'The views expressed are those of the author and do not reflect the official policy or position of the US Air Force, Department of Defense or the US Government.'"

USAFA Harmon Memorial Lecture #21
"The Influence of Air Power upon Historians"
Noel F. Parrish, 1978

Friends, seniors, juniors, countrypersons from near and far; we come here not to praise the history of air power, nor yet to bury it, but rather to revive it if we may. We who are about to try salute you innocent but entangled spectators. In the arena, tomorrow and after, the lions which appear, the great lionized leaders and writers of air power who represent its teeth and its roar. As your speaker tonight, I represent the rest of us, the anonymous Christians who furnish the meat of the spectacle.

Even among Christians there must be an opening gun, a little gun, firing blanks. So, as Horatio said to Daniel at Saratoga, "let us begin the game." At this point ahead of time I announce a footnote, hoping to create at the outset a scholarly and professional illusion.[1] Further footnotes will be provided later for any who read.

This lightweight prelude has been presented so that veterans of open cockpit aircraft, and recent victims of hard rock music, may carefully adjust their hearing aids for what is to come. Please be assured, and warned, that within half an hour this discourse will become as heavy and as tragic as any you have ever heard.

I beg your further indulgence to reminisce for a moment. Some of you may recall another gathering of historians here just eight years ago. It was my privilege then to comment on a fine paper entilted 'John Foster Dulles: The Moralist Armed." My simple comment was that a moralist should, by all means, be armed. This followed Sir John Hackett's splendid lecture to the effect that a leader in arms should, above all others, be moral.[2] I hope that my minor comments established a precedent for harmony and simplicity.

Our purpose in meeting here, as I understand it, is to enjoy the living elements of air power history, to mourn for the missing, the departed, and the ill-conceived, and to speculate hopefully on those elements yet unborn. Since the influence of air power upon most historians is largely negative, I will also discuss the influence of historians on air power which, by contrast, is practically non-existent.

Before we enter into this purgatorial situation, let us adopt, like Dante, a classic guide. He could be no other than the great Alfred Thayer Mahan, who once ventured into global concepts then unknown and emerged in glory. Doubtless you noticed that the title of his classic history book resembles the title of our non-book here tonight. Since The Influence of Sea Power Upon History, 1660-1783 was translated and published in eight other nations and was highly influential in Britain, France, Germany and Japan, he is perhaps our best known historian. Global strategists admit their debt to him. Yet most American historians, other than the small military minority, blame him for America's past expansion and strength, which they have happily helped reduce.

Since Mahan also found American strength in relative decline, he is an appropriate companion for our brief journey. Except for his original dependence on two great sponsors, Mahan made it almost entirely on his own. The two sponsors were Adm. Stephen B. Luce, founder of America's first war college, and Theodore Roosevelt.

Military history, except during and right after wars, is not a subject of wide popular appeal in our country. Military historians have seldom gained distinction without faithful sponsors and supporters, as you well know. Though lucky in some respects, Mahan suffered the wisdom pangs of most normal historians. Not only did he suffer with the past but also in the present. The depth of his insight into the past prevented him from accepting the shallow pretensions of most political administrations. He felt it his duty to say as much, from the very beginning, yet he survived. He

enjoyed the freedom of military speech that flourished in America until the early 1960s, and he took full advantage of it, as we shall see.

Let us consider, then, the slow but sure influence of sea power upon two- yes, two- persistent historians.

This is their early story. Nearly ninety years ago, Capt. Mahan, Professor at the Naval War College, urged by his wife, edited and expanded his War College lectures. Mrs. Mahan bought a secondhand typewriter, taught herself to use it, and typed the five hundred and fifty pages. No publisher would accept them.

A "vanity press" offered to publish the book at a cost of two thousand dollars. Mahan invited two men of wealth to finance the book and keep all returns. Both declined, but J. P. Morgan offered to advance two hundred dollars. The Captain, tired of asking, gave up. Not so his wife. Finally, Little, Brown and Company agreed to take the risk. So great was the book's success, though mostly abroad, that Mahan eventually wrote nineteen more books and many magazine articles. He had no more problems of publication.[3]

None of the later books reached the stature of the first. It was like Herman Kahn and his great book, On Thermonuclear War. A friend said: "We should learn from Herman's experience and never put the most important things we know all into one book." And yet, a full generation after Mahan, Secretary of War Henry Stimson could refer to the United States Navy as "a dim religious world in which Neptune was God, and Mahan his prophet, and the United States Navy the only true Church."[4] So much for the influence of sea power upon two historians, Captain and Mrs. Mahan.

