

# Principles of War

## Introduction

General Ferdinand Foch, Commander of the Allied Armies in World War I, explained the importance of studying the history of warfare. As an Airman, you are entrusted with the role of properly and effectively applying airpower principles in the accomplishment of national military strategy. To do this, you must study the historical application of airpower and understand its advantages and limitations. This lesson, titled "The Principles of War," will help you gain that understanding.

## Lesson Objective

The objective of this lesson is for you to know the principles of war as expressed from the perspective of an Airman, or more specifically, a United States Air Force Airman. At the end of this lesson, you will be able to recall the principles of war as they pertain to the application of airpower. You will also be able to describe the enduring nature of the principles of war with regard to future technological advancements and changes.

## Overview

The lesson begins by covering the historical evolution of the principles of war. Next, you will look at the different perspectives of the principles from the joint and Air Force positions. Finally, you will be introduced to historical examples illustrating the application of the principles of war from the airman's perspective.

## Joint vs. Airman's View

Joint Pub 1, Doctrine for the Armed Forces of the United States, refers to the principles of war as the principles that "...guide warfighting at the strategic, operational, and tactical levels of war." Air Force Doctrine Document 1, Air Force Basic Doctrine, Organization, and Command, acknowledges that the principles of war apply equally to all of the US armed forces. Airmen must develop an understanding of the principles from an Airman's point of view because Air Force forces provide unique capabilities through operations in the third dimension.

## History Ancient Era

The principles of war are not new concepts. As early as Sun Tzu's work, "The Art Of War", the concepts that evolved into principles were taking shape. Although Sun Tzu never addressed specific principles, his concepts of deception, freedom of action, adaptability, and flexibility can be directly related to modern principles of war. To view a description of a concept, roll your cursor over the link.

## History Napoleonic Era

The Napoleonic era saw the science of land warfare taken to new heights, both ideologically and technologically. Antoine Henri Jomini was the first to express the idea that a small number of principles should guide the commander's efforts on the battlefield. Although he never explicitly identified the general principles to which he referred, Jomini articulated two basic concepts which have been taken as principles. Jomini's thoughts on freedom of maneuver to bring masses of one's own troops against fractions of the enemy's and his thoughts on the ability of a military power to strike in the most decisive direction can both be linked to modern day principles of war. To view a description of a concept, roll your cursor over the link.

## History 19th Century

Carl von Clausewitz has been erroneously credited with the development of an enduring list of principles. In fact, even in his book, "The Principles of War," he warned against a reliance on principles, but rather presented them as tools to "stimulate and serve as a guide for reflection." To view a description of a tool, roll your cursor over the links.

## History 20th Century

In the years immediately following the end of World War I, much of the academic thought regarding the principles of war was formalized. The efforts of Major General J.F.C. Fuller evolved into a list of principles that was published in the British Field Service Regulations, Volume 2, in 1920.

## History Current Era

Through modest evolution, the principles shown here have emerged as the accepted standards for the US military. These principles are detailed in Joint Pub 30, Joint Operations. As broad guidelines for employing military force, the Principles of War apply equally to all US armed forces. Next, we will discuss each principle in greater detail.

## Principles Objective

The joint perspective of the principle, objective, is that all operations should directly contribute to the achievement of clearly defined, decisive, and attainable goals. Unlike surface forces, air and space forces are uninhibited by geography and can therefore strike targets, without having to fight through fielded forces, to produce strategic effects; thus attaining strategic objectives. From the Airman's perspective, the principle of objective shapes priorities which allow air and space forces to concentrate on theater and strategic-

level priorities.

## **Principles Offensive**

The principle, offensive, is about seizing, retaining, and exploiting the initiative. Offensive actions are the best way to maintain freedom of action and achieve decisive results. Even defensive operations must be prosecuted with an offensive spirit. Due to their inherently offensive nature, Air Force forces allow the joint force commander to seize the initiative by dictating the timing, place, purpose, scope, intensity, and pace of battlespace operations. Offensive actions against operational or strategic objectives, force the enemy to react rather than act, thus denying the enemy the offensive, and shaping the remainder of the conflict.

## **Principles Mass**

The joint interpretation of the principle, mass, is the ability to concentrate combat effects at a decisive place and time. Surface forces typically achieve mass by concentrating forces—synchronizing their operations in space and time and sustaining them until the desired effect is achieved. Airmen emphasize the fact, which joint doctrine recognizes, that mass is an effect, not just overwhelming quantity. With recent advances in precision weaponry and command and control, Air Force forces are uniquely capable of using their speed, range, and flexibility to mass effects, either lethal or nonlethal, anywhere in the world from widely dispersed launch locations.

## **Principles Economy of Force**

Economy of force concerns the allocation of minimal essential combat power toward achieving secondary efforts. This preserves combat power to mass elsewhere at a decisive time and place. From an Airman's point of view, economy of force demands a rational use of critical resources on properly selected objectives. The misuse or misdirection of Air Force forces on ill-defined objectives can reduce their contribution even more than enemy actions.

