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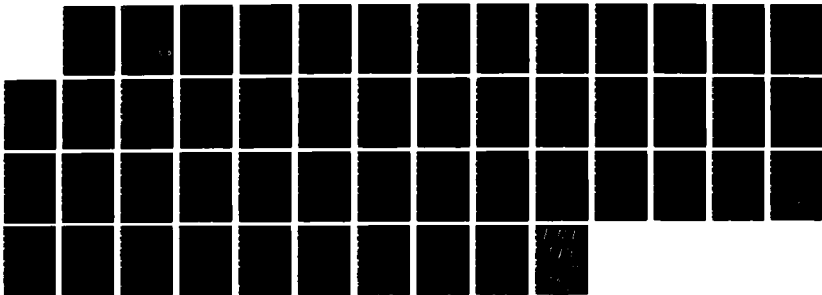
PROTECTING THE FORCE: THE THIRD DIMENSION OF  
OPERATIONAL MANEUVER(U) ARMY COMMAND AND GENERAL STAFF  
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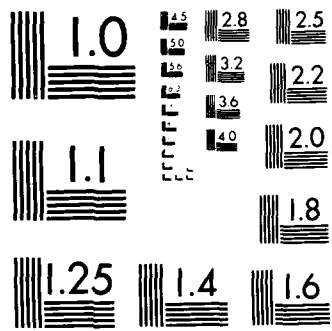
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PROTECTING THE FORCE: THE THIRD  
DIMENSION OF OPERATIONAL MANEUVER

by

LTC GARY M. STEWART  
AIR DEFENSE ARTILLERY

Advanced Operational Studies Fellowship Program  
School of Advanced Military Studies  
US Army Command and General Staff College  
Fort Leavenworth, Kansas

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Name of Fellow: LTC Gary M. Stewart

Title of Research Paper: Protecting the Force: The Third Dimension of Operational Maneuver

Approved by:

Harold R. Winton

Monograph Director

(Lt. Colonel Harold Winton, Ph. D.)

Richard H. Sinnreich

Director, School of Advanced  
Military Studies

(Colonel Richard H. Sinnreich, MA)

Gordon Sullivan

Deputy Commandant, U. S. Army  
Command and General Staff College

(Major General Gordon Sullivan, MS)

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## ABSTRACT

**Protecting The Force: The Third Dimension of Operational Maneuver by  
LTC Gary M. Stewart, USA, 42 pages.**

**This paper focuses on relationships between maneuver and counterair operations at the operational level of war. It seeks to determine key elements of air threat protection doctrine in support of operational maneuver. Its methodology first examines theory behind maneuver and protection as elements of combat power before using the 1973 Arab-Israeli War and the 1982 Falklands War as historical examples which show recent wartime relationships between maneuver and counterair force protection. A look at current doctrine then establishes a baseline for comparison with key points from the theoretical and historical analyses. Results of this comparison provide observations concerning U.S. doctrine and the needed interface between theater maneuver and counterair operations.**

**Insights concerning the air threat, dominance of the air, jointness and synchronization to include its components indicate that some changes may be needed in U. S. doctrine for maneuver and counterair operations during campaign planning and execution. Pertinent lessons in these areas appear to be learned and relearned but not remembered. Implications of these lessons learned may be serious for NATO where the air and counterair threats are much more serious than in the Falkland and MidEast theaters of war.**

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## I INTRODUCTION

Commanders have always faced the dilemma between protection and maneuver: the desire of maneuvering to win versus uncovering the force to maneuver. What are the risks to force protection during maneuver and what is the relationship between maneuver and protection? Maneuver and force protection are two of the dynamics of combat power, the ability to fight.<sup>1</sup> The commander's ability to achieve a balance between protection and maneuver became significantly more difficult with the advent of airpower.

The nature of warfare constantly changes. Airpower's birth during World War I, its World War II development and its ascendancy since then to the missile age have changed forever the business of warfighting. In recent years, technology has focused intently on adding greater sophistication to both airpower and counters to it. As a result, the effects of airpower significantly influence our military doctrine at all levels of war. Airpower has frequently affected the outcome of operational maneuver during campaigns and major operations. In fact, control of the air or the third dimension of warfare may be the dominant element of force protection or perhaps even of warfighting.

Army doctrine states that the future battlefield is "likely to be chaotic, intense and highly destructive."<sup>2</sup> It also says that "maneuver will rarely be possible without firepower and protection" and that "operational maneuver requires protection from enemy airpower."<sup>3</sup> Doctrine for countering the air threat and providing force protection to support maneuver is currently changing to meet the increased sophistication of the air threat and ways to counter it. It is also important that Army doctrine for prosecution of AirLand Battle maneuver mesh with doctrine for countering the air threat and with related doctrine of the "Sister Services." Without doctrines which interface with each other, synchronization of the effects of both the ground and air operations within a theater campaign plan most likely will not occur. This could produce potentially disastrous results.

Given that maneuver and force protection are two elements of combat power which should mesh and that a major element of force protection involves protection against the air threat, this paper seeks to determine what should comprise the key elements of air threat protection doctrine in order for it to support operational maneuver.

The scope of this paper limits the discussion primarily to the operational level of war for both maneuver and counterair. The paper presumes some knowledge of the Soviet air threat and restricts itself to a mid to high level intensity conflict in a European environment. The 1973 Yom Kippur War and the 1982 Falklands War are the principal historical cases for examination. This paper will not address applications of space technology, although it recognizes that strategic space systems could have a direct effect on the operational level of war.

The methodology is straightforward. It begins with the age-old theoretical discussion of maneuver versus protection in an effort to articulate ideas which will more closely link the Army's counterair doctrine and its keystone warfighting manual, FM 100-5. The specific research question of this paper is "What should be the essential elements of doctrine for the protection of US forces to meet the requirements for operational maneuver?" The plan is to examine first the theory behind maneuver and protection as elements of combat power. After establishing protection against the air threat as a major element of force protection, an analysis of both the 1973 Arab-Israeli War and the 1982 Falklands War for pertinent observations relevant to protection and maneuver will ensue. At this point, an examination of current US doctrine for operational maneuver and force protection will establish a baseline for comparison with key points from the theoretical and historical analyses. The conclusions will hopefully provide useful observations for the continued refinement of Army doctrine concerning the linkages between operational maneuver and counterair operations.

The next section addresses operational maneuver and protection as elements of combat power and also provides a summary analysis of pertinent observations

concerning operational maneuver and protection against the air threat during both the 1973 Yom Kippur War and the 1982 Falklands War.

## II INSIGHTS FROM THEORY AND HISTORY

General. FM 100-5 identifies maneuver and protection as two of the four dynamic elements of combat power. An examination of the theoretical roots of these elements will illuminate our historical and contemporary analysis. It is important to remember that a theory is simply a proposition, an expression of an unproven relationship or perhaps a series of insights. Doctrine, however, begins with theory and, hopefully, contains principles which are supported by evidence. Doctrine then adds a guide to action on employing the theory or principles and also contains an authoritative sanction for its use. Section III will focus more on current doctrine. It is equally important to recognize that history offers lessons learned in all aspects of warfighting. The 1973 Yom Kippur War and the recent 1982 Falklands War are the historical vehicles within this paper for examination of relevant linkages between maneuver and protection against the air threat at the operational level. Analysis of these historical examples should lead to informed observations concerning the dynamic relationship between operational maneuver and counterair force protection.

