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AIR CAMPAIGNS: FACT OR FANTASY?

A Monograph

by

Major Mark H. Skattum
United States Air Force

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

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Major Mark H. Skattum
USAF

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

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Name of Student: Mark H. Skattum, MAJ, United States Air Force

Title of Monograph: Air Campaigns: Fact of Fantasy?

Approved by:

William H. James
LTC William H. James, MA — Monograph Director

L. D. Holder
COL L. D. Holder, MA — Director, School of Advanced Military Studies

Philip J. Brookes
Philip J. Brookes, Ph.D. — Director, Graduate Degree Program

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ABSTRACT

AIR CAMPAIGNS: FACT OR FANTASY?
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This monograph addresses the concept of air operations and their relationship to campaigns. It determines whether air actions should be considered as operations or campaigns. The monograph first addresses the definitions of the terms "campaign" and "operation," and then establishes the criteria by which to judge three historical examples of the use of air power. These examples are the Battle of Britain, the Korean War air interdiction battle, and the Israeli preemptive strike against the Egyptian Air Force during the 1967 Arab-Israeli war.

The monograph concludes that air operations should not be considered as campaigns. Air operations are part of the overall campaign and support campaign objectives rather than accomplishing strategic goals. The implications of this analysis are that air superiority should be the primary air operation; offensive air and ground operations must be synchronized for success; and the terms and concepts applied to ground operations can be applied to air operations. By understanding the correct relationship between air operations and campaigns, air planners can help Army planners prepare for success on the joint battlefield.

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INTRODUCTION

The term "campaign" is loosely thrown about in many professional journals and histories of air operations. It is commonly used throughout United States Air Force (USAF) histories, where air superiority and air interdiction campaigns compete with strategic bombing campaigns for top priority. In fact, the National Defense University has recently published a book entitled The Air Campaign, written by an Air Force colonel who uses air superiority as the basis for operational art in an air campaign.(1) But, can an air operation be labelled a campaign? Do air campaigns really exist, or are they actually air operations in support of an overall campaign plan?

Other than a question of semantics, it is important to draw a distinction between the terms operations and campaigns. First, joint planners must speak the same language. A common cultural basis must be established to ensure interservice understanding. This means common definitions. While JCS Pub 1, the dictionary of military terms, defines operations, it does not give a definition for a campaign. This leaves the individual services free to form their own definitions.

Second, Air Force planners must understand the difference between these terms to determine how the USAF can best support or plan for campaigns or operations. To properly apply airpower, an air component

commander must not only understand his doctrine, but the relationship between the Air Force and the other services.

Third, by looking at the successes and failures of past operations, today's planners can be alerted to the complexities and risks involved in planning and executing operations and campaigns. They will be able to ascertain the shortcomings of separate operations and see the value of synchronized ground and air operations.

Finally, the theoretical terms usually applied to ground operations can be tested against air operations to see if these terms have any validity for air planners. Such terms as center of gravity, branches, sequels, and culminating points should be familiar to and used by Air Force planners.

As General William W. Momyer, USAF, retired, said: "In short, airpower can win battles, or it can win wars. All commanders since Pyrrhus have been tempted at one time or another to confuse the two, but few distinctions in war are more important."(2) I think the Air Force is confused on the use of the terms operations and campaigns and that it is just as important to understand the difference between the two as it is to understand the difference between battles and wars. To properly employ airpower, the Air Force must understand the distinction.

This monograph, then, will determine whether air air actions should be differentiated as campaigns or operations. If they are not air campaigns,

they should be called air operations. To make this determination, I will first define campaigns and operations. From these definitions, I will establish the criteria to examine three historical examples. These three examples were chosen because they cover a broad range of airpower application.. The Battle of Britain exemplifies the use of air without support from ground forces. The Korean War air interdiction plan represents the use of airpower in conjunction with ground forces, but lacking synchronization. The final example, the Israeli pre-emptive strike in the 1967 Arab-Israeli war, typifies a synchronized approach to air and ground operations. The monograph will conclude with the implications for today's air planners on the usage of airpower in operations or campaigns.

SECTION I

CAMPAIGNS AND OPERATIONS

"Air forces conduct campaigns of their own as well as support and jointly prosecute surface campaigns." (3)
General Charles C. Donnelly, Jr., USAF, (ret)

The word "campaign" is used to describe many actions in war. This section will present definitions for campaigns and operations, and use these definitions as the criteria to examine the historical cases from World War II, Korea, and the 1967 Arab-Israeli conflict.

