## Isolation of the

## Battlefield

## by Air Power

## General Henry H. Arnold, US Army

In this lead article of the July 1944 issue of Military Review, General Henry H. "Hap" Arnold clearly articulates the principles associated with the Army's doctrinal "deep battle" concept at that time. The tactical air force priorities he outlines are virtually identical to those employed by air component commanders today. This article clearly demonstrates why Arnold, the first General of the Air Force, is considered the founder of our modern-day US Air Force.

OMBAT AVIATION WHEN employed by the higher commander, trained in the correct use of Air Power, is a powerful means for influencing the course of battle. The formulation of a correct Decision which results in the proper employment of the Air Power assigned to the Theater is a function of command, and this Decision can be properly concluded only after a thorough and exhaustive Air Estimate of the Situation by the Air Commander and his Staff. A faulty or incomplete Air Estimate of the Situation can result only in an equally faulty and incorrect Decision and a subsequent employment of the available Air Power against unremunerative targets. Through such employment, the great offensive potential of Air Power is nullified and its contribution to eventual victory greatly weakened or perhaps completely lost.

The Nazis have furnished us an excellent example of incorrectly employed Air Power. In 1939, when the Nazis had the greatest air bombardment fleet in the world, it turned its efforts against the civilians of London. Targets of great strategic value such as factories, transportation facilities, and ship-producing facilities were neglected in a vain attempt to make the British people cry "Quits." That Hitler and Goering failed is a matter of history. That we are not making the same mistake today is now a subject of great concern for Hitler and the entire German people.

Under certain tactical conditions and from a correct Air Estimate of the Situation, the Commander will often decide that the enemy's rear areas offer the most favorable opportunities for the employment of the major part of the Air Power at his command. Normally, employment of the greater part of the aerial offensive effort against the enemy's rear areas is that aerial phase of operations referred to as the "Isolation of the Battlefield."

Field Manual 100-20, Command and Employment of Air Power, outlines my doctrine as to the proper employment of tactical air strength. It states: "The mission of the tactical air force consists of three phases of operations in the following order of priority:

- (1) First priority—To gain the necessary degree of air superiority. This will be accomplished by attacks against aircraft in the air and on the ground, and against those enemy installations which he requires for the application of Air Power.
- (2) Second priority—To prevent the movement of hostile troops and supplies into the theater of operations or within the theater.
- (3) Third priority—To participate in a combined effort of the air and ground forces, in the battle area, to gain objectives on the immediate front of the ground forces."

There can be no "D" day or "H" hour at which one phase of activity is completed and another phase begun. All three phases of the aerial offense will in most probability be conducted simultaneously, but, and this is the important fact to note, the first phase will always have the higher priority even though the greater number of aircraft and personnel may not be involved in its accomplishment. The second and third phases will be assigned to the aircraft and personnel not needed for the successful accomplishment of the first phase of the aerial operations. It has often been found necessary, because of the enemy's effort to reinforce his air defensive strength, to assign the

mission of regaining the necessary degree of air superiority to the greater part of our Air Power even after that necessary degree of air superiority had been once established and emphasis had been placed on missions aimed at the accomplishment of the "Isolation of the Battlefield."

Thus, isolation of the battlefield may be and will most likely be begun even though the necessary degree of air superiority in the battle area has not been accomplished, but its attainment must be attempted only by the aircraft not needed to attain or maintain the necessary degree of air superiority. Even though the aerial offensive operations have developed to the extent that isolation of the battlefield is requiring the combined efforts of the greater number of the Air Force personnel and the greater amount of the Air Force equipment, it must not be supposed that continued efforts to maintain the required degree of air superiority can be neglected and that counter-action against enemy aircraft and the sources of strength of his Air Power is no longer necessary. It is thus established that as the battle, or campaign, proceeds to a successful conclusion, more emphasis passes to the second and third phases of operations but the priority remains the same.

