Fundamental Truths of Air Power

*Air power doctrine* is a set of beliefs held by institutions about air power and the best way to employ it. Doctrine represents the lessons of experience and includes developing theories. For Mitchell there was little air power history beyond his personal experiences, and he noted that “In aviation, particularly in its application and use, there is almost nothing to go on.”

His ideas were largely theoretical, based on his experience and vision. His theories and those of his aeronautical contemporaries when validated would become air power doctrine. Mitchell’s words reflect both fact gathered through experience, and theory springing from his insight and vision. Most of his early concepts on air power would be validated as fundamental truths and serve as the foundation of contemporary air power doctrine.

- To develop anything, the underlying thought and reason must govern, and then the organization must be built up to meet it.
- The attempt of one combatant, therefore, is to control the vital centers of the other that it will be powerless to defend itself. . . . From the dawn of history, nations have put numbers of men in the field, called armies, and have launched them at these hostile centers. The opposing nation then put a wall of men in front of these places to defend them, and a combat took place to determine which side would gain mastery. Gradually the theory grew up that the object of war was to destroy the hostile army in the field—because if this were done the country lay open to the invader. . . .

The advent of air power which can go straight to the vital centers and entirely neutralize or destroy them has put an entirely new complexion on the old system of making war. It is now realized that the hostile main army in the
field is a false objective and the real objectives are the vital centers. The old theory, that victory meant the destruction of the hostile main army is untenable. Armies themselves can be disregarded by air power if a rapid stroke is made against the opposing centers, because a greatly superior army numerically is at the mercy of an air force inferior in numbers. . . . The result of warfare by air will be to bring about quick decisions.  

- Air power can attack the vital centers of the opposing country directly, completely destroying and paralyzing them.

- In case of an air war the action will be directed against the vital centers, and the outcome will be determined in a comparatively short time. One side or the other will be completely victorious.

- Heretofore, to reach the heart of a country and gain victory in war, the land armies always had to be defeated in the field and a long process of successive military advances made against it. . . . A new set of rules for the conduct of war will have to be devised and a whole new set of ideas of strategy will have to be learned by those charged with the conduct of war. No longer is making war gauged merely by land and naval forces. Both these old well-understood theaters of conducting war are affected by air power, which operates over both of them.

- Not only can a decisive stroke be made against a great industrial and commercial country by aircraft, but it can be held in subjection much more easily by an air force than by an army or navy.

- The art of war had departed. Attrition, or the gradual killing off of the enemy, was all the ground armies were capable of.

- What will this new element in warfare result in? Unquestionably the amelioration and bettering of conditions in war because it will bring about quick and lasting results.
To bring war to a successful conclusion a sharp, quick decision is necessary, no matter what the losses, because it is much cheaper in every way to have the whole thing over quickly than to keep dragging it on for years. Today ground armies alone are not a means of obtaining a rapid victory in contests between first-class powers. They are becoming merely holding forces for ground areas.36

- Speed of locomotion is the predominant characteristic of air power. . . . The range of view is almost infinite as compared with troops on the ground or a navy on the water. . . .Their routes through the air are straight lines—mountains, rivers, deserts and oceans are not obstacles.37

- The air covers everything and wherever there is air, aircraft can go.38

- No part of the country will be immune from attack to the nation having control of the air, as no frontiers exist for air forces, the air being the same the world over.39

- The first battles of the future will be held in the air, and the results of these battles will either determine who shall win the war or have a very marked influence on it.40

- In other words, the most important battle will be the first air battle.41

- The first decision in a war is going to be sought in the air.42

- In future wars, aircraft will project the spear point of the nation’s offensive and defensive power against the vital centers of the opposing country. Then woe be to the nation that is weak in the air. It will fall a prey to its enemy more quickly than has ever been the case in war waged by armies and navies.43

- The only adequate defense against hostile aircraft is our own aircraft.44

- As [the armed services] have changed so little in their methods and ways of conducting war for so many centuries, they always look back to find a precedent for
everything that is done. In the development of air power, one has to look ahead and not backward and figure out what is going to happen, not too much what has happened.\textsuperscript{45}