The Department of Defense dictionary, JCS Pub 1, defines a campaign plan as "a plan for a series of related military operations aimed to accomplish a common objective, normally within a given time and space."(4) Field Manual 100-1 explains a campaign as "a series of joint actions designed to attain a strategic objective in a theater of war...theater commanders and their chief subordinates usually plan and direct campaigns."(5) Field Manual 100-5, Operations, becomes even more specific:

A campaign is a series of joint actions designed to attain a

strategic objective in a theater of war. Simultaneous campaigns may take place when the theater of war contains more than one theater of operations. Sequential campaigns in a single theater occur when a large force changes or secures its original goal or when the conditions of the conflict change. An offensive campaign may follow a successful defensive campaign, for example, as it did in Korea in 1950. Or a new offensive campaign may have to be undertaken if strategic goals change or are not secured in the initial campaign.(6)

Field Manual 101-5-1 simply states "a campaign is a connected series of military operations forming a distinct phase of war to accomplish a long range major strategic objective."(7) Field Manual 100-6, Large Unit Operations, is more specific than FM 100-5:

Theater of war campaigns seek to attain national and or alliance strategic objectives. Theater of operations campaigns seek to achieve theater strategic objectives.

A campaign is the operational way that the commander of a theater of war or theater of operations coordinates, employs, and sustains available resources in a series of joint and combined actions to achieve strategic objectives. It is framed by geography and time. It is characterized by : (1) a phased series of major operations along intended lines of operation to bring about decisive results from battles, and (2) the commander's authoritative synchronization of land, sea, and air effort to attain his strategic objective. The synergistic effect of these phased joint and combined operations creates operational advantage, or leverage, which makes the enemy's position untenable.

Campaigns are conducted throughout a theater of war: the total land, sea, and air space that may become involved in military operations. In large theaters of war where campaigns may be conducted along more than one line of operation, commanders establish theaters of operations to conduct operations along primary lines of operation. The theater of war campaign synthesizes deployment, employment, and sustainment actions into a synchronized, coherent whole.(8)

The Air Force's basic doctrine does not address campaigns. Rather, it provides broad guidance for an air commander:

> An air commander's broad plan will normally include offensive strategic and tactical actions which are designed to control the aerospace environment and neutralize or destroy the warfighting potential of an enemy... To gain the full potential of these actions, an air commander must coordinate and integrate his capabilities, give adequate attention to defensive as well as offensive actions, and weigh the psychological impact of his attacks.(9)

This quotation reflects the absence of the operational level of war in USAF doctrine.

The application of airpower should adhere to a theater-level concept.(10) This concept is called a campaign by most senior Air Force generals, most notably by General Charles L. Donnelly, Jr. Gen. Donnelly considers air operations as theater-level campaigns, and holds that the major challenge facing theater air commanders is the proper apportionment and allocation of air assets.(11) Gen. Donnelly defines an air campaign as the application of air under centralized control and decentralized execution to directly support theater objectives.(12)

Others in the Air Force share this view of the air campaign. Colonel John A. Warden, III, in his book The Air Campaign: Planning for Combat, addresses the operational concepts of center of gravity, branches, sequels, and phasing. He also states a case for a single

service prevailing in combat. This is justification for an air campaign, as the air forces are achieving the strategic objectives within a theater of operations.(13)

General Michael J. Dugan, the present USAFE commander, also agrees with the air campaign concept. He views the air campaign as "inter-related air operations conducted from an operational level perspective."(14) These operations include counter-air, close air support, interdiction, and strategic missions.

There is not widespread agreement outside the Air Force about the concept of an air campaign. Colonel William Mendel (USA) implies that Gen. Donnelly is using an imprecise definition of campaign. Mendel believes using the term "campaign" when the word "operation" is called for guarantees confusion and blurs the true concept of campaigns.(15) Mendel suggests that counter-air or interdiction campaigns do not, by themselves, achieve strategic objectives, and therefore cannot be called campaigns.(16) Rather, air operations contribute toward achieving the theater commander's objectives, and can be considered as operations in an overall campaign. Even Gen. Donnelly admits this is the case in Allied Forces Central Europe (AFCENT): "CINCENT, with advice from his component commanders, develops campaign strategy and objectives for all his land and air

forces. Airpower, in concert with land campaigns, supports his objectives."(17) It appears Gen. Donnelly is confusing campaigns with operations, since he admits CINCENT develops the campaign strategy and objectives. CINCENT is the theater of operations commander. The land and air forces under his command plan operations in support of the overall campaign. But what is an operation?