The attainment of the necessary degree of air superiority is a prerequisite to successful accomplishment of the second and third phases.

Let us assume that our air strength has established the necessary degree of air superiority. Under this condition, the ground and naval forces can operate in the Theater with a much greater degree of mobility and more effort can be directed toward the accomplishment of their offensive mission since a lesser effort is needed to counter the capabilities of the enemy's weakened aerial strength.

This decisive advantage of air superiority having been attained, greater aerial offensive effort is now directed toward the successful accomplishment of the second phase, namely, that of isolating the battlefield. The purpose of this offensive effort is to prevent the movement of hostile troops and supplies into or within the Theater of Operations. If the enemy is not permitted because of the efficiency of our aerial blockade to reinforce the areas under attack by our combined arms, it follows that the consistent but ever increasing rate of attrition resulting from the combined power of all of our arms must finally result in a decreasing of his ability to resist. Complete collapse is the ultimate result.

Modern mechanical war with its ever greater demand for technical supplies and services requires a constant flow of supplies. The enemy's Line of Communications is the lifeline of his ability to resist and to fail to protect this lifeline is to invite disaster. Failure to receive these supplies presages defeat if facing an enemy that has successfully secured and maintained his own Line of Communications.

Not only is the enemy prevented from moving into the Theater the weapons and personnel of war needed to increase his resistance, but he is also unable to replace the constant attrition of men and materiel suffered in opposing our forward movement.

Proper targets in this phase of operations are many. Any aerial operation that will prevent or delay the arrival of personnel or any type of military supplies in the Theater of Operations is aiding in the isolation of the battlefield. In an area where the main Lines of Communications are the sea lanes, this means a constant and continuous aerial effort against enemy shipping and harbor facilities. Not only will the destruction of his cargo vessels, his troop transports, and his tankers satisfy the requirement, but the damaging and destruction of the warships used as escorts is a direct contribution because the enemy's ability to protect his Line of Communications in the future is materially weakened by such losses. This compels the enemy, if the attrition of escort vessels has been sufficiently great, to desist in his efforts at reinforcement and resupply or to attempt to continue his efforts with less well protected convoys. If he discontinues his efforts to reinforce and supply his forward bases, then these bases must certainly fall before our ground offensive. If he continues his efforts, then our aerial offensive directed at the more weakly protected Line of Communications encounters even less opposition and the results obtained are greater.

In 1943, the forces of the Southwest Pacific faced a tremendous job in forcing the enemy from his numerous bases on the North Coast of New Guinea. Six months had been required to take Buna. At the speed that we were moving on the ground, it would have taken years to have freed even New Guinea. Then the Fifth Air Force. strengthened by planes, men, and newly constructed air bases, began its offensive against the Japanese military strength and its Lines of Communications. Gradually his Air Power was driven back and then his Lines of Communications were attacked. In the Battle of the Bismarck Sea the Fifth Air Force destroyed a total of twenty-two warships, troop transports and supply ships. In this single operation, one Jap[anese] division and all its equipment was destroyed at the cost to the AAF of twelve men and six aircraft. Because of our continued superiority in the air, the enemy was unable to supply his forward area and it collapsed under our integrated military effort.

Today our forces are in Hollandia because the enemy's Air Power was destroyed, his forces immobilized, and his supply lines cut by the concentrated use of our air strength against proper targets.

In a Theater of Operations where the enemy depends upon a network of railroads, rivers, and highways for supply, the targets are numerous. Not only is the actual conveyor of the personnel or supplies a target but the route he covers is a logical and proper target. Destruction of the vital and key points of the transportation system such as highway and railroad bridges and railroad centers causes delays out of proportion to the actual material damage inflicted. Rerouting of highway and railway vehicles interferes with movements already scheduled on alternate routes. Again, as on the oceans, the results are accumulative. As more roads and railroad lines are blocked, increasing congestion on the remaining system of highways and railroads is the inevitable result. This congestion of traffic presents our Air Power with more lucrative targets and renders the remaining routes even more vital to the enemy. It is to be noted that in aerial action against enemy ground Lines of Communications, the effect felt is only temporary unless-and this is vital-constant aerial pressure is maintained, thereby keeping the highways and railway systems blocked and continuing the congestion on the remaining part of the transportation system until those lines are also blocked or until the part of the transportation system remaining to the enemy is absolutely incapable of logistically supporting the degree of operations necessary to hold our forces in check.