### THEORY

Operational Maneuver. Some definitions are needed. Maneuver is movement relational to the enemy to gain an advantage. It is the projection of combat power against the enemy. More simply stated, maneuver is the dynamic element of combat.<sup>4</sup>

What then is operational maneuver? The operational level of war is the level at which tactical means are used to achieve strategic objectives, usually via the conduct of campaigns and major operations. It cannot and should not be related directly to a corresponding level of command. One can think of operational maneuver as an

attempt at the operational level to gain a positional advantage over an enemy for the purpose of exploiting that advantage.<sup>5</sup> Or, put in another way:

Effective operational maneuver consists of the ability to position forces in such a way as to tip the local combat power balance in one's favor.....It is thus a function of unit mobility, effective tactical analysis, effective management of resources and effective command, control and communications.<sup>6</sup>

Operational depth is a related, important concept which may help in understanding operational maneuver. Operational depth is the area in which maneuver is achieved and, if gained by the attacker, provides the opportunity to destroy the defender without engaging the majority of the defenses.<sup>7</sup> Operational depth is not necessarily related to a specific level of command either and can change in dimension during the course of a battle or campaign. The ability to shift from a limited degree of maneuverability to operational maneuver signals the crossover from tactical to operational depth.<sup>8</sup>

Effective operational maneuver is difficult to achieve and requires sound anticipation of the enemy's actions to manage the battle stage properly. A mission of the operational commander is to prepare the battlefield by positioning large forces correctly before the battle. Primary planning and execution challenges to operational maneuver include the monitoring of combined arms cooperation, sustaining the force logistically and movement control.<sup>9</sup> A key to operational success is tactical success. It is difficult to conduct operational maneuver without a degree of tactical competence and materiel quality at least equal to those of one's opponent.<sup>10</sup> Operational depth provides the opportunity to conduct operational maneuver and the potential to destroy the enemy and achieve victory. It is sobering to recall during this period of rebirth for US operational maneuver that Soviet theorists defined the parameters of the operational level of war (to include operational maneuver) in the 1920s and concluded that operational success was a prerequisite for strategic success.<sup>11</sup>

Protection. Protection includes many things, one of which is protection from air threats. Protection is defined as the shielding of the fighting potential of the force so that it can be applied at the decisive time and place.<sup>12</sup> Protection's two major components are (1) actions to counter the enemy's firepower and maneuver and (2) actions to keep soldiers healthy with good morale.<sup>13</sup> It is the positive effects from protection which contribute directly to combat power. The name of the game in warfare is to achieve superior combat power relative to the enemy at the decisive time and place. Leaders attempt to accomplish this by maximizing the effects of their own capabilities while degrading those of the enemy.<sup>14</sup>

Leaders today have threats to their forces not only from the ground and sea, but also from the air in the form of aircraft, missiles, aerial platforms, sensors, etc.

Aviation gives modern land battle a third dimension: height.  
Forces no longer fight for surfaces, limited to length and breadth;  
modern battle is the fight for cubic space.<sup>15</sup>

The airspace over the battlefield today will be crowded with high quality aerial combat, aerial surveillance, reconnaissance, target acquisition and air defense systems and weapons designed to deny the enemy use of battlefield airspace.<sup>16</sup> The enemy will seek to use his air assets to destroy our combat power. As Giulio Douhet said in 1921, "To have command of the air means to be in a position to wield offensive power so great it defies human imagination" and "To conquer the command of the air means victory."<sup>17</sup> It follows that protection of the force must include measures to counter the enemy's airpower and preserve friendly combat power for prosecution of the war.

Having briefly reviewed the theory of maneuver and protection, it is appropriate to examine a Middle East war and the Falkland Islands for insights concerning the dynamic interface between operational maneuver and counterair force protection during war.

Background. The origins of the 1973 Arab-Israeli Yom Kippur War trace back to the 1967 "6 Day War", during which the Israeli Air Force (IAF) destroyed the Egyptian Air Force on the ground in a matter of hours with a 5 June 1967 pre-emptive air attack. Five days later, the war was over with the Israelis victorious.<sup>18</sup> The Arabs, particularly the Egyptians, would remember this lesson well, even during the so-called War of Attrition from 3 March 1969 to 8 August 1970.

With the help of Russian training and equipment, the Egyptians constructed and occupied hundreds of new Surface to Air Missile (SAM) sites from 1970 to 1972. The Egyptians recognized both their weakness and the Israeli strength in the air and decided to challenge the continuing Israeli air superiority with SAMs in any future war, which they believed inevitable.<sup>19</sup> By June 1970, the Russians and Egyptians had created an extensive and integrated SAM defense over the entire Central and Southern sectors along the Suez Canal, an area 45 miles long and 20 miles deep. These SAM sites, primarily Russian SA-2s and SA-3s, were mutually supporting with overlapping fires and the entire system was reinforced by heavy concentrations of conventional anti-aircraft weapons.<sup>20</sup> Later, the Russians added a brigade of the newer, more sophisticated and more mobile SA-6 systems to this defense, which by 1973 would total over 150 SAM batteries and 2500 Anti-Aircraft (AA) guns, making it one of the most dense missile walls in the world.<sup>21</sup>

During the month of June 1970, the Egyptians used the cover of night to leapfrog many of the reconstituted SAM units forward into "the strip" along the west side of the Suez Canal and fortify these positions. This was a critical move because it allowed the Egyptians to control the airspace over the Suez Canal and the Israeli front lines, but remain out of Israeli artillery range.<sup>22</sup> This enhanced an Egyptian crossing of the Suez Canal and would also affect later development of Egyptian offensive plans for operational maneuver. Soviet assistance also included several squadrons of newer MIG aircraft, BMP vehicles, SAGGER anti-tank missiles and both FROG and SCUD surface to surface missiles which provided a deep-strike capability.<sup>23</sup> By 1973, the Egyptian

Army's strength exceeded 1 million men and 2200 tanks while the Air Force had over 550 first line aircraft. As Gen. Shazly, Egyptian Commander-in-Chief, said later: "Without the help of the Soviet Union, our battle would have been impossible."<sup>24</sup>

Preparations for the 1973 War involved the widest Arab participation since the 1948 War with Egypt, Syria and Jordan the leading participants. Eight Arab States would commit forces against Israel during the war.<sup>25</sup>

The Arab Campaign Plan. The Arabs based their campaign plan on perceived solutions to the biggest problems posed by the Israeli Defense Force (IDF) - their Air Force and Armored Corps. These solutions rested in SAMs and anti-tank missiles which were provided the Arabs in great quantities. The Egyptians realized that the Israelis were clearly superior in offensive, mobile warfare involving swift, armored thrusts with closely coordinated air support and requiring aggressiveness, initiative and flexibility.<sup>26</sup> Egypt's plan for the war sought to launch a rapid, large-scale offensive into the Sinai and achieve a defensive, static situation so that the deployed SAMs and anti-tank missiles could destroy the two primary offensive shock components of the IDF - the Air Force and Armored Corps.<sup>27</sup> The extent of any initial Egyptian drive east of the Canal was restricted by the SAM umbrella to about 6 miles. Gen. Shazly, the Commander in Chief and operational commander of all Egyptian forces, stated:

Any advance by our troops east of the Canal would need the support of an air defense based on SAMs.....Our SAMs would remain west of the Canal, out of range of the enemy's field artillery, until that had been destroyed or driven back. Initially, until the SAMs could be moved ponderously forward, the depth of the SAM umbrella east of the canal would be very limited.<sup>28</sup>

The Egyptian campaign plan called for an attack across the Canal against the Israeli Bar-Lev line simultaneous with a Syrian attack on the northern front. It stemmed from an elaborate deception plan linked to a yearly strategic exercise which began with a test of the Egyptian mobilization system.<sup>29</sup> The Egyptian Plan BADR had 3 phases. First, 5 Divisions (2d Army in north with 3 Divisions, 3d Army in south with 2