JCS Pub 1 defines an operation as :

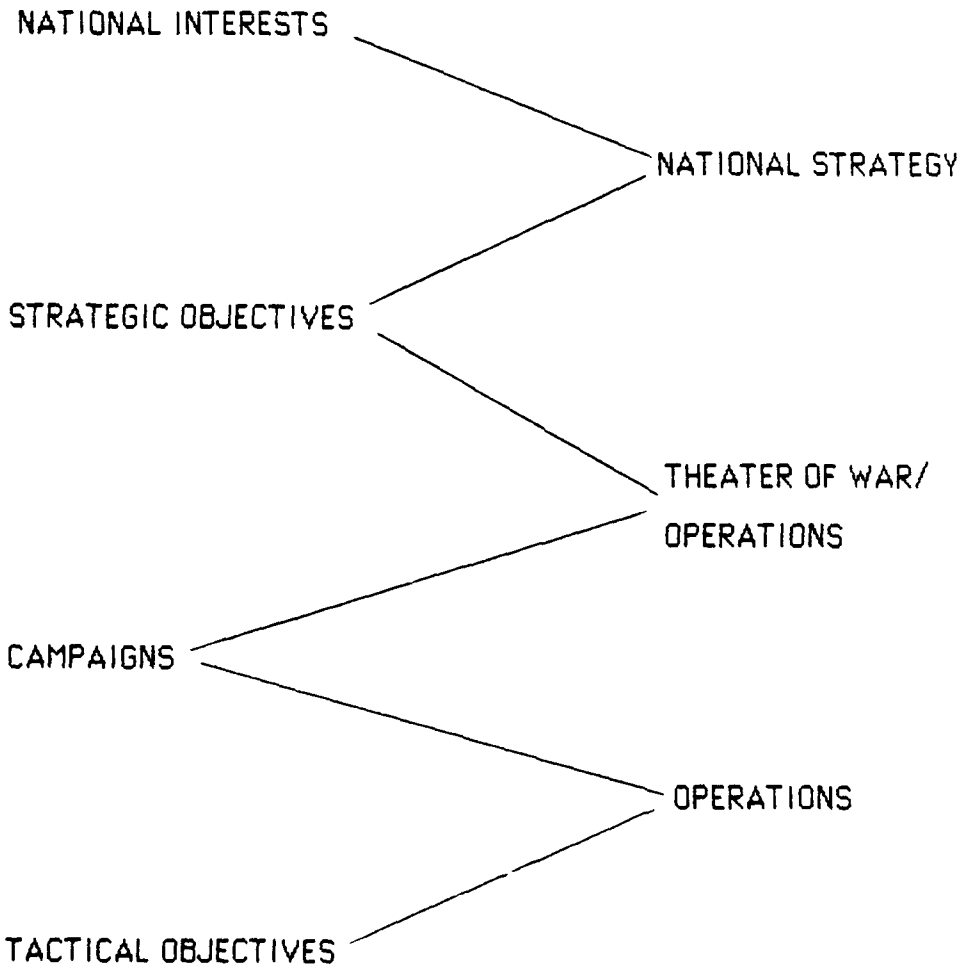
> A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense and maneuvers needed to gain the objectives of any battle or campaign.(18)

Operations support the objectives of a campaign. They are not campaigns in and of themselves. FM 100-5 defines major operations as the "coordinated elements in the phases of a campaign."(19) While usually joint in nature, they may also be independent operations.(20) However, one operation usually receives priority, and is the main effort.(21) Thus, coordinated or phased operations constitute a campaign.

Another method of differentiating between campaigns and operations is to see where they are found within the framework of national interests and strategy. Figure 1 details this.

FIGURE 1

From John E. Turlington, "Truly Understanding the Operational Art," Parameters, Spring, 1987, 66.



National interests and national strategy drive the strategic objectives. These strategic objectives translate into theater of war objectives. The theater commander, using these objectives, sets up a campaign plan to meet his theater objectives, which in turn will satisfy the strategic goals. The theater commander's end state is to meet the strategic objectives.

If the theater of war is too large to be controlled effectively, the theater commander can break the theater of war into theaters of operations. These theaters of operation will also have campaign plans. Within the theaters of operation, subordinate commanders will conduct operations to meet the theater of operation campaign objectives. The operations will use operational maneuver, intelligence, logistics, deception, and fires to gain strategic objectives. Air Force planners apportion and allocate air assets towards the different missions of offensive counter-air and offensive air support to help achieve the campaign objectives. In this manner, operational art translates the strategic guidance into coherent campaigns which bring about tactical action.(22)

Having seen the Army and the Air Force's concept of campaigns and operations, how should we define a campaign? There are two points that stand out: a campaign should be oriented on meeting the

strategic objective and a campaign should be a phased series of (tactical) operations. To meet the strategic objective and be phased, the campaign must focus on a center of gravity, and use branches and sequels. Culminating points should also be considered to determine how far the commander can stretch his resources. Operational pauses may be needed to allow the commander to reconstitute his forces before continuing with his plan. By defining these concepts and their relationship to campaigns, the criteria for the historical analysis can be determined.