For reasons we have not time to examine here, historians had traditionally included, in general history, the history of warfare on land. Yet the great general and military historians, even those most admired by Mahan- Arnold, Creasy, Mommsen, and Jomini- had tended "to slight the bearing of maritime power on events." This was due, said Mahan, to their having "neither special interest nor special knowledge" concerning the sea. This reasoning is, of course, even more applicable to air and space.

Naval historians, on the other hand, Mahan saw as having "troubled themselves little about the connection between general history and their own particular topic, limiting themselves generally to the duty of simple chroniclers of naval occurrences."[5] This is perhaps less true of air power historians. We are often accused of limiting our knowledge of other histories, but not of limiting our opinions. It is surprising that time has changed little since Mahan's observation. Recently military historian Peter Paret has commented on the striking lack of interpretive synthesis in military history. Military historian Allan R. Mulett has called for works "that would link the writings of American military history to questions of lasting historiographical significance."[6]

More important, perhaps, is Millett's opinion that American military historians can work in the mainstream of research without "abandoning the historian's skepticism about quantification and models of predictable behavior." This is very encouraging. Would that military historians could spread their distrust of these tricks to our puzzled press, our bewildered Congress, and our disarming civilian controllers.

No history before Mahan's, military, naval or general, had proposed to "estimate the effect of sea power upon the course of history and the prosperity of nations." Prosperity, in the nineteenth century, and doubtless in the future, often meant survival. Remembering that sea power is as old as civilization itself, we must regard this oversight, which Mahan rectified, as the most amazing oversight in all the history of history. We have now endured but a tiny fraction of so long a delay in convincingly relating air power to the fate of nations. Yet our failure to define and to apply the lessons of air power history now threatens to bring our civilization to an end. Why are we so slow?

No one but a historian can understand the tardiness of historians. Sometimes no historian can understand it. let us remember that full comprehension of the meaning of any period of history requires insight into the meaning of life itself. No wonder the honest and modest historian may often feel no

rush to publish. Ideologues and formula-mongers, on the other hand, suffer no such misgivings. The mysteries of historical cause and effect are easily resolved for them. They can be prematurely and continuously prolific, for they believe they can open every door to wisdom.

Mahan had no early illusions as to the depth of his wisdom. When he wrote his book, he was almost over-qualified, with thirty-three years of naval service and an even longer period of study in European and American history. While acknowledging his debt to many historians, he gave full credit to Jomini as the inventor of military "science" and of certain principles equally appropriate to war at sea. One idea alone Mahan claimed as his own: that control of the sea as a factor in history should be "systematically appreciated and expounded."[7]

The true secrets of Mahan's success lie in the depth of his thought and the persuasive skill of his expounding. It was his ability to make naval history an indispensable and sometimes dominant feature of national histories that did the trick. Question: How many historians have tried to do as much for air power? Who has introduced air power into general history?

The question of decreasing breadth in historical research and writing is a serious one. It exists even within the special field of military history, where we find experts concentrating on just one war, one service, and even one type of weapon. Some have attributed this increasing trend to the circumstances of graduate study, government employment, and teaching duties.[8] Many of us are aware of these pressures from experience, yet there are means of resistance. Biography relates military men to other elements of society. Other studies, involving military and race relations, civil-military relations, military education, the critical interdependence of military and commercial aviation, the military in politics, air power as a political issue, and similar subjects, may help penetrate the vast domain of general history.

At a session during the 1977 meeting of the American Historical Association, a successful publisher of military magazines explained the lure of pictures displaying such renowned weapon carriers as the B-29. Two well-bearded young professors rose to challenge the usefulness of attracting readers with such objects as B-29s. In the manner of oracles, they announced that "history is not history unless it has social significance." It was obvious that they meant political significance. They were true believers in the great historical forces conjured up by their chosen prophet; they could never see the pilots, the designers, the commanders of B-29s, as anything but pawns in an evil charade.