Divisions) would assault across the Canal to seize division bridgeheads and destroy the Israeli Bar-Lev Line. Second would be bridgehead expansion and an "operational hold" during which battle under conditions favorable to the Egyptians could cause maximum attrition of Israeli forces moving forward to relieve the Bar-Lev Line. This worked in that the IAF suffered heavy losses, 50 planes in the first 3 days, early in the war to the mixed, well-synchronized, high-low SAM and AA fires. The second Egyptian operational echelon of 2 Armored and 2 Mechanized Divisions with supporting artillery and SAMs would cross the Canal during this phase. Third, on order, Egyptian forces would penetrate Israeli forces on two main thrusts to seize the operational objectives of key passes about 60 km. to the east.<sup>30</sup>

The Syrian campaign plan was similar to that of Egypt. First, a massive armor attack would seize the Golan Heights. Second would follow occupation of defensive positions on the Jordan River and Sea of Galilee and movement of SAMs forward. Last would be meeting the Israeli counterattacks head-on and conducting a war of attrition.<sup>31</sup>

Israeli Campaign Plan. Israel based its war plans on three elements. The first element was a small standing ground force to hold the enemy until the bulk of IDF units, mostly reserves, mobilized. The second element was the IAF with a large, active, regular component and the third element was Israel's intelligence system, tasked to provide at least 48 hours warning of an attack. The intelligence system failed on 6 October 1973 and the Egyptians and Syrians achieved surprise at least at the tactical and operational levels with their attack.<sup>32</sup>

After the Arabs attacked on 6 October and inflicted heavy losses on both Israeli fronts, the Israelis faced the difficult strategic task of fighting a two-front war against Syria, Jordan and Iraq in the North and Egypt in the South. Since Israel could not attack on two fronts simultaneously and because of the nearer Syrian threat, the strategy gave initial priority to attacking the Syrians in the air and on the ground while defending in the south against the Egyptians.<sup>33</sup> Southern front forces were to

defend first while avoiding attrition, prevent enemy successes and prepare for the offensive. After Syria's defeat, a ground and air offense in the south was planned and included crossing of the Canal.<sup>34</sup> Each front commander fought at the operational level using the battles and engagements of his units to achieve strategic results on his respective front.

Execution of the Campaign Plans - Operational Maneuver and Counter Air. The map at Appendix A shows key locations on the southern front. The Egyptian canal crossing and assault of the Bar-Lev Line on 6 October were brilliantly successful, and by 8 October Egyptian bridgeheads were 6 miles deep, at about the edge of SAM coverage. Operational and tactical maneuver to execute the Egyptian campaign plan were geared to be kept totally under the SAM umbrella. Three armored brigades functioned behind the line as the Israeli mobile, operational level reserve. Piecemeal Israeli counterattacks by reserve units rushing into battle took heavy casualties from 9-11 October, many from Egyptian anti-tank missile fire. An Egyptian mechanized infantry brigade attempted to extend the bridgehead south on 10 October and was entirely destroyed (all 50 tanks) by the IAF as the Brigade's maneuver took it outside the SAM umbrella.

In open country outside the protection of our SAMs, the Brigade was routed by the enemy Air Force. Not a single tank or field piece fired a shot. The decisiveness of the encounter was a reminder, if we needed one, of how open our ground forces were to air attack the moment they left our SAM umbrella.<sup>35</sup>

Meanwhile, on the northern front with the full support of the IAF, the situation had stabilized by 12 October after some difficult moments for the undermanned and undergunned Israelis. An Israeli multi-division counterattack into Syria on 11 October made steady progress into Syria's operational depth and led to Syrian demands that Egypt end its "operational hold" and resume the offensive to relieve pressure from the northern front.<sup>36</sup> With the exception of Israel's successful armored engagements with an Iraqi Armored Brigade on 13 October and a Jordanian Armored

Brigade on 16 October, IDF units steadily pushed back Syrian forces until Syria accepted a cease fire on 22 October.

In spite of strong objections from Gen. Shazly, President Sadat ordered his forces to execute Phase 3 of the campaign plan by attacking on 14 October. They attacked with 2 divisions on a four brigade front against an Israeli force which outnumbered them 900 tanks to 400 tanks and into an environment outside of their SAM umbrella, dominated by the IAF.<sup>37</sup> As predicted by Gen. Shazly, the results were disastrous. The Egyptians lost over 250 tanks compared to the loss of only 10 IDF tanks. It should be noted that the Israeli plan to contain the Egyptian Phase 3 counterattack was to let Egyptian armor move east away from their infantry support and out of their SAM umbrella before blocking and attacking them from the ground and air. The Israelis were also critical of the Egyptian doctrine which copied Soviet doctrine of a multi-axis breakthrough rather than concentration of firepower at a critical point.<sup>38</sup>

The momentum had clearly shifted to the Israelis who were ready now to execute that part of their campaign plan which carried the war to Egyptian soil. It appears that the Egyptians reached their offensive culminating point at about the same time the Israelis reached their defensive culminating point. In other words, the Egyptian offensive stalled at about the same time that it was most opportune for the Israelis to shift from the operational defensive to the operational offensive. The Israeli plan was for a two division assault crossing just north of Great Bitter Lake at Deversoir to break into the Egyptian operational depth, destroy SAM sites west of the Canal providing the IAF freedom of action and then attack north and south.<sup>39</sup> The Deversoir attack location was picked because it was on the seam between the Egyptian 2d and 3d Armies, a weakness identified by earlier reconnaissance. The planned crossing was to support a general IDF counteroffensive designed to destroy Egyptian forces on the West bank and, hopefully, encircle the 3d Army.<sup>40</sup>

After a tough fight, initial IDF units crossed the Canal on 18 October and split with one Division attacking north and another attacking west and south. The Egyptians

failed to take the Israeli crossing seriously until it was too late and also failed to relocate armored units from east to west of the Canal to meet the new threat. Raiding Israeli units conducted tactical ground actions west of the Canal and destroyed many Egyptian SAM sites as they fought their way both north and south, respectively. The IAF now enjoyed complete air superiority without the SAM threat and destroyed great quantities of Egyptian tanks and other equipment to include all the canal crossing equipment of the 3d Egyptian Army in the South.<sup>41</sup> The war officially ended on 25 October when a cease fire was accepted by both sides.

Summary Observations. This brief analysis of the Yom Kippur War underlines several fundamentals concerning the interface of maneuver and counterair as a dominant protection factor at the operational level.

At the operational level, Gen. Shazly functioned as the Commander in Chief of Egyptian Armed Forces and interfaced between the President and his two Army, Air Force and Navy Commanders. He was the theater commander for both the theater of war and the theater of operations since they were synonymous for the Egyptians. For the Israelis, each operational level or front commander acted as a theater of operations commander and conducted a campaign acting at the interface between the strategic level of the Chief of Staff and Minister of Defense and subordinate tactical units. The Israelis did a better job of meshing strategic, operational and tactical plans than did the Arabs. The war illustrated the important and even dominant role that airpower and counterair power can play in the AirLand battle. It also showed that knowing the air and counterair threats is key. Planners must account for these threats in their maneuver plans and must judiciously balance the maneuver, air and counterair plans. The Israelis not only eventually achieved better balance, but also retained flexibility and initiative in synchronizing air and ground operations. At the operational level, "blue suit" airpower is firepower for the theater commander just as theater counterair is his means of controlling the enemy's airpower. Theater counterair is closely linked to the theater commander's priorities for protection.

The Yom Kippur War saw Egyptian counterair used directly to thwart Israeli offensive air and set the stage for operational maneuver. The war also showed air and counterair as the dominant element of protection in the combat power equation. Ground commanders cannot always expect air superiority and "blue suit" air support - it is time sensitive and tough to get. Most importantly, the Israeli operational plans and their execution showed the benefits of synchronization between ground and air operations.