- With aviation, vision is a most important matter because its great possibilities lie ahead and not behind us.\textsuperscript{46}
- Air fighting is a thing distinct, and entirely in a class by itself.\textsuperscript{47}
- Air power has brought with it a new doctrine of war which has caused a complete rearrangement of the existing systems of national defense, and a new doctrine of peace which eventually will change the relations of nations with each other due to the universal application and rapidity of aerial transport.\textsuperscript{48}
- So many erroneous doctrines have been enunciated about aviation by the older services that see in the development of air power the curtailment of their ancient prerogatives, privileges, and authority, that we consider it time to challenge these proceedings and make our own views known.\textsuperscript{49}
- Those of us in the air knew that we had changed the methods of war and wanted to prove it to the satisfaction of everybody.\textsuperscript{50}
- The first thing to do, manifestly, was to conserve what we had learned in the European War, and we immediately set about writing all this down on paper so that it would not be completely lost.\textsuperscript{51}
- All of the measures taken which are mentioned above [organization training and equipping] are at least written down and ready to be applied in case of trouble. They are, however, very largely theoretical.\textsuperscript{52}
- No missile-throwing weapons or any other devices have yet been created or thought of which can actually stop an air attack, so that the only defense against aircraft is other aircraft which will contest with them for supremacy of the air by air battles.\textsuperscript{53}
- There is one thing which was absolutely proved in the European war, and that is that nobody was capable of
handling air units except flying officers who had learned by experience what flying was and how these things should be handled.\textsuperscript{54}  

- The great trouble now is that, whenever an air question is up for discussion, mostly individuals who are not air officers are consulted. No one is capable of passing on air matters except an air officer trained in the work.\textsuperscript{55}  

- No other military instrument has ever demonstrated, within such a short time, its absolute necessity, dependability, and power for carrying out military requirements.\textsuperscript{56}  

- Probably [bombardment's] greatest value is in hitting an enemy's great nerve centers at the very beginning of the war so as to paralyze them to the greatest extent possible.\textsuperscript{57}  

- Aviation depends for its action on a concentration of power at the decisive point.\textsuperscript{58}  

- The divided control of the air force between the army and the navy resulted in a terrible mess.\textsuperscript{59}  

- Aviation must attack to bring results. It cannot dig trenches or dugouts in the air and assume the defensive. It must go after its adversary, wherever he is, and either destroy him or be destroyed. There is no middle course.\textsuperscript{60}  

- Putting an opponent on the defensive in the air is much more valuable comparatively than putting him on the defensive on the ground.\textsuperscript{61}  

- The premium of successful combat is shooting down the enemy and the forfeit when unsuccessful is to go hurtling to earth in a flaming coffin.\textsuperscript{62}  

- We bombed the centers of concentration first to interrupt the communications through these centers, which was done to a great extent; and second, to make them defend that particular part of the line with their pursuit airplanes to keep them away from our lines. The best criterion of the effect of bombardment against any place is the vigor with which they defend it.\textsuperscript{63}
Military aviation is designed to inflict the greatest loss possible against the enemy and the dangers incident to this have to be sustained.  

The principal difference between the employment of our airplanes over the water and over the land is in the character of airdrome, or landing place, that has to be used. This landing place may be on the land itself; it may be on the water itself; it may be a floating airdrome on the water, such as an airplane carrier, or a floating landing platform.

Most of the time the ground troops cannot see the air troops doing their work, as the air fights necessarily take place at a distance from the troops because the hostile air forces have to be sought out and fought wherever tactical requirements necessitate it. The ground troops consequently get the idea in many instances that they are abandoned by their aviation, and occasional glimpses of a mass of their own aviation such as mentioned above, crossing the lines, and, in spite of being covered by the hostile anti-aircraft artillery fire and attack of the hostile air forces, proceeding on their mission, is indeed a very inspiring sight.66

The air is a very large place. It has three dimensions—up, down, and sideways. Like any other military operations, concentration of force at the vital point is what counts. This often, and nearly always, is far removed from the troops on the ground, out of their sight, and out of their knowledge, and when the sharpest fighting is being carried on in the air, it is usually far within the enemy’s territory, so as to carry the air fighting away from our own troops. This often makes the troops on the ground, particularly green troops, feel that they are abandoned in the air. The way to prevent this feeling on their part is to instruct them as thoroughly as possible in how air forces have to be used to obtain their maximum benefit. Not only should this instruction be given to the officers
themselves, but to the non-commissioned officers and privates.\textsuperscript{67}

- If a soldier on the ground saw any hostile aircraft in the air, no matter how impotent it might be, he at once conceived the idea that everything he did was seen and immediately reported. . . . Aircraft really exerted an uncanny influence—on new troops particularly, and even on old ones—and quite rightly.\textsuperscript{68}

- Do not think that we are not on the job when you cannot see us—most of our planes work so far in front that they cannot be seen from the lines.\textsuperscript{69}

- All military progress has hinged on the development of armament (this is, bringing more fire to bear on the object to be attacked), on mobility or the power to go from one place to another quickly, and on the number of effectives or the strength that could be concentrated at the decisive point.\textsuperscript{70}