Clausewitz defined the center of gravity as "the hub of all power and movement on which everything depends."(23) It can further be defined as the source of strength or balance, that which gives a force strength, freedom of action, or the will to fight.(24) If the center of gravity is destroyed, its loss will unbalance the whole, which may result in the enemy's complete collapse.(25) The hallmark of a campaign plan is identification of the enemy's center of gravity, and setting the conditions for the defeat of that center of gravity.(26)

Branches are different solutions to determine the tactical actions of a campaign; they give the commander options for changing dispositions, orientations, or accepting or declining battle.(27) They are most helpful in allowing the commander to deal with the fog and

friction of combat. Sequels are a transition from one solution to the next.(28) Sequels are based on possible outcomes such as victory, defeat, or stalemate.(29)

Culminating points occur on both the offense and the defense. An offensive culminating point is reached when the attacker can not continue offensive operations without risking defeat from an enemy counterattack.(30) The defensive culminating point is reached when it is no longer advantageous to remain on the defensive- when time is no longer on the side of the defense.(31) Recognizing and planning for these culminating points is another attribute of operational art. The astute commander will plan operational pauses throughout a campaign and prior to reaching culminating points, or at least be cognizant of the consequences of pushing past a culminating point. If he decides to operate beyond his culminating point, the commander must be willing to assume the risk entailed by doing so.

These will be the criteria for determining whether the three historical examples are campaigns or operations. A campaign is oriented towards achieving the strategic objective and oriented on the enemy center of gravity. A campaign is also a series of operations, phased with identifiable branches and sequels. Culminating points will also have been considered in the campaign

plan. These criteria will determine if the campaign has been planned to a logical end state: the attainment of the strategic objective. If the examples do not meet the test of these criteria, then the actions can be considered as operations within an overall campaign. With this definition in mind, let us turn to the first historical case: the Battle of Britain.

SECTION II

THE BATTLE OF BRITAIN

"The operations of the Luftwaffe are beyond all praise...There is a great chance of totally defeating the British." (32)
Adolf Hitler

The Battle of Britain is the first instance in the history of airpower where an air force has attempted to defeat a nation by air action alone. The concept of the Luftwaffe destroying the aerial defenses of England and allowing a ground invasion to occur appealed to Adolf Hitler.(33) This section will look at the Battle of Britain from the perspective of the German air battles, and then apply the criteria for campaigns to determine if this was an operation or a campaign.

Planning for the actual aerial assault on England began in May of 1939. A study carried out by the Luftwaffe Operations Staff showed that the Germans had insufficient strength to defeat Britain by air. The Douhetian concept of bombing cities was also ruled out, since the results of such attacks would probably strengthen British national will.(34) This report also stated that an air attack alone might not suffice to defeat England.(35)

The strategic guidance given the Luftwaffe following the outbreak of World War II was to damage enemy forces and war potential as much as possible.(36) Hitler's concept of airpower at this time was to blockade England by aerial interdiction against British ports, merchant shipping, and supply depots. Thus, the Luftwaffe undertook initial operations of mining, shipping attack, and limited strikes against industrial targets. It appears that at this early stage, Hitler saw England's vulnerability as her economic dependence on imported goods; her center of gravity was the ability to protect her import lines of communication from interdiction. The primary players in this protection were the Royal Air Force (RAF) and the Royal Navy.

It appears that Goering, the Luftwaffe commander, understood the role of the RAF, for on 30 June 1940 he issued a directive: "So long as the enemy air force remains in being, the supreme principle of warfare must be to attack it at every possible opportunity by day and by night, in the air and on the ground."(37) The initial German concept of destroying the RAF consisted of fighter sweeps and the use of bombers to attract the RAF fighters. These interceptors would then be destroyed by the escorting German fighters. The RAF did not cooperate: "Our difficulty was not to bring down enemy (RAF)

fighters-but to get the enemy to fight."(38)

Hitler then changed his guidance from economic blockade to support of the planned invasion. Directive 16 gave the Luftwaffe the mission of preventing interference by the enemy air force and to begin attacks against defensive strong points.(39) Directive 17, issued one month later, further clarified the guidance: "The Luftwaffe is to overpower the English Air Force with all the forces at its command, in the shortest possible time. The attacks are to be directed primarily against flying units, their ground installations, and their supply organizations."(40)

Adlerangriff was the plan for the destruction of the RAF. The attack was targeted against RAF Fighter Command in southeast England: aircraft, airfields, radar stations, and support facilities.(41) This was the first phase of the battle and stretched from 13 August 1940 to 18 August 1940. During this phase, the Luftwaffe's major error was the lack of concentration of assets against Fighter Command.(42) The Luftwaffe did not have accurate intelligence on active RAF airfields, and thus wasted sorties against airfields that did nothing to destroy Fighter Command. This intelligence failure was also evident in the selection of industrial targets: targets thought to be producing bombers were untouched,

although these factories were turning out fighters.(43)

The Luftwaffe also failed to appreciate the true center of gravity of RAF Fighter Command- its command and control network. This intricate system of radar sites, sector stations, group operations centers, and outlying airfields was the "hub of all power" for Fighter Command. This system allowed Air Marshall Sir Hugh Dowding to husband and marshal his fighters in the most efficient and effective manner. To destroy this network, the Luftwaffe required patience and persistence.(44) The Luftwaffe, Goering, and Hitler lacked both. Although the Germans made a cursory attempt at knocking out the radar sites, a British deception plan led them to believe their attacks were unsuccessful, and thus they were called off.(45)