Theater counterair requires early warning and a mix of weapon systems - fighters, SAMs, AA systems, etc. Without total integration of these systems, it is impossible to have a viable counterair operation, much less one which can link effectively with a maneuver plan. Proper balance of counterair assets and missions between protection and attrition is needed. The Yom Kippur War illustrated the value of airspace control, aircraft identification means, and survivability measures for defensive counterair systems. Egyptian campaign plans indicated the need for mobility of SAM and AA units and their requirement forward to support operational maneuver, even if it means helping them in self defense against ground threats.

Experiences in the Yom Kippur War indicate that for the first time, ground forces in the form of SAMs controlled air superiority and that air forces no longer did so exclusively. Combined air - ground operations were the only successful means of defeating the SAMs and AA systems either by direct ground attacks against them or forcing SAMs to relocate for self defense.<sup>42</sup>

The next section examines the interaction of maneuver and counterair protection at the operational level in the 1982 Falklands War.

## HISTORICAL ANALYSIS - THE FALKLANDS

Background. Arguments between Britain and Argentina over the Falkland Islands have persisted for hundreds of years. On 19 March 1982, after many unsuccessful

attempts to resolve the argument peacefully, war resulted between Britain and Argentina over ownership of the Falkland Islands when Argentine soldiers posing as scrap metal dealers raised their country's flag on South Georgia Island.<sup>43</sup>

The following analysis of the war will focus on British campaign plans and their execution with emphasis on relationships between operational maneuver and counterair force protection. It will not address every detail of the war. Particularly interesting is how this campaign was fought and won quickly in an immature, remote theater thousands of miles from Britain, with so much depending on advanced planning, particularly for logistics. The relatively small joint task force used to prosecute the theater commander's operational war is also noteworthy. The war dramatically illustrates how tactical execution at the company and battalion level achieved the theater commander's operational campaign plan which in turn met the British government's strategic aim of retaking the Falkland Islands. Linkages between tactics, operations and strategy of the British were clear in this war.

British Campaign Plan. Britain responded rapidly to the Falklands crisis. Within days of the 2 April 1982 invasion, a carrier group left England for the Falklands with other elements to follow as they became ready. Most of the planning for the operation occurred during the three week voyage of strategic maneuver via Ascension Island to the Falklands.

Admiral Woodward was commander of the joint task force with MG Moore commander of land forces which included 3 Commando Brigade, 5th Infantry Brigade, 2d and 3d Battalions of the Parachute Regiment, Special Air Service(SAS) units and many supporting elements. Fleet elements included over 40 warships which comprised carriers, destroyers, frigates, submarines and landing ships along with support vessels and some troop transports.<sup>44</sup> Numerous Royal Air Force squadrons supported the operation, but the Harrier combat aircraft and helicopter assets on board the two carriers were most important.

The British developed a seemingly simple campaign plan to achieve the strategic aim of retaking the Falklands. The plan was first to win the naval war, then achieve air superiority and, lastly, land the force, if necessary, to seize the Falklands.<sup>45</sup> Many Britons believed the war would be over before they arrived on the scene. The campaign plan contained few other details of land operations until after arrival in the Falklands. The Argentine air threat was of great concern from the start. Planners included in the joint task force highly modern air defense ships, the Type 42 destroyers armed with Sea Dart missile systems, and frigates, armed with the Sea Wolf missile system for close-in, terminal air defense for the fleet. Harriers provided the bulk of the counterair assets for both fleet and land force protection. Rapier and Blowpipe (a man portable air defense system or MANPADS) defensive counterair missiles provided most of the protection for land forces against aircraft. It was stated firmly at the beginning that no beach landing would occur without at least local air superiority, but this requirement degenerated later to only air parity and, finally, to only landing under a Combat Air Patrol (CAP) provided by Harrier patrols.<sup>46</sup> Although there was much concern over the Argentine air threat, the British believed they would have the problem quickly under their control. Right up to the day of the landing, the belief persisted that the air threat would be sorted out within 24 hours of landing.<sup>47</sup> It is significant to note that British forces initially possessed no early warning system of any kind against the air threat.

Argentine Campaign Plan. Argentine national leaders saw recovery of the Malvinas as a sensitive issue and an action which would help unite the nation and perhaps even turn attention away from the corruption of the ruling junta. The Argentine plan, such as it was, evolved from an old plan called "Plan Goa" whose key points recognized the risky sea control issue with Britain and included the landing of marines ashore on the Falklands.<sup>48</sup> As diplomatic efforts failed, the Argentine junta decided in March 1982 to implement its invasion plan. The plan's essence was to achieve surprise. It involved the use of minimum force to achieve a "fait accompli".<sup>49</sup> A Naval exercise

screened the initial deployment of the Argentine fleet which approached the Falklands by the end of March. On 2 April, Argentine commandos seized Port Stanley.

Argentine Army forces landing on the Falklands included about 6 regiments with supporting artillery, air defense and ground attack (Puma and Augusta) aircraft under Gen. Joffre at Port Stanley; 2 Regiments with artillery, air defense and aircraft at Goose Green; and 2 Regiments under Gen. Parol on West Falkland.<sup>50</sup> The Army was reasonably well equipped, but the majority of its soldiers were conscripts whose morale was low. Gen. Menendez was overall commander of Argentine forces on the Falklands. He was tasked to hold the capital of Port Stanley with his roughly 10,000-man force. The Argentine Air Force, probably the most professional of the 3 services, was well trained and well equipped with more than 200 Pucara, Mirage and Super Etandard fighter aircraft. However, other than a few ground attack planes, all aircraft were based on the mainland. Armament included several Exocet missiles. Argentina also possessed a substantial navy with 4 submarines, at least 6 ships equipped with Exocet missiles, a cruiser and a carrier with an air capability.<sup>51</sup> A military junta ruled Argentina and the junta naturally ran the armed forces since its members were the service chiefs. President Galtieri was both President and Army Commander. He was also a member of the junta along with Admiral Annaya of the Navy and BG LomiDozo of the Air Force. It is interesting to note that one of the junta's goals was to recover the Falklands during the 2 years of Galtieri's presidency, preferably before January 1983, the 150th anniversary of the British seizure.<sup>52</sup>

Execution of the Campaign Plans - Operational Maneuver and CounterAir. The map at Appendix B shows key locations and operations during the Falklands War. As the British task force arrived near the Falklands on 29 April, its first task within the campaign plan was to gain control of the seas. On 2 May, the British submarine *Conqueror* sank the Argentine cruiser *General Belgrano*, a major incident which may have helped prolong the war by provoking the Argentines with the great loss of life. Several smaller surface engagements occurred on 4 May. The British air defense

destroyer *Sheffield* received a direct hit from a sea skimming missile on 4 May and later sank.<sup>53</sup> This loss of a vessel specifically tasked for fleet air defense coupled with the continuing abundance of Argentine air activity around the task force caused great concern and posed a dilemma to Adm. Woodward. He desired to lure the enemy aircraft out to fight so that they could be engaged and the British could gain air superiority. However, he could not risk a carrier to do so.<sup>54</sup> Therefore, carriers were kept farther out to sea for their safety and time on station for Harrier CAP aircraft, the first line of fleet air defense, decreased accordingly. It became apparent that the Navy's promise of air superiority could not readily be fulfilled. A member of BG Thompson's (Commander, 3 Commando Brigade) staff said later: "If the air threat had been properly appreciated, I don't think that this whole venture would ever have been undertaken."<sup>55</sup> The enemy air force remained intact and indeed was perceived by 5 May to be a far more deadly threat than when the task force first set sail. British submarines on patrol off the Argentine coast received the mission of providing early warning of Argentine air attacks to help protect the fleet. By mid-May, the British controlled the seas around the Falklands, but the Argentine air threat remained serious in spite of the Harrier's effectiveness.