## **Principles Maneuver**

Maneuver is normally viewed in relation to the enemy's fielded forces. The goal of maneuver is to gain a positional advantage from which to deliver fires. The flexibility and versatility of airpower allow the simultaneous application of mass and maneuver to strike strategic or operational centers of gravity anytime, anywhere, and from any direction. This forces the enemy to defend everywhere, all of the time.

## **Principles – Unity of Command**

The principle, unity of command, from both the joint and airpower perspectives, calls for unified efforts that are directed and coordinated toward pursuing common objectives. Because airpower is the product of multiple capabilities, centralized command and control, as implemented through an Airman designated the Joint Force Air Component Commander, or JFACC, with a theaterwide perspective, is essential to effectively fuse them.

## **Principles Security**

The principle, security, focuses on the areas of force protection and risk management. Keeping our forces secure, increases their combat power and preserves freedom of action. The range and speed of air and space assets uniquely enhance their ability to operate beyond the enemy's reach. Not only can they stri

ke from an extended range, Air Force forces can also distribute data and provide command and control globally to reduce their vulnerability.

## **Principles Surprise**

Surprise leverages the security principle by attacking at a time or place, or in a manner for which the enemy is not prepared. Surprise can shift the balance of combat power leading to success exceeding the effort expended. Airpower can more readily achieve surprise due to their range, speed, flexibility and versatility. Airpower can also enhance and empower surface forces to achieve overwhelming surprise. The rapid global reach of airpower allows surface forces to reach foreign destinations quickly and seize the initiative through surprise.

## **Principles Simplicity**

Simplicity in the joint arena calls for making all plans and orders as clear and concise as possible. A simple plan is more likely to endure the fog and friction of war and be successful. From the Airman's perspective, simplicity is crucial for decentralized execution or allowing subordinate commanders the freedom to creatively execute the operational plan within given general guidelines. Simplicity begins with unambiguous organizational and command relationships that can develop straightforward plans.

## **Historical Applications**

In the introduction to Gen Foch's book, "The Principles of War," de Morinni reflected on the perils of concentrating on the methods of trench warfare during the First World War. Today, some critics argue that joint doctrine may be concentrating too heavily on two-dimensional maneuver warfare like that used during Operation DESERT STORM in 1991, known as "The Gulf War." The consequences of ignoring the proper application of airpower in the future could be just as disastrous as those endured in the trenches of northern France. Take an opportunity to study a few historical examples of the uses and misuses of airpower and consider how some of those lessons might apply today.

## **Combined Bomber Offensive**

Ideas about the decisive use of airpower were developed at the Air Corps Tactical School at Maxwell Field, Alabama during the interwar years. The first real test of those ideas came in World War II during the European combined bomber offensive, or CBO. Using the target sets of Air War Plans Division 1, or AWP-1, the CBO targeted the electrical power system, transportation system, oil and petroleum production facilities, and public morale. The concept behind the combined bomber offensive was a solid application of the principles of objective and offensive.

## **CBO Fighter Escorts**

The success of the combined bomber offensive was made possible by changes in employment concepts and technological advancements. The introduction of effective, long-range bomber escort enabled airpower to neutralize the German Air Force through counterair attacks and interdiction deep into German territory. This campaign effectively utilized the principles of maneuver and surprise.

## **CBO Security**

By attacking submarine

bases, surface ships and ports, the combined bomber offensive was able to safeguard allied resources from German attack. This exemplifies how the principle of security is enhanced by the use of airpower.

## **Vietnam ROLLING THUNDER**

The Vietnam War contained many examples of the proper application of airpower, and a few misapplications. In 1965, Operation ROLLING THUNDER was one of the prime examples of the misapplication of airpower. This campaign was an attempt to stabilize the situation in Southeast Asia. Using progressive air strikes against carefully selected targets approved by the president, the objective was to persuade the North Vietnamese government that it could not win the war. The results of the offensive actions had just the opposite effect. These actions caused a hardening of enemy defenses, rhetoric and attitudes against US involvement in the war. When the interim results were analyzed in the spring of 1965, the US strategy was modified to gradually increase the tempo of attacks. The North Vietnamese responded with a complementary escalation in their offensive activity. The misapplication of airpower centered on the improper choice of interdiction targets and the inability to deliver the decisive blows required to achieve the desired operational and strategic effects. The restrictive planning and close control exercised by the administration were also detrimental to US morale and spirit which only intensified the sentiments of the North. As you can see, offensive and objective were two of the principles misapplied during the ROLLING THUNDER campaign.