The second phase of the Battle of Britain followed a lull in the air fighting, primarily due to bad weather, but on 24 August 1940, the air battles began again. The Luftwaffe continued to put pressure on the RAF airfields, forcing the RAF fighters to respond to these attacks. This reaction was what the Germans wanted, for it forced combat and inevitable losses on Fighter Command. Although not realizing the true center of gravity of command and control, the Luftwaffe was inexorably winning the war of attrition against

Fighter Command. This attrition affected not only the number of pilots available, but their experience as well.(46) A vicious circle occurred: those pilots with experience flew more and more because inexperienced pilots did not last very long in combat.

Unfortunately for the Luftwaffe, another change in guidance was coming. The Germans did not realize the effect their attacks were having on Fighter Command, and switched their bombing attacks over to economic targets. Hitler and Goering, having perceived a reluctance of the RAF to join combat, decided that the bombing of London, primarily the dock area, would force the RAF fighters into the air and hasten their destruction.(47) Goering decided: "We have no chance of destroying the English fighters on the ground. We must force their last reserves...into combat in the air."(48) The results of this decision was a mistaken bombing of the center of London, followed by a retaliatory British strike on Berlin. When Hitler decided to put the might of the Luftwaffe against London, the "miraculous mistake" was made.(49)

This started the third phase of the Battle of Britain, and marked the return of the Luftwaffe to the theory of Douhet. In one and a half years, the Luftwaffe had turned from rejection of Douhet's theory of bombing populations to acceptance of it. The result of this

change gave the RAF a respite, and allowed them to convince the Germans that Fighter Command was still viable. By the end of September, 1940, the Germans called off both their invasion and the aerial assault against England.

Hitler himself contributed to the failure of the attack on England. His overall strategic aim was the defeat of England; however, he kept changing the theater of operations guidance given to his subordinate commanders. Initially, he wanted economic blockade. Next, he envisioned support of the ground invasion, as evidenced by Directives 16 and 17. Finally, he changed the direction of the aerial attack because of a desire for revenge. Hitler did not understand the patience and persistence required to gain air superiority over south-east England, nor did he allow his subordinates sufficient time to meet the strategic aim. With such rapidly fluctuating guidance, it is a wonder the Luftwaffe came as close as it did to achieving its goal of the defeat of Fighter Command. Without stable, clear strategic guidance, it is impossible to form a coherent campaign.

A true center of gravity was never clearly defined. It appears the Germans initially attempted to attack England's vulnerability, while ignoring the center of gravity. While Goering recognized his primary goal was the defeat of the RAF Fighter Command, he saw only

numbers of aircraft and pilots. His "bean counting" approach did not consider the vital link of command and control. The loss of this command and control structure would have unbalanced the entire RAF Fighter Command. Churchill recognized this: "If the enemy had persisted in heavy attacks against the adjacent sectors...the whole intricate organization of Fighter Command might have broken down."(50) Had the Germans persisted, Fighter Command would have collapsed, paving the way for the German invasion.

Although the Battle of Britain is described in three phases, I do not see the phases as interrelated branches or sequels to a campaign plan. The German shifts to different phases were caused by changes in guidance, not in response to success or failure of operations within a campaign. The switch from bombing airfields to bombing London is a perfect example. Had the Germans been following a cohesive campaign plan, the switch would not have occurred until air superiority over southeast England had been achieved. One sequel does appear in the German planning: after air superiority had been gained, the invasion would occur. However, there are no branches detailing what to do if air superiority was not achieved on schedule or how to change the attack to accomplish air superiority.

Culminating points do not appear to have been anticipated.

Rather, weather forced operational pauses and the eventual cancellation of the invasion. However, the Luftwaffe had not reached a offensive culminating point, for it was able to continue operations following the Battle of Britain.

My conclusion is the Battle of Britain, from the German perspective, was not a campaign, but a major operation in support of the campaign for the invasion of England. Airpower, in Hitler's view, would set the conditions for a successful land invasion, which would accomplish the strategic goal of defeating England. The Luftwaffe would play a major role initially, but could not accomplish the strategic goal by itself. The overall campaign consisted of joint major operations, combining the German Navy, the Luftwaffe, and the Wehrmacht.

SECTION III

KOREA-AIR INTERDICTION

"The interdiction campaign begins with attacks against the production sources of war material." (51)
General William W. Momyer, USAF,(ret)

The history of air interdiction during the Korean War is a story of successes and failures. The successes came when the interdiction was applied in concert with ground operations; the failures when air planners used air interdiction in an attempt to win the war.