Pressure soon built for a landing on the Falklands even though the precondition of air superiority did not exist. With San Carlos selected as the landing site primarily because surrounding terrain favored defensive counterair operations, operational maneuver to land the land force began on 21 May. The landing was unopposed and 3 Commando Brigade got ashore without significant loss. The Brigade made a priority effort to transport the 12 Rapier SAM launchers by helicopter to their firing sites on the carefully selected crests surrounding San Carlos harbor.<sup>56</sup> The counterair plan was for Rapier to provide the defensive counterair effort for the landing site with assistance from SAMs on the surface ships in the harbor.

Shortly after the land force was ashore on 21 May, the Argentine Air Force struck the landing site aiming for the ships in the harbor. The battle raged for 6 hours with a

destroyer sunk and 4 other warships damaged. SAMs were not effective against the attacking aircraft, but visually aimed weapons and Harriers armed with Sidewinder missiles proved to be a match for the attackers. The sheer weight of the Argentine air attack plus the technical problems of the SAMs, both those on ships and ashore, cost the British a great deal of damage and loss of life. Luckily, the aircraft attacked warships and not the vital storeships offshore which were now moved totally out of the anchorage during daylight creating logistics problems for the land forces ashore who had planned on them being readily available.<sup>57</sup> Argentine aircraft sunk three more ships on 24 and 25 May; but by 25 May, the air war reached a turning point because one-third of the Argentine fighter aircraft had been destroyed.<sup>58</sup> The most difficult part of the campaign plan was over with the landing force ashore and British control of the air was on the upswing. For the SAMs, Rapier's performance was improving as was that of Sea Dart and Sea Wolf. The performance of the Harrier crews who claimed 31 of 109 enemy aircraft downed in the entire war was very impressive.<sup>59</sup> There were no Argentine counterattacks or fighting patrols against British forces landed at San Carlos.

Pressure was mounting from England for the British forces to engage the Argentines quickly and show some success after the losses to Argentine aircraft from 21-25 May. Execution of tactical plans followed. BG Thompson quickened the pace of the campaign plan on 27 May by sending 2d Parachute Battalion on a raid to Goose Green while simultaneously sending 45 Commando and 3d Parachute Battalion overland toward Port Stanley via Teal Inlet where they would link up with supplies transported there by ship and protected by a Rapier battery.<sup>60</sup> After a tough fight, the Goose Green operation ended on 29 May. Counterair assets provided 2d Parachute Battalion on the Goose Green tactical expedition included the Blowpipe MANPADS weapon and Harriers for CAP and close air support. It is worth noting that at Goose Green, the lack of sufficient artillery, naval gunfire and mortar support almost jeopardized the whole operation.<sup>61</sup>

On 31 May, SAS elements found Mt. Kent, key terrain west of Port Stanley, undefended; elements of 42 Commando with a supporting Blowpipe MANPADS troop were airlifted to secure it. 5th Brigade arrived in theater and landed at San Carlos on 5 June. Initially, it was planned for this unit to land in the northeast of East Falkland, opening up a new beachhead for the theater. But this plan was scrapped because there were insufficient Rapier launchers to provide effective protection from the air threats at the new anchorage.<sup>62</sup> Instead, the Brigade conducted an amphibious operational maneuver from San Carlos east to Bluff Cove and Fitzroy on 5 and 6 June. There was no local air defense for this amphibious landing, and the Navy deemed it too risky to bring an escort warship close-in for some measure of counterair protection for the landing. On 8 June, Rapier launchers and a goodly number of 5th Brigade soldiers were still aboard the landing ships sitting at anchor just off Bluff Cove. Four Argentine aircraft bombed two of the landing ships on 8 June killing 51 soldiers. Reasons for this tragedy included poor ship to shore coordination; delay in offloading troops and critical equipment; no naval escort, CAP or air defense for the landing site; and no early warning of air attack.<sup>63</sup>

After continued eastward movement by 2d and 3d Parachute Battalions in the north and both 42 Commando Battalion and 5th Brigade in the south, the final tactical assault on Port Stanley began on 13 June. After some tough fighting in the mountains west of Port Stanley, Argentine forces surrendered on 14 June.

Summary Observations. This review of the Falklands War illustrates some interesting points concerning maneuver and counterair protection at the British operational level of war.

Admiral Woodward, as the operational commander of the Joint Task Force, used the tactical elements of his land, naval and naval air units to achieve the strategic aim of retaking the Falklands. It was a joint campaign which first won the sea battle and fought the air superiority battle while landing the land force ashore. The British won

the battles, campaign and the war. But, as MG Moore, the land force commander, said after the war: "It was a close-run thing."<sup>64</sup>

The war was a "close-run thing" for several reasons. First, as discussed earlier, the British underestimated the nature of the Argentine air threat and were unable to achieve air superiority as readily as they anticipated. Argentina retained the ability to project its airpower anywhere in the Falklands until 6 June, causing the British to alter dramatically their operational sustainment plan.<sup>65</sup> Many of the bombs, perhaps as many as 50%, dropped by Argentine planes hit their targets but did not explode because their late release did not allow fuses to activate. If every bomb which hit a ship on 21 May had exploded, it is possible that the British campaign would have stalled and a diplomatic solution would have been the only remaining British option.<sup>66</sup> The bombing incident at Bluff Cove and Fitzroy on 6 June shows what can happen to operational plans without air superiority. Theater commanders must take risks. The risks taken as a result of the imbalance of operational maneuver and counterair protection at both San Carlos and Fitzroy were great indeed and could have cost the British their entire campaign. Losses at San Carlos occurred in spite of careful selection of a landing site designed to use the surrounding high ground in the defensive counterair battle. This kind of risk taking contributes to making a campaign a "close-run" operation. Frequently, operational maneuver and counterair create a conundrum such as Admiral Woodward's dilemma with his carriers - how does one defeat the air threat by moving closer to shore and also support air protection of the force ashore without being destroyed by the enemy air threat?

Lastly, some additional points should be made about theater counterair. Early warning is critical, and lack of it cost the British a lot during this war. It is important to know the limitations of defensive counterair systems well before their anticipated use in war. Sea Wolf and Rapier eventually worked well while Sea Dart and Blowpipe had weaknesses. Rapier's initial problems and the need for a 24 hour "settle in" period seemed to be partially caused by the damp, cold environment of the Falklands.

The counterair performance of Harrier exceeded all expectations.<sup>67</sup> Use of automatic weapons fire against low flying aircraft was very effective. Argentine aircraft saturated the British SAM systems. The British lacked a fully integrated counterair system. There was little, if any, early warning and tie-in of AA and SAM fires over a common air early warning or command and control net. The SAS pre-emptive attack of 14 May on Pebble Island during which they destroyed 11 Argentine aircraft underlined the importance of offensive counterair and the role which all forces play in that mission.<sup>68</sup>

The Falklands War leaves a firm appreciation for the dominance of airpower and the great need for balance between maneuver and counterair protection at the operational level of war. The British lacked a sound doctrine to mesh the dynamic relationship between operational maneuver and counterair force protection, contributing to truly a "close-run" campaign.

We have now examined the theory for both operational maneuver and counterair protection followed by an analysis of both the Yom Kippur and Falklands Wars from the operational maneuver - counterair protection perspective. It is useful now to see how well current US doctrine for operational maneuver and counterair protection meshes with the observations garnered from theory and history.

### III DOCTRINE VERSUS INSIGHTS FROM THEORY AND HISTORY

General. Our current doctrine for both operational maneuver and counterair force protection establishes a baseline for comparison with the theoretical and historical insights described above. Results of the comparison may indicate additional doctrinal elements required for inclusion in or modification of existing operational maneuver or counterair doctrine.

Doctrine for Operational Maneuver. Doctrine is "an approved set of guidelines for the conduct of war."<sup>69</sup> FMs 100-1 and 100-5 contain the Army's keystone doctrine for warfighting and both address the subjects of operational art and maneuver. The operational art involves the translation of strategic aims into military operations and campaigns and, while operational art is not uniquely tied to a specific level of command, normally theater commanders plan and direct campaigns.<sup>70</sup> Effective campaigns comprise successful operations as well as successful battles and engagements at the tactical level. While maneuver occurs at all three levels of war, operational maneuver is a key component of Army doctrine.