Is it not strange that the ideologues are as impersonal as the technology zealots who see us only as the robot operators of their favorite machines?

Technology is an indispensable ingredient of military history. Air power historians, as well as naval historians, have recognized its importance. The Army, forever plagued with manpower problems, is more inclined to treat it as a separate subject. As a result, the technology portion of the U.S. Army's eighty volume history of World War II is seldom used at the Army War College.

In the words of Benjamin Cooling, it is possible for historians to be "captives of technology as well as captives of ignorance about technology. "[9] Many of us resist the constant implications that technology is our master, and we tend to avoid the subject. Knowledge of the trends and effects of technology is valuable, but we need not accept the pretense that it is some kind of supernatural juggernaut, whose predestined machinations will destroy us, which is conceivable, or control us forever, which is inconceivable.

Air power historians now face, or refuse to face, a serious problem similar to one surprisingly solved by Mahan. A present solution, if one is achieved, must necessarily resemble his in some degree. The similarity is that we have witnessed the end of complete dependence on wings as he had witnessed the end of complete dependence on sail. Steam power had been used only sporadically in major wars, as missiles and rockets were used in World War II. If we are not to depend entirely on the artificial pre-calculations of total human and weapon behavior that most historians despise, then we must discover in past experience lessons applicable to the changing technology of the future. Mahan went about it in a surprising way.

His first great book began with an honest recognition that "steamships have as yet made no history which can be quoted as decisive in its teaching." He said, "I will not excogitate a system of my own." That would be unreliable. So he retreated two hundred years to begin his story and closed it in 1783, a full one hundred years before the time of his writing. He had determined, as he put it, "To wrest something out of the old woodensides and twenty-four pounders that will throw some light on the combinations to be used with ironclads, rifled guns and torpedoes."[10]

How did he do it? Not by ignoring current technology, for he was an ordnance officer. Instead, he bypassed technology into the past rather than into the future. His insight was that while the behavior of ships may vary, the behavior of people who direct them changes but little. As he put it: "Finally, it must be remembered that, among all changes, the nature of man remains much the same; the personal equation, though uncertain in quantity and quality in the particular instance, is sure always to be found.""

Not even those cool technicians the Wright Brothers were motivated entirely by the challenge of experimentation. As our colleague Charles Gibbs-Smith is doubtless aware, they were inspired by the story of the first truly scientific martyr to the control of wings, Lilienthal. He, in turn, had been inspired to master the air by his reading the story of Count Zambeccan, a truly adventurous Italian balloonist.[12]

Mahan made yet another useful contribution when he showed us that the burden of advocacy is not so overpowering when it rests upon a broad historical base rather than a narrow one. Mahan wrote of the rise and fall of nations over periods of centuries. Yet he introduced a new factor. He said: "Writing as a naval officer in full sympathy with his profession, the author has not hesitated to digress freely on questions of naval policy, strategy, and tactics. [13]

He did indeed speak his mind without hesitation and with the usual results that plague all men who do so. Most American naval officers did not, at first, agree with him. The British, French, German, and Japanese navies accepted his recommendations before his own navy did. He was immediately ordered to sea by an admiral who said: "It is not the business of a naval officer to write books."[14] Another admiral placed several cages of canaries near his cabin while at sea and announced that he wanted to drown out the scratching of Mahan's pen.[15]

As sometimes happens to historians today, Mahan had much less trouble with his civilian controllers. The disturbed admirals had no thought of silencing him, but tried, instead, to close his beloved War College. Two successive Secretaries of the Navy saved it. This despite the fact that, in midcareer, young Comdr. Mahan had written numerous letters to influential congressmen and others concerning political corruption at the Boston Navy Yard. He recommended "a thorough investigation of the Secretary of the Navy," which he predicted would result in the Secretary's removal.

Mahan expressed his views completely and openly, regardless of their popularity. Senior officers were not then required to speak only in agreement and thus help re-elect each incumbent administration. Theodore Roosevelt wrote: "It is important for you to write just what you think."[16] Other presidents adopted policies that were strongly criticized by Mahan, but they did not deny him the protection of the First Amendment just because he was a naval officer. Only Woodrow Wilson, in his neutralist pacificist phase, caused any trouble, and that was an aberration. The currently touted notion that American tradition silences military opinion, is, of course, quite false.