The Far East Air Forces (FEAF), consisted of 1172 aircraft at the outbreak of hostilities.(52) The interdiction operations began in late July, 1950, after air superiority had been gained over the North Korean Air Force. Most interdiction sorties were flown at night, since that was when the majority of North Korean logistics moved. According to General Otto P. Weyland, commander of FEAF, this interdiction dropped the flow of supplies from 206 tons per month to 21.5 tons per month.(53)

This interdiction operation was combined with the ground forces breakout from the Pusan perimeter and the Inchon amphibious landing. The ground push, coupled with the drastic decrease in supplies, proved decisive, and the North Korean Army was pushed

rapidly back to the Yalu River. At this time, the Chinese intervened and began pushing the United Nations Command (UNC) forces back.

The withdrawal of the UNC forces back to the 38th parallel and subsequently south of Seoul led to a lengthening of Chinese supply lines. These lines of communication became vulnerable to air interdiction and finally collapsed.(54) An equivalent of five Chinese divisions were estimated to have been killed or wounded during the United Nations Command withdrawal, attributable mainly to air interdiction attacks against Chinese columns.(55) Interdiction bought time for the United Nations Command forces, allowing them to regroup and prepare a counteroffensive .

Up to this time, the air interdiction operation had been run concurrently with the ground operation. In General Weyland's words:

> To be successful, an interdiction campaign must be sustained with adequate firepower for a long enough period to reduce or eliminate the enemy logistic capability. When such a campaign is combined with continuing destructive attacks against enemy personnel and organic equipment both in the rear areas and in the front lines, the effects can be turned to great advantage.(56)

Following July, 1951, the guidance for the application of airpower changed. The UNC air forces were given the mission of denying the enemy the capacity to maintain and sustain further decisive ground attack.(57) Airpower was to create a situation favorable for a negotiated peace, while UNC ground forces were to

stabilize and maintain a defensive line.(58)

The greatest portion of the air effort at this time went to the interdiction of the North Korean rail system. This was to become known as Operation "Strangle." Although fully cognizant of the possibility of failure when air interdiction is not tied to a corresponding ground effort, General Weyland set up limited objectives for the interdiction operation: deny the enemy the capability to launch and sustain a general offensive.(59) This objective was achieved, but Operation "Strangle" has usually been labelled a failure because it did not deny the enemy the ability to launch limited attacks or maintain a defense.(60) This latter objective could never be achieved, due to the North Korean and Chinese ability to repair roads and rail lines quickly, while continuing to reinforce anti-aircraft defenses. This caused a disproportionate amount of losses vice the benefits gained. As a result, the air interdiction was shifted to "air pressure" strikes, designed to make the war too costly for the communists to continue.(61) Supply centers, concentrations of transportation assets, and large groups of troops were hit. Within a year of the shift to "air pressure" missions, the armistice was signed.(62)

At first glance, it appears this may be an air campaign, for the

guidance dictates airpower as the sole instrument for forcing a negotiated peace. However, ground operations did not cease because of this new emphasis on air operations. Rather, ground operations became defensive rather than offensive. The air operation was given priority and became the main effort. Thus, the synchronization between ground and air operations was disrupted, due to a shift to defensive ground operations. There were not two campaigns in progress at the same time. There were two major operations: air, the primary operation, and the defensive ground operation.

However, a center of gravity was identified. The "strength and hub of all power" of the communist forces in Korea was the ability of the enemy to use the sanctuary of China. China and bases north of the Yalu River could not be attacked. Therefore, the theater commanders attacked the lines of communication that brought reinforcements and supplies to the enemy. This was attacking a decisive point in the hopes that it would lead to the destruction of the center of gravity. Unfortunately, that center of gravity, although identified, could not be reached.

Operation "Strangle" did not appear to be phased, since operations were to be continued until a peace was achieved. There were no branches worked out in advance in the event Operation

"Strangle" did not succeed. The "air pressure" strikes were the result of the failure of the rail and road interdiction effort, but they were planned and used only after "Strangle" proved to have limited success.

The culminating point of the enemy was calculated in terms of time. Initial estimates were eight or nine months would elapse before the enemy collapsed due to Operation "Strangle."(63) Since the UNC had air superiority and sufficient resources, an offensive culminating point was not foreseen prior to the end of hostilities. Due to the strategic guidance, a defensive culminating point was of little concern. Both sides appeared to be content with a stalemate situation.

Thus, it seems the war in Korea after July 1951 was not an air campaign. Although airpower was the primary focus for meeting the strategic aim of a negotiated peace, ground operations still were ongoing. Even though these were defensive operations, the combination of ground and air operations brought about the strategic objective.