## **Vietnam Command & Control**

The command and control of air activities during the Vietnam War could not have been conducted in a more disjointed fashion. Each service controlled its own sectors of airspace in North Vietnam and Laos through the Route Package System. The Military Assistance Command Vietnam, or MACV, controlled the air war in route pack I. The Navy, through PACFleet, controlled the air war in route packs II, III, IV, and VI B. Pacific Air Forces, PACAF, controlled air activities in route pack V and VI A. The widespread use of long range bomber forces was controlled by Strategic Air Command. The first point at which the planning and execution chains of command joined was at the Joint Chiefs of Staff. The problems this caused with regard to the principles of unity of command and economy of force directly contributed to the current joint operations doctrine put into law by the Goldwater-Nichols Act of 1986.

## **Vietnam LINEBACKER II**

In contrast with the mistakes of the ROLLING THUNDER campaign, the conduct of Operation LINEBACKER II highlights the proper use of airpower. The North Vietnamese had shifted their strategy to that of a conventional ground war. The objective of Operation LINEBACKER II was to end the war by demonstrating that the conflict was not sustainable, a subtle but significant change in policy. By finally being able to take the damage and destruction of war to the heart of the country, especially Hanoi and Haiphong, the air war had effects that the ground campaign was never able to carry out. This is a positive example of airpower employed with regard to the principle of objective. Only after the Vietnamese air defense system was neutralized, and bombing missions were conducted virtually unopposed, did the North Vietnamese leadership finally realize that they were better off returning to the peace negotiations. This application of airpower illustrates the ability of air and space forces to exercise the

principles of mass and offensive action.

## **DESERT STORM**

During Operation DESERT STORM, two technologies—stealth and precision guided munitions—had a significant impact on military operations. The Coalition Force Commander was able to strike operational and strategic targets with precision, a task that was technically impractical prior to this operation. For the first time, Coalition forces were able to use the concept of parallel warfare, thereby eliminating the need for sequential attacks. The F-117s were able to go after any target deemed necessary, to include communication nodes, electrical grids, command and control centers, and transportation systems. The Coalition Force Commander was able to target for effect and inflict the desired destruction or damage. In one way or another, every principle of war is embodied in stealth and precision strike capabilities. Most significant are the principles of objective, mass, economy of force, and security. By striking deep and completely avoiding the well entrenched ground forces, the F-117s shaped the battlefield in a way that may never be fully appreciated.

### **Stealth and Precision**

Our capabilities in stealth and precision have steadily progressed. In World War II, large numbers of aircraft had to concentrate in a single area to produce any effect. This was mass in the traditional sense. In Vietnam, improvements in precision were made but it still required a large number of aircraft to destroy one target. In Operation DESERT STORM, stealth was added and for the first time, mass was redefined. Airpower could now achieve desired effects on multiple targets without large numbers of aircraft. Recent operations such as Operation IRAQI FREEDOM demonstrated how stealth and precision guided munitions coupled with advances in command and control are able to put any target in an entire country at risk within minutes. Modern air operations give the principles of objective, mass, and economy of force a whole new meaning. The effect of one, two thousand pound bomb down the airshaft of a command and control bunker could only be dreamed of in the days when massive bomber formations conducted so-called "high altitude daylight precision bombing." Requiring fewer sorties to achieve an effect means fewer aircraft are exposed to risk, a primary concept in the principle of security. Stealth also enhances security, enables surprise, and allows unfettered maneuver over, around, or through enemy defenses. It's important to note that while technology has improved, the basic principles of waging war have remained the same.

### **Space Assets**

Space assets give the US unique capabilities for surveillance, reconnaissance, communications, and navigation across the globe. Space-based assets allow direct access to objectives exactly where needed, throughout the range of military operations. In many parts of the world, the US is unable to deploy a significant physical presence. Space assets do the work of literally thousands of land-based systems without putting lives at risk. Satellites allow the US to surveil areas on the globe where overflight rights are unavailable. For example, space assets provided persistent monitoring to ensure Iraq was in compliance with UN sanctions after Operation DESERT STORM. Objective, economy of force, and security are but a few of the principles of war that space assets exemplify in supporting national and military strategy. While space capabilities have proven to be a tremendous advantage for the US, recent events have challenged our dominance in the space domain and the security of our space assets. For example, in January 2007, the Chinese intercepted one of their weather satellites using a kinetic

c kill vehicle. This event not only demonstrated a possible threat to US systems, but also resulted in the introduction of thousands of pieces of space debris increasing risk to spacebased operations.

## Summary

The principles of war apply equally to all of the US armed forces. As members of the Air Force component of the joint team, it takes an Airman's perspective to communicate how these principles pertain to air and space forces. As an element of doctrine, the principles of war are guidelines that commanders can use to form and select courses of action. Of course, even valid principles are no substitute for sound, professional judgment- but to ignore them totally is equally risky. For a more detailed examination of each principle, you can click on the links to Joint Pub 30 and Air Force Doctrine Document 1.