What makes operational maneuver successful? At any level of war, movement is a complex but necessary function. Our doctrine states that "effective operational maneuver requires the anticipation of friendly and enemy actions well beyond the current battle, the careful coordination of tactical and logistical activities, and the movement of large formations to great depths."<sup>71</sup> It involves the synchronization of all the functions of warfighting including protection from air and sea threats, firepower, intelligence, deception, interdiction, reconnaissance and special operations to name but a few. Firepower remains a vital complement to maneuver.

Our doctrine cites four basic tenets as essential for successful prosecution of AirLand battle - initiative, agility, depth and synchronization. In a nutshell, initiative means making the enemy fight the campaign according to terms we set. Agility

requires that we act more quickly than does the enemy. Our decision cycle must function within his to our advantage. Depth implies our ability to extend the theater or battlefield in space, time and resources, all critical to effective operational maneuver. Finally, the synchronization to "make it all happen" must occur. The process of synchronization, arranging all battlefield activities in time, space and purpose, results in operations which produce decisive results at the right time and place.<sup>72</sup> These are the primary elements of doctrine which produce successful operational maneuver. Joint planning and execution are also inherent in operational maneuver because forces may well include multi-service elements and lines of operation may be singular or multiple, over land or sea and may be augmented by air.<sup>73</sup> All in all, Army doctrine is based soundly on operational maneuver.

Doctrine for Counter Air Force Protection. Counterair doctrine's foundations lie in four main publications: FM 100-5(Operations), FM 44-1(Army Air Defense Artillery Employment), Air Force Manual 1-1(Basic Aerospace Doctrine of the USAF) and JCS Publication 26(Joint Doctrine for Theater Counter Air Operations).

JCS Pub 26, the most recent counterair publication, stresses the severity of the multi-faceted air threat and cites the need for joint action to defeat the threat and accomplish the goals of counterair which are to control the air and protect the force. Offensive and defensive counterair operations involving all the Services and all combat arms of the Army must interact to provide an integrated counterair scheme for the theater campaign plan. The theater air component commander directs the counterair effort. Under any kind of air threat, a major consideration in joint theater planning must be friendly counterair action.<sup>74</sup> AFM 1-1 also recognizes the need for joint teamwork and underlines the relativity of air superiority, stressing its time dependency. While general in nature, the Air Force doctrine in AFM 1-1 also recognizes maneuver and its accompanying risk element, stating that "The most precious thing aerospace forces can provide for an Army or Navy is control of the

airspace environment, since this enables surface forces to carry out their own plan of action without interference from an enemy's aerospace forces."<sup>75</sup>

Detailed doctrine for execution of Army counterair at both the operational and tactical levels is outdated and does not mesh well with any of the other three key counterair publications. FM 44-1, dated May 1983, the last published version, does not contain the term counterair, has different objectives for Army defensive counterair units than either FM 100-5 or JCS Pub 26 and has no discussion of the three currently recognized levels of war.<sup>76</sup> It does track with the four basic tenets of AirLand Battle, stresses the need for a mix of air defense weapons and provides details concerning the uniqueness of air defense command and control. Efforts are underway to revitalize FM 44-1 and bring its needed doctrine in line with the Army's and that of JCS. These efforts must address in detail how to execute defensive counterair at both the operational and tactical levels as well as key linkages between the two levels.

FM 100-5 is the Army's warfighting "Bible" for counterair force protection just as it is for operational maneuver since it sets the doctrinal theme for the Army's detailed "How to Fight" manuals generated at branch centers. The current version of FM 100-5 contains much more detail than any earlier version on the role of air and counterair force protection. Emphasis on the operational level of war has stimulated Army-Air Force cooperation since it revived the Army's interest in larger operations which has been the focus of the Air Force for many years.<sup>77</sup> Our current Army doctrine recognizes the lethality of air systems, required jointness in operations, the vital importance of the air dimension and the need for counterair protection against a potent air threat. FM 100-5 clearly states that "Operational maneuver requires protection from enemy airpower" and "Air superiority operations, theater-wide air defense systems and protection of air bases are important activities associated with maximizing combat power at the operational level."<sup>78</sup>

FM 100-5 could use additional emphasis on the gut issue - the meshing of counterair with maneuver at the operational level. It is important for FM 100-5 to address this issue in more detail because the Army's keystone, operational level, doctrinal manual must clearly specify for theater and land component commanders the criticality of air - ground, "blue suit - green suit" synchronization and interface. FM 100-5 scarcely mentions air or counterair efforts in chapters which deal with offensive and defensive operations, joint and combined operations and contingencies. Counterair operations should be a specific imperative for AirLand Battle rather than one of the many complementary or reinforcing functions of "Sister Services." Detailed discussion of counterair as an AirLand Battle imperative could summarize in one location of the manual the importance of counterair operations, its relevance to operational maneuver and synchronization requirements between air and ground operations.

Current publications for Army counterair protection doctrine are generally on target but require some additional work to ensure commonality in thought from the keystone manuals down through the operational and tactical execution manuals which support the operational keystone doctrine.

Comparison - Insights from Theory and History Versus Doctrine. Before attempting to compare lessons from theory and history with current doctrine, one should consider whether or not conditions for operational maneuver or counterair have changed since the Falklands War. Certainly, their importance to warfighting has not diminished. The third dimension remains and maneuver is still a vital dynamic of combat power. The quality and quantity of the air threat as well as counters to it have continued to increase via technological improvements. The lethality of air delivered weapons also continues to improve. More nations now possess the more sophisticated air threats to ground operations. In general then, while these continued technological advancements don't require any specific amendment of observations from the Yom Kippur or Falklands Wars, they should underline from a doctrinal standpoint the potentially

dominant role which air and counterair weapons can play on the battlefield. Indications are that this will continue to be the case in the future.

It will be useful now first to examine the key elements from history and theory regarding the interface between operational maneuver and counterair protection, and secondly, balance these key elements with what is stated regarding them in current doctrine.

The Air and Counterair Threats. Analysis of both the Yom Kippur and the Falklands Wars revealed a great tendency to underestimate the severity of air and counterair threats, even in spite of known intelligence to the contrary. In one case the theater of operations was mature, while in the other it was relatively immature; yet the air and counterair threats in both were severe. While our doctrine in FM 100-5 accepts a potentially severe air threat, it may not go far enough, particularly when one considers the total envelope of the air threat (fixed wing, helicopter, tactical ballistic missiles, etc.) which could face us in the mature NATO environment. Air threat intelligence not only involves numbers of aircraft and missiles, but should also include enemy doctrine on the synchronized use of all air and counterair systems. Both AFM 1-1 and JCS Pub 26 sufficiently address the total air threat while FM 44-1 requires rework in its threat assessment. Enemy counterair threats are of equal concern since they operate directly against any friendly offensive counterair actions. Both air and ground counterair forces are high priority targets for neutralization via friendly offensive counterair operations. A theater commander's ability to mesh maneuver and counterair protection goals must start with a total assessment of both the air and ground threats coupled with doctrine which also addresses these threats.

Air Dominance. Theory shows that air is certainly a critical consideration for both operational maneuver and force protection. Both historical cases clearly indicated not only that the air dimension is critical, but also that it can dominate the battlefield both offensively and defensively. Air mobility, primarily Army at the tactical level and Air Force at the operational level, is also part of the air picture. Management and control

of theater airspace can determine a campaign's outcome. FM 100-5 should attach even more importance to the air dimension than do JCS Pub 26 and AFM 1-1.

