Department of Military Art and Engineering, p. 6.
47. Playfair, p. 298.
48. Clausewitz, p. 92.
49. Barnett, p. 51.
50. Barnett, pp. 52-58., Department of Military Art and Engineering, p. 6. and Lewin, pp. 88-89.
51. Barnett, pp. 57-58. and Department of Military Art and Engineering, pp. 4-9.
52. Playfair, p. 10.
53. Barnett, p. 65.
54. Playfair, p. 364.
55. Clausewitz, pp. 381-382.
56. Ibid.
57. Ibid, p. 383.
58. Ibid.
59. Barnett, pp. 30-31.
60. Clausewitz, p. 613.
61. FM 100-5, p. 15.
62. Ibid, p. 30.
63. Clausewitz, p. 597.
64. Lewin, p. 87.
65. Barnett, pp. 58-65. and Lucas, pp. 18-19.
66. Barnett, p. 45.
67. Jackson, p. 36.
68. Lucas, p. 265., Note: "Ultra" refers to the messages received from Bletchley Park Intelligence Centre, known as the Government Code and Cypher School. Before the outbreak of the Second World War, the Allied Intelligence organization had obtained a German cypher device known as "Enigma", and by crypto-analysis had used it to read the messages which passed

between German headquarters.

69. Ibid, p. 19.

70. Kenneth Macksey, Rommel's Battles and Campaigns, (London, 1979), p. 46.

71. Ronald Lewin, The Life and Death of the Afrika Korps, (New York, 1977), pp. 13-14.

72. Macksey, p. 46.

73. Lewin, The Life and Death of the Afrika Korps, p. 14., and Macksey, p. 49.

74. Macksey, p. 49.

75. Maj. Richard Feige, "Relationship Between Operations and Supply in Africa". Donald S. Detwiler, gen editor, World War II German Military Studies, 24 vols. (New York: Garland Publishing, 1979), vol. 14: Part IV. The Mediterranean Theater, continued, MS R D-125, p. 2.

76. Lucas, p. 14.

77. Ibid, p. 19.

78. Pitt, p. 242.

79. Macksey, p. 49.

80. Lewin, p. 16.

81. Macksey, p. 53.

82. Ibid, pp. 49-55.

83. Department of Military Art and Engineering, p. 8.

84. Esposito, p. 74., and Macksey, p. 8.

85. Macksey, p. 61.

86. Pitt, p. 275.

87. Department of Military Art and Engineering, p. 9.

88. Ibid, p. 10.

89. Ibid, p. 11.

90. Ibid, pp. 11-12.

91. Department of Military Art and Engineering, pp. 12-13. and Field Marshal Albert Kesseler, "The War in the

Mediterranean Area". Donald S. Detwiler, gen editor, World War II German Military Studies, 24 vols. (New York: Garland Publishing, 1979), vol. 14: Part VI. The Mediterranean Theater, continued. MS R T-3 P1, p. 37.

92. Macksey, p. 68.

93. Ibid, pp. 68-71.

94. Ibid, p. 95.

95. Feige, pp. 3-4., Field Marshal Albert Kesselering, "Final Commentaries on the Campaign in North Africa 1941-1943". Donald S. Detwiler, gen editor, World War II German Military Studies, 24 vols. (New York: Garland Publishing, 1979), vol. 20: Part VIII. Diplomacy, Strategy and Military Theory, MS R C-075, p. 17. and Macksey, pp. 95-97.

96. Clausewitz, p. 92.

97. Kesselering, "Final Commentaries on the Campaign in North Africa 1941-1943", pp. 13-14.

98. Ibid, p. 17.

99. Ibid, pp. 16-18.

100. Lucas, p. 19., Pitt, p. 242., and Macksey, p. 49.

101. Wolf Heckmann, Rommel's war in Africa, (New York, 1981), p. 52.

102. Ibid.

103. Ibid.

104. Maj. Donald E. Kirkland, Rommel's Deseret Campaigns, February 1941-September 1942: A Study in Operational Level Weakness, (US Army Command and General Staff College, Fort Leavenworth, Kansas, Unpublished SAMS monograph, 21 May 1986), p. 19.