- It [air power] consequently has the power of offensive always with it, and can choose the time, place, and method of attack against either an army or a navy, and largely can control these matters for the army or navy with which it is acting, providing the hostile air force has been destroyed or put out of action.\textsuperscript{71}

- Starting as a more or less insignificant adjunct to the armies in 1914, Aeronautics ended up on the Western Front as one of the decisive factors in all operations.\textsuperscript{72}

- The spring of 1917 had seen the real beginning of grand tactics in air warfare, that is, large numbers of airplanes acting together under a common leader.\textsuperscript{73}

- Whenever an attack of a military object depends on an explosive, an aerial bomb attack is the most efficient, because air projectiles carry a far greater proportion of explosives than any other missile (roughly, one-half their weight).\textsuperscript{74}

- To hit anything in the air, you have got to see it.\textsuperscript{75}

- Distance is nothing to airplanes. Our accuracy is the same up to the limit of our gas capacity.\textsuperscript{76}
The air attack will come from whatever direction offers the greatest advantage to the attacker.  

The essence of air attack is to approach the objective from different directions so as to mislead the enemy, separate him into various detachments, maneuver him out of his position in the air, then combine one's forces at the crucial moment where they will do the most good.

He [the air attacker] can use the greatest weapons of all time and can bring about decisions in warfare with a speed never conceived of before. Once the power of the initiative is seized by an air force, the opponent had better make peace.

Putting an opponent on the defensive in the air is much more valuable comparatively than putting him on the defensive on the ground.

Looking at the earth from aircraft gives us a different perspective from anything we have had before.

Fighting on the ground and on the water had gone on since the beginning of time, but fighting in the air had just started; and several generations will have to be born and pass away before people can adopt and maintain the same attitude toward this form of warfare as they exhibit toward the old familiar ones.

Hindenburg looked back to Hannibal's Battle of Cannae, and made his disposition to fight the Russians at Tannenberg. Napoleon studied the campaigns of Alexander the Great and Ghenghis Kahn, the Mongol. The navies draw their inspiration from the Battle at Actium in the time of the Romans, and the sea fight of Trafalgar. In the development of air power, one has to look ahead and not backward, and figure out what is going to happen, not too much what has happened. That is why the older services have been psychologically unfit to develop this new arm to the fullest extent practicable with the methods and means at hand.

It was the greatest concentration of air power that had ever taken place and the first time in history in which an
air force, cooperating with an army, was to act according to a broad strategical plan which contemplated not only facilitating the advance of the ground troops but spreading fear and consternation into the enemy’s lines of communication, his replacement system and the cities behind them which supplied our foe with the sinews of war.  

- We were constantly forcing them to fight in the air; of course, it was a walkover on the ground for the army.  

- In Mesopotamia, Irak, as it is called, the air force handles the military occupation of the country in a manner similar to that in which armies have in the past.  

- Naturally, if ground is to be held, armies will still have to do it; but once a country has capitulated and agreed to certain terms, it can be controlled by threat of additional aerial bombardment, and ground forces can be transported under protection of air power.  

  It is probable that in a future war a very strong air power may so overawe its rival that it will not await the final shock but will capitulate before a strong demonstration of hostile air power.  

- The first consideration in a modern war will be to seize and hold localities in which aircraft can act against the vital centers of the opposing nation. The question of who holds the sea is entirely secondary. It is a question of who holds the air.  

- In the past war aircraft were grouped around the ground armies, for the most part at low altitudes, within plain sight, because at that time the armies were thought to be the principal means of obtaining a decision in war. Now, however, no more airplanes will be assigned to the ground armies than are absolutely necessary for their local wants. All the rest will be thrown into the offensive, hundreds of miles away.  

- If an expedition is to take place, and it is desired to have the equipment quickly available, all parts of the airplanes, their motors, guns, ammunition, bombs, and
everything necessary for them, should go over together at the same time, and be in the same place.  

- We have two elements in an Air Service that have to work side by side—that is, the technical control of all equipment by the Engineering Section of the Air Force, and its tactical use by the fighting forces against the enemy.

- A good supply system is always a very difficult element to have running smoothly at the beginning of a campaign, because during a time of peace all the methods and ways of doing things become so stabilized that when a change is brought about, unless very capable men are handling it, a great mix-up occurs.

- In applying Aeronautics to military purposes, it is necessary to hold in mind the principal mission of Aviation, deduce from that the tactics that must be employed to make this mission successful, and then from that trace the equipment that is necessary in order to make the tactical combinations possible.