Considering offensive counterair:

.....Army AirLand Battle doctrine, despite its title, makes only superficial mention of how airpower, and particularly air interdiction, can contribute to combat effectiveness. In order to correct these deficiencies, both Air Force and Army doctrines should explain how air interdiction and land maneuver should be integrated in order to create the powerful synergies that can lead to theater success.<sup>79</sup>

Defensively, Gen. Rogers, SACEUR, believes Warsaw Pact air defenses are so effective that he advocates developing unmanned systems to perform interdiction.<sup>80</sup> The potentially dominant role of air and counterair in either a mature or immature theater dictates that a theater commander consider with equal care both his offensive and defensive counterair assets and priorities for their use. If he does not, historical experience suggests that plans for operational maneuver will fail. Naturally, these considerations and prioritization process deal directly with assumption of risk.

Jointness. Both historical cases, particularly the Falklands, and our doctrine reflect the continued need for and importance of joint planning in counterair operations. If this does not occur, not only will counterair operations within the theater fail, but it is likely that operational maneuver operations also will suffer. The common goals for counterair operations are to control the airspace and protect the force. Joint planning and execution of Suppression of Air Defense (SEAD) operations merit particular attention.

Synchronization. A theater campaign plan consists of at least air and ground operations and may also include operations at sea. A key to successful execution of the campaign plan is how well synchronization of the air operation occurs with ground operations. Maneuver and counterair protection need balance and synchronization. Our two historical cases included examples where this synchronization occurred very well and also examples where it did not occur at all, with disastrous results. The

concept of operational depth is relevant to both air and ground operations. An advantage of air is that airpower can neutralize not only the advanced elements of the enemy, but also the whole of his depth simultaneously.<sup>31</sup> Our doctrine stresses the use of agility, depth and initiative and it is the very tenets of AirLand Battle which create the need for balance between air and ground operations. A harmonious meshing of air and land operations will assure that the needs of one are balanced by the capabilities of the other throughout the campaign as long as it is recognized that the needs are constantly changing and affect all close, deep and rear operations. While FM 100-5 stresses synchronization, additional emphasis on (1) specifics of interface for air and ground operations, (2) contributions of operational air resources vice tactical air, and (3) air and counterair support of offensive and defensive operations would contribute to better understanding of overall synchronization of a campaign's air and ground operations. Counterair should be a clearly identifiable imperative of AirLand Battle.

Components of Synchronization. Several specific components of the theater counterair synchronization effort merit a brief discussion. The need for air early warning and an integrated counterair effort is obvious from our examination of both the Yom Kippur and Falklands Wars. Integration should include early warning and both offensive and defensive counterair efforts. Our doctrines for both operational maneuver and counterair must stress this need. Air superiority is greatly misunderstood. It is time-sensitive and comes and goes as the synchronization of air assets with maneuver needs occurs. Air superiority can result from offensive air, defensive air or a mix of the two. Threat and friendly air identification techniques are part of the counterair effort and have not worked well based on our two historical cases. For defensive counterair, a weapon mix of SAMs and guns with "fall back" optical sighting provides success. For survivability, SAMs require mobility commensurate with their supported force and may require ground protection assistance. Past experience indicates that synchronization of a theater counterair operation with operational maneuver usually

involves tradeoffs between protection and attrition missions as with the "carrier dilemma" in the Falklands War.

Summary. Counterair force protection and operational maneuver are closely and firmly interrelated. They must be for execution of any campaign plan. Maneuver requires counterair protection. There are several main elements which from theory, history and current doctrine are primary components of any counterair force protection doctrine which supports operational maneuver. These include the nature of the air threat, the potentially dominant role of air, the need for jointness and the absolute requirement for close synchronization of air and ground operations during execution of the theater campaign plan. Key components of this synchronization effort are air early warning, an integrated counterair effort, an understanding of the transitory nature of air superiority, threat and friendly air identification techniques, the need for a mix of weapon systems and the tradeoff considerations between protection and attrition missions.

Some modification of our current doctrine as specified in both FM 100-5 and FM 44-1 would facilitate clearer understanding of the air threat and counterair efforts needed to overcome the threat in support of a theater campaign plan.

#### IV CONCLUSIONS AND SUMMARY

Risk. In a theater of operations, maneuver and counterair operations are closely related and vital to execution of the AirLand Battle. Maneuver is the dynamic element of combat power and usually, he who maneuvers, wins. Maneuver also involves risk. The nature of today's air threat poses significant risk to a theater commander anywhere in the world. Counterair operations allow the theater commander to gain control of the air, protect his force from air threats and prosecute the AirLand Battle.

Although important, it is difficult to interface operational maneuver with counterair force protection. Recent experience, particularly the 1973 Yom Kippur War and the 1982 Falklands War, offers some lessons learned concerning requirements for successful interface of these two functions of AirLand Battle. Both must be planned together early as the campaign plan begins to take shape such that the completed campaign plan accurately reflects the commander's intent for risk tradeoffs between maneuver and counterair protection as well as synchronization of air and ground operations. In spite of efforts to the contrary, theater commanders continue to be surprised by the nature of the air and counterair threats, their severity and their dominance of both the battlefield and the air above it. This dominance has occurred in both the relatively mature theater of the Mid-East and the immature theater of the Falklands. This is worth noting when one considers the likely Soviet counterair picture expected in any European confrontation. Joint, combined and contingency operations require special care when it comes to interfacing operational maneuver with counterair force protection efforts.

Doctrine. There are several key counterair doctrinal elements which are basic and perhaps relatively obvious for successful support of operational maneuver. But while perhaps obvious, nations continue to relearn their importance during periods of conflict. These elements include air early warning, full integration of all counterair operations, a clear understanding of air superiority and what it means, aircraft and

missile identification techniques which work, a complementary mix of offensive and defensive counterair weapons, adequate mobility and ground protection for SAMs and synchronized air-ground operations in one well-understood campaign plan. Lessons learned from the 1973 Yom Kippur and the 1982 Falklands Wars underline the importance of each of these key doctrinal elements.

Some doctrinal refinements are needed. JCS Pub 26 sets the theme for counterair operations. FM 44-1 requires significant modernization to continue Army counterair doctrine where JCS Pub 26 and FM 100-5 end. This modernization effort is presently ongoing. FM 100-5 adequately addresses operational maneuver but requires additional emphasis not only on the nature of the air threat and counterair operations, but particularly on meshing counterair force protection with operational maneuver. Counterair operations should be a separate imperative of AirLand Battle for offensive, defensive, joint, combined and contingency operations. For a warfighting manual half of whose title is "Air", FM 100-5 does not pay enough emphasis to the air threat, counters to it and synchronization of ground with air and counterair operations. Primary doctrinal discontinuities are (a) lack of a flow of common counterair doctrine from JCS through Army keystone manuals to branch-particular documents, (b) insufficient recognition of the severity and potential dominance of the total air threat and, (c) lack of more detailed doctrinal linkages between maneuver and counterair at the operational level.

Balance and synchronization during execution of an AirLand campaign plan appear to be necessary keys to success. A theater commander must synchronize air and ground operations as he balances maneuver and counterair force protection requirements. The goal is a harmonious meshing of time, space and other resources for air-ground operations and maneuver-counterair protection needs. This is critical for a nation whose doctrine requires it to fight a campaign anywhere in the world at any time.