Today over northern Europe, our Eighth and Ninth Air Forces are disrupting and destroying the transportation system that Hitler needs to meet the invasion of the Continent. It is one of the missions of these Air Forces to damage or destroy the road and railroad system so that the German High Command will not be able to promptly move the necessary reserves into the areas threatened by our invasion forces. To immobilize the German Reserve is to assure that our ground and air forces have superiority at the desired points.

The operations described above are limited to the effort of preventing the arrival in the Theater of the men and implements of war. It has often been advantageous to prevent the movement of equipment and reserves within the Theater of Operations. If because of our aerial offensive in his rear areas, the enemy is denied the opportunity to move reserves to meet points threatened by our forces, then we are able to establish overwhelming air, ground, and naval superiority in any area or part of the Theater that we may desire. This loss of mobility by the enemy,

even though our strategy and tactics may become obvious, enables us to hit him when he is unable to deploy his forces to meet our concentrations of strength.

Even if our air strength is unable to prevent the arrival of some supplies into the enemy's forward areas, constant air activity behind his front lines can destroy or so damage these supplies that their value to the enemy, even after all his efforts to bring them to the Theater, is destroyed. An example of this today is the large store of supplies once located on Wotje, Mille, Maloelap, and Jaluit, the principal atolls of the Marshalls still in Japanese hands. Constant air activity expended on these atolls is steadily destroying the large stores of supplies he has accumulated there and is rendering doubtful his ability to even exist.

When overall strategy demands the taking of these atolls, the enemy's ability to resist will have been greatly reduced or will have become nonexistent by the losses in materiel and men that have resulted from a daily pounding of these isolated land areas by the aircraft of the Seventh Air Force. The isolation of the battlefield or the battle area by the Army Air Forces demands the expenditure of a vast amount of effort and time by our Air Force personnel and the expenditure of large quantities of materiel. To make this expenditure of so much effort, time, and materiel acceptable, it must pay exceedingly rich dividends. These dividends are the logical result of a correct Decision employing an Air Force of adequate size, which is superbly equipped and carefully trained, to convert the correct Decision into an accomplished fact. The immediate result is an enemy military force weakened by the daily attrition of war, incapable of being reinforced and resupplied from the Homeland, and unable to move reserves within the Theater to points under attack or threatened by attack. The final result is a rapid deterioration of the enemy military situation and ultimately the complete collapse of his resistance.

In the past, the Army Air Forces have logistically isolated large enemy forces and have thus directly contributed to the annihilation and destruction of the enemy force as an effective fighting machine.

In the future, the Army Air Forces shall continue to contribute to ultimate victory by the continued accomplishment of all of its missions, of which "Isolation of the Battlefield" is only one. **MR** 

General Henry Harley "Hap" Arnold (1886-1950) was born on 25 June 1886 in Gladwyne, Pennsylvania, and graduated from the US Military Academy at West Point, New York, in 1907 as an infantry officer. In June 1914, he earned his pilot's certificate after receiving instruction from Orville Wright in Dayton, Ohio. As a temporary colonel, he commanded Marshall Field, Fort Riley, Kansas, from 1926 to 1928 and graduated from the US Army Command and General Staff School in 1929. Arnold served in various senior aviation assignments before, during and after World War II, all of which eventually led to the establishment of the US Air Force as an independent service in September 1947. He was promoted to five-star rank of General of the Army in December 1944 and retired in March 1946. In May 1949, he was named the first and only General of the Air Force.