Perhaps the most important lesson to be learned from the use of airpower in Korea is that decisive success results only through synchronized application of offensive ground and air operations. This was a lesson that the air and ground forces knew going into the

Korean War. Unfortunately, this synchronization was abandoned due to political guidance when it would have been most effective. As a result of this guidance General Omar Bradley, Chairman of the Joint Chiefs of Staff, said:

> ...airpower constitutes the most potent means, at present available to UNC, of maintaining the degree of military presence which might impel the communists to agree, finally, to acceptable armistice terms.(64)

However, only the combined operations of air and ground forces would achieve the strategic objective.

SECTION IV

THE 1967 ARAB-ISRAELI WAR

"Egyptians get to their offices at 9 A.M. Striking fifteen minutes before that time would catch air force commanders on the way to their offices, and pilots on their way to training courses." (65) Brigadier General Modechai Hod, Commander, Israeli Air Force, 1966-73

On 5 June 1967, the Israeli Air Force (IAF) launched a preemptive strike against the Egyptian Air Force (EAF). Unlike the other two air operations in this monograph, this operation was planned in detail and in conjunction with the ground component commanders. This operation epitomizes the role of airpower in modern combat, and shows conclusively that synchronization between ground and air operations is one of the keys to a successful campaign.

During the early sixties in Israel, the IAF was given both money and people to build up its strength.(66) The IAF had superbly trained and motivated pilots, modern aircraft., and a mission to destroy the Arab air forces before Israel could be attacked.(67) The major problems facing the Israelis were the delivery of the right amount of ordnance within a limited period of time and with a limited number of aircraft, while at the same time avoiding a retaliatory strike from the EAF's bomber force.

The Israelis solved these problems by planning, preparation, and training. Pilots were taught to deliver their ordnance at slow speed, regardless of anti-air defenses, to ensure accurate delivery.(68) Target intelligence was constantly updated to provide accurate assessment and priorities. Maintenance teams were trained for rapid turn around of aircraft and ensured the highest number of mission ready aircraft available for the strike.

The Israelis also assumed risks in this operational plan. Forced to put most of their aircraft in the fighter-bomber role to effectively nullify the EAF, there were not enough aircraft left to provide air defense coverage. Thus, when the preemptive strike took place, only one squadron was retained in Israeli airspace for air defense.(69)

The overall plan was to gain air superiority in the first day of combat by destroying the EAF on the ground. Once air superiority was achieved, the Israeli ground units were free to move as they pleased. After air superiority, the IAF could concentrate on close support or interdiction, as the need arose. But, as in our other operations studied, air superiority was the overriding mission. This was driven in the Israeli case by an Arab four-to-one superiority in aircraft.(70)

At 0745 on 5 June 1967, (0845 Egyptian time), the attack began. Simultaneously, the ground forces in the Sinai also began their

attack without air cover. The Israeli aircraft flew in underneath the Arab air defense coverage, and in three hours destroyed the EAF. The IAF flew 500 sorties, destroying 309 out of 340 Egyptian aircraft, including all of Egypt's bombers.(71) The IAF systematically attacked the runways, then aircraft, and finally the support facilities.(72) Iraq, Jordan, and Syria, responding to Egypt's call to arms, initiated hostilities against Israel on the first day. By nightfall, their air forces had met the same fate as Egypt's. By the end of 5 June 1967, Israel had uncontested air superiority throughout the theater of war. Professionalism, planning, training, and preparation had paid off and paved the way for a successful campaign against the Arab forces.(73)

The Israeli planners correctly identified the Egyptian center of gravity: the EAF. With a four-to-one advantage over the IAF, the Egyptians had the ability to not only bomb Israeli cities, but also to significantly threaten the movement of Israeli ground forces.(74) By destroying the EAF, the Israelis could unhinge the entire Arab plan.

Branches and sequels were also considered and formed. The Israelis planned for the possible entry into hostilities by Iraq, Syria, and Jordan, and prepared appropriately for these contingencies. When these Arab countries attacked, Israel was able to respond quickly and decisively. The sequel to the successful air superiority operation

was to support the ground forces by close air support and interdiction.(75)

The Israelis had reached a defensive culminating point prior to the actual outbreak of war. In Clausewitz's words, they had to wield the "flashing sword of vengeance."(76) The defensive posture against the Arab forces would no longer suffice. Since the advantage of time no longer rested with the defenders, the Israelis were forced to go on the offensive- their preemptive strike. Had they not done this, and waited for the Arabs to strike, the Israeli plan would not have succeeded. This raises an interesting question: can one be at the defensive culminating point before the start of a war? Yes, particularly if one believes the Israelis were in a state of undeclared war. However, I do not feel that is necessary. What is important is for the defensive side to realize when it is no longer to their advantage to remain on the defense. Once this decision is reached, it is time for action.

All the elements of a campaign are present in this air action: a clearly defined center of gravity relating to strategic guidance, branches and sequels, and culminating points. However, unlike the case of the Korean War, the air force was not the only service that would bring about the end state, which in this case was the removal

of Egyptian forces in the Sinai and the blunting of the Arab threat from Iraq, Syria, and Jordan. This campaign was a combination of offensive ground and air operations working in synchronization. Thus, the air operation did not comprise a campaign.