105. Lewin, p. 16.

106. Kesselering, "Final Commentaries on the Campaign in North Africa 1941-1943", pp. 13-17.

107. FM 100-5, p. 10.

108. Ibid.

109. Ibid.

110. Clausewitz, p. 383.

- 111. FM 100-5, p. 24, and Kirkland, p. 14.
- 112. Mao Tsetung, Selected Military Writings of Mao Tsetung. (Peking: Foreign Languages Press, 1972 (SAMS reprint)), pp. 81-82.
- 113. Michael Carver, El Alamein. (New York: MacMillan Co., 1962), p. 12.
- 114. Macksey, p. 48.
- 115. Ibid, p. 52.
- 116. Ibid, p. 85.
- 117. Ibid, p. 93.
- 118. Ibid, p. 68.

## BIBLIOGRAPHY

### Books

- Barnett, Correlli. The Desert Generals. Bloomington, IN: Indiana University Press, 1982.
- Blumenson, Martin. Sicily: Whose Victory?. Ballantine Books, 1969.
- Carell, Paul. The Foxes of the Desert. New York, NY: E.P. Dutton & Co., 1961.
- Carver, Michael. El Alamein. New York, NY: MacMillan Co., 1962.
- Clausewitz, Carl Von. On War, trans. and ed. by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.
- Detwiler, Donald S. gen. editor, World War II German Military Studies, 24 vols., Vol 14: Part IV. The Mediterranean Theater, continued. MS R T-3 P1, Field Marshal Albert Kesselering., MS R D-125, Major Richard Feige., and Vol 20: Part VIII. Diplomacy, Strategy and Military Theory. MS R C-075, Field Marshal Albert Kesselering
- Esposito, Vincent J., BG. The West Point Atlas of American Wars, Volume II: 1900-1953. New York, NY: Prager, 1972.
- Heckman, Wolf. Rommel's War in Africa. New York, NY: Doubleday & Co. Inc., 1981.
- Irving, David. The Trail of the Fox. New York, NY: Avon Books, 1977.
- Jackson, W.G.F. The Battle for North Africa: 1940-43. New York, NY: Manson/Charter, 1975.
- Jomini, Baron De. The Art of War. trans. by C.H. Mendell and W.P. Craighill, West Port, Conn: 1972.
- Lewin, Ronald. The Chief. New York, NY: Farrar, Straus and Gironx, 1980.
- Lewin, Ronald. The Life and Death of the Afrika Korps. New York, NY: The New York Times Book Club, 1977.
- Lucas, James. War in the Desert. New York, NY: Beaufort Books Inc., 1982.

- Macksey, Kenneth. Rommel's Battles and Campaigns. London: Cox & Wyman Ltd., 1979.
- Mitcham, Samuel W. Rommel's War: The Life and Death of the Afrika Korps. New York, NY: Steinand Day, 1982.
- Pitt, Barrie. The Crucible of War: Western Desert 1941. London: Jonathan Cape, 1980.
- Pitt, Barrie. The Crucible of War: Year of Alamein 1942. London: Jonathan Cape, 1982.
- Playfair, L.S.O. History of the Second World War: The Mediterranean and Middle East: Volume I. London: Her Majesty's Stationary Office, 1954.
- Playfair, L.S.O. History of the Second World War: The Mediterranean and Middle East: Volume II. London: Her Majesty's Stationary Office, 1956.
- Playfair, L.S.O. History of the Second World War: The Mediterranean and Middle East: Volume III. London: Her Majesty's Stationary Office, 1960.
- Rommel, Erwin (Edt. by B.H. Liddel Hart). The Rommel Papers. New York, NY: Harcourt, Bruce and Company, 1953.
- Slim, Sir William, Field-Marshal. Defeat into Victory. London: Cassell and Company LTD, 1956.
- Strawson, John. The Battle for North Africa. New York, NY: Charles Scribner's Sons, 1969.
- Tsetung, Mao. Selected Military Writings of Mao Tsetung. Peking: Foreign Language Press (SAMS Reprint), 1972.
- Van Creveld, Martin. Supplying War. New York, NY: Cambridge University Press, 1977.

#### Field Manuals

- Field Manual 100-5, Operations. Washington, DC: HQ Department of the Army, 1986.

#### Theses, Studies and Other Papers

- Kirkland, Donald E., Maj. "Rommel's Desert Campaigns, February 1941-September 1942: A Study in Operational

Level Weakness." Unpublished Monograph. SAMS: Ft.  
Leavenworth, KS, 1986.

Department of Military Art and Engineering, The War in North  
Africa. USMA: West Point, NY: 1951.

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