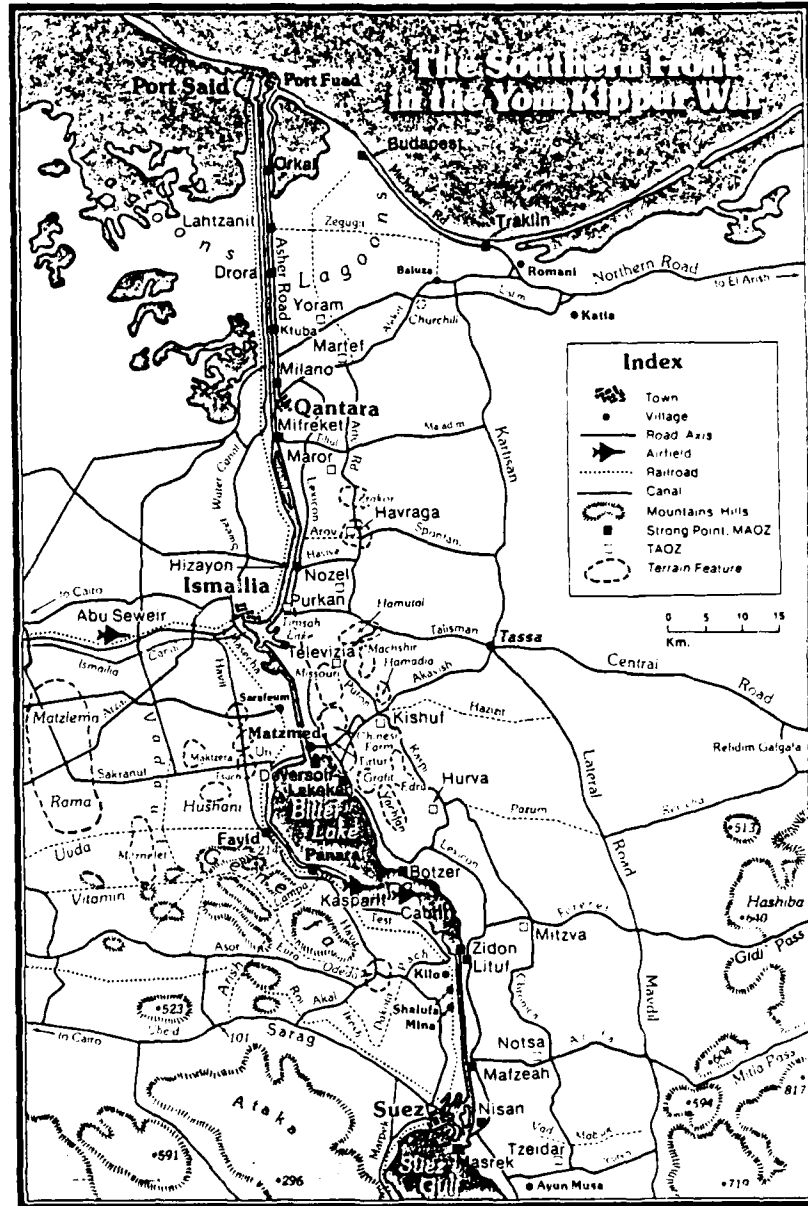
There may well be a need for continued reassessment of our ability to fight AirLand Battle doctrine in NATO considering the risks inherent in operational maneuver against the most severe air threat present in that theater of operations. Europe remains the focus of our national interests, and the Soviet air threat there remains the most difficult to counter in support of required operational maneuver. Lessons relearned from the Yom Kippur and Falklands Wars concerning operational maneuver and counterair take on additional importance when threats from tactical missiles and space - based systems are considered.

Summary. Since the Korean War, there have been only three wars of mid - to - high intensity wherein both sides used advanced technology's weapons against each other. One of these wars is the ongoing Iran - Iraq War. The remaining two wars were the Arab - Israeli Wars, most recently in 1973, and the 1982 Falklands War. In both of these wars, the third dimension of aerial conflict and counterair conflict played a dominant role. In both of these wars, operational warfighting thrust maneuver directly against air and counterair operations. In both of these wars, participants relearned basic doctrinal lessons of operational maneuver and counterair. We can view these wars as special cases or aberrations which could never happen again or we can work harder to assimilate the historical lessons learned in our operational and tactical warfighting doctrines.

While it is important to remember that successful warfighting requires sound, well-understood doctrine, one must also recall that winning demands good soldiers and good leaders armed with the right weapons and supported fully by a committed nation. Ultimately, it is the job of well trained and well led soldiers to execute what is hopefully sound doctrine. We have good soldiers and good leaders, and we are spending a great deal of money to guarantee that they have modern equipment. We must also ensure the doctrine is the very best we can provide!

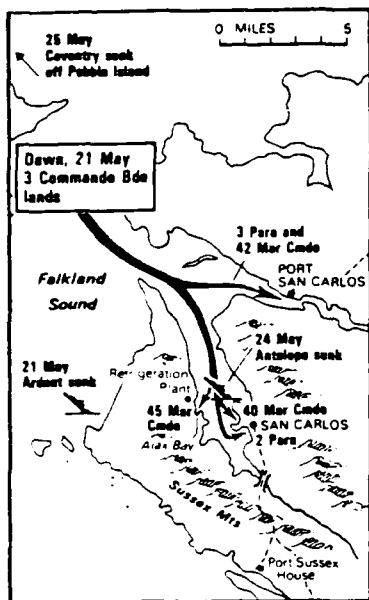
APPENDIX A

(From Adan: On The Banks of The Suez)

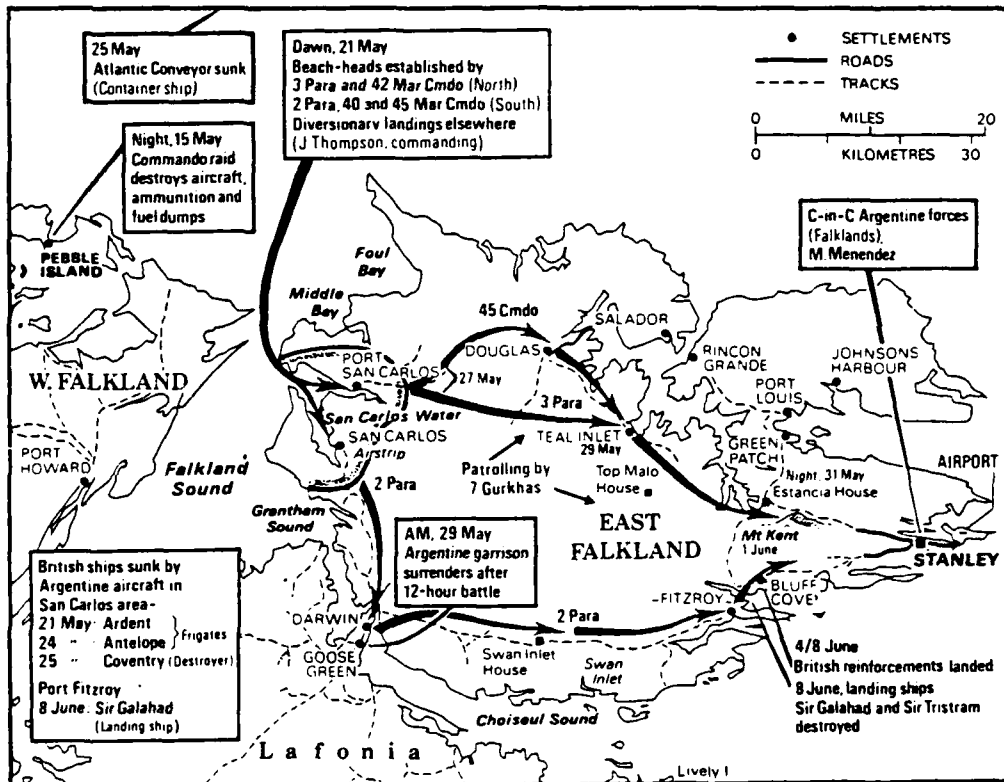


APPENDIX E

(From Hastings and Jenkins: The Battle for The Falklands)



The Landing at  
Port San Carlos



The Two-Pronged Attack towards Port Stanley

## ENDNOTES

1. U.S. Army, Field Manual 100-5, Operations, (Washington, D.C., May 1986), p. 11.
2. Ibid., p. 2.
3. Ibid., p. 12.
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