While the air operation was not a campaign, it still provides important lessons for today's planners: preparation, training, and planning take time. It is also important to know your enemy and plan to take advantage of his weaknesses before he attacks. The Israelis knew the pattern of the EAF's pilots and planned their strike accordingly. The synchronization of ground and air in this car `aign proved successful, just as the proper synchronization of Army and Air Force assets resulted in success in the early days of the Korean War.

SECTION V

IMPLICATIONS AND CONCLUSIONS

There are four implications for Air Force planners that can be derived from the historical analysis of these three air operations. First, air superiority should be the primary object in an air operation; second, offensive air and ground operations must be synchronized to ensure success; third, the terms and concepts currently applied to ground operations have application to air operations; and finally, air operations are not campaigns.

In all the operations studied, air superiority was the key to future operations. Air superiority gives freedom of action and operational flexibility to both ground and air forces.(77) The follow-on invasion of England by German ground forces was predicated on air superiority over southeast England. During the Battle of Britain, the Luftwaffe never gained air superiority, and thus could not successfully set the terms for battle. Ultimately, this caused the collapse of the entire campaign.

In the Korean War, air superiority was achieved quickly, setting the conditions for synchronized offensive ground and air operations that took UNC forces to the Yalu River. Air superiority allowed Operation "Strangle" to take place, but could not guarantee the success of the interdiction operation. Rather, air superiority afforded the flexibility to attempt the

operation.

The Israeli's were able to gain a quick, decisive ground victory by the success of the preemptive air strike against the EAF. The resulting air superiority allowed Israeli ground forces to maneuver wherever and whenever was necessary.

Thus, air superiority is one of the keys to a successful operation and a campaign. Both ground and air planners must be cognizant of this. Ground planners need to know the primary allocation and apportionment early in any conflict will be given to air superiority. Air planners have to be able to explain why this is necessary in terms the ground planners understand. Since air superiority is mutually beneficial to both ground and air forces, there should be no complaint from either side.

This leads to the second implication of ground-air synchronization. Air operations, by themselves, will not bring success to a campaign. The Battle of Britain showed the ineffectiveness of separate air operations undertaken without corresponding offensive ground action. In the Korean War, success was achieved by applying offensive ground and air operations. When the ground operations became defensive, offensive air operations lost their effectiveness. The Israeli's, on the other hand, effectively combined offensive ground and air action to defeat an unsynchronized coalition of nations.

For air planners, this implies the joint application of air and ground, not a parochial use of only airpower. Air planners must realize the limitations of airpower acting alone or in conjunction with defensive ground operations. Such use of airpower may not bring about the desired results.

For ground planners, this synchronization may mean the delay in some ground operations while the air superiority operation takes place. Recognizing the fact that air assets are limited and unable to be everywhere all the time will help ground planners be more realistic in their expectations of what airpower can accomplish.

By understanding the terms and concepts of operations and campaigns, air planners can avoid the mistakes of planning separate operations, or operations out of synchronization with ground forces. Using terms such as center of gravity, branches and sequels, and culminating points can aid air planners in the development of successful operations. However, these planners must be aware of the complexities of simple questions such as "what is the enemy's center of gravity?" In our three cases, there were three different answers: command and control, enemy sanctuaries, and the enemy air force. By understanding these terms, though, air planners can look for, find, and determine how to attack the enemy center of gravity. To accomplish this, these planners must be able to phase their operations with branches and sequels. This was done extremely well by the Israeli's.

Through preparation and planning, the Israeli's were able to deal with contingency attacks by Syria, Jordan, and Iraq, without causing a major disruption of the overall campaign. The value of planning branches, sequels, and culminating points is not being surprised.

An added benefit of using these terms is a clearer understanding between ground and air planners. Both services will be able to visualize the operations being prepared and their overall contribution to the campaign plan. Such understanding can only enhance the synchronization of ground and air assets, resulting in complementary air and ground operations.

Finally, air operations do not constitute campaigns. Airpower, by itself, does not achieve strategic objectives. Rather, the combination of ground and air forces successively conclude campaigns. In all three cases, air operations were a part of an overall campaign plan. This campaign plan included ground, and sometimes naval, forces to bring about the strategic objectives. The future for airpower is the same. Working in concert with ground forces, airpower can help achieve the strategic aims, but it will never accomplish the goal by itself. By understanding this, air planners can work to support the campaign rather than devising campaigns of their own that may not help the overall plan.

However, air operations are important. They set the stage for future actions, but air operations should not be considered the sole method of

achieving success. By the same token, ground operations by themselves may not be decisive. It is joint operations that will win campaigns. By working together, the Army and the Air Force can better plan for successful future campaigns.

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