From the beginning, Mahan proposed "to draw from the lessons of history inferences applicable to one's own country." It was proper; he said, in case of national danger "to call for action on the part of the government," and that was what he did. He saw the United States as "weak in a confessed unpreparedness for war" and lacking defenses to gain time for belated preparation.[17] In less than a generation he was proven correct as far as the Army was concerned, but the Navy had prepared just in time for the Spanish-American War.

Three generations later, free speech for military leaders was still the American practice. Just before the so-called surprise of the Korean War, Air Force Chief of Staff Hoyt Vandenberg sounded

very much like Mahan. He said bluntly: "I have freedom to speak in one area and that is the military point of view, while our secretaries have to take the view of both the military and economic area, insofar as they can."[18] In a prepared public speech just before the Korean War he made a statement which is again uncannily appropriate:

> It is always pleasant to be cheerful and reassunng. But I must ask you, as responsible citizens, to face some facts from which I can find no escape. I know of no military calculations which indicate that the risk we take is decreasing . . to speculate upon whether Russia would attack us after building forces capable of defeating us is the most fateful speculation in all history . . the time to begin our preparation is now.[19]

Nevertheless, the Truman administration continued to reduce American military forces until the Korean explosion, but Truman overruled Secretary of the Air Force Finletter to keep Vandenberg in office beyond the normal four year tour. All this was considered to be in the American tradition. So was President Eisenhower's forbearance two years later in granting Vandenberg complete and uncensored freedom to make public attacks on the new Eisenhower force levels for the Air Force.[20]

These events and many others belie the current myth that American history justifies gagging its military leaders and its official historians. Distortions of history often are used to conceal present truths. The number of such distortions concerning air power and its leaders are too numerous even to mention, yet few corrections have been written. Here are a few of the still popular myths: The Douhet Myth, the Bombing of Dresden Myth, the Claude Eatherly Myth, the B-36-Was-Useless Myth, the Foulois Air Mail Disaster Myth, the Dien Bien Phu Intervention Myth, the Bay of Pigs Myth, the Cuban Missile Crisis Myth, the "Linebacker-II" Losses Myth, the Myth of Superior Historiographical Wisdom in the Higher Grades, and finally the Myth of Ineffective Air Power in World War I.

An especially persistent myth is that of the Air Force's position on the nuclear weapon. Far from being elated at the gift of the atomic bomb, Air Force leaders were long reluctant to accept it and even more reluctant to depend upon it. Gen. Spaatz, who received the first order to drop the bomb, demanded a written order and even asked to be allowed to drop it near, rather than on, a city.[21] He was overruled by the scientists, who wanted a "virgin target," an unbombed city, for testing the effects of their bomb.[22] As years passed and military budgets were further reduced, it became apparent that our "shoestring" Air Force would have to depend upon our few big bombs. Even then, Gen. Earle Partridge, in a letter here in the Academy collection, wrote Gen. Muir Fairchild at the War College to ask why only one hour of the curriculum in an entire year was devoted to the atomic bomb.

Earlier, Gen. Arnold had written that he hoped for United Nations control of the bomb. In any case, he said, "There is historic precedent for withholding destruction in wars. The case of gas in Europe is an example . . . other instances of non-destruction are . . .the open cities of Paris and Rome."[23]

Gen. Vandenberg, who had to face the question repeatedly, stated many times the now traditional Air Force position. Asked whether he would bomb a city in retaliation, he said, "No." World War II experience had shown him that civilian killing tended to unite the survivors. He said, "We do not believe in indiscriminate bombing of cities."[24] On another occasion he said that after absorbing an attack, our strategic force would be deployed for defense. He said: "It must be employed to insure that air attacks against us cannot be repeated. This is more important than mere retaliation. Our principal aim is not to destroy another nation but to save this nation. We cannot waste our forces on mere revenge."[25] Gen. Nathan Twining, as Chief of Staff, announced that the Air Force would not bomb cities. Gen. Thomas D. White officially adopted the term "counterforce" in contrast to counter-city.

Gen. Curtis E. LeMay, who was once pictured as an airborne Genghis Khan, continued the Air Force tradition on targeting in October of 1964. He explained that some cities were targeted in the early days of meager forces and few bombs as a possible way to check the advance of massive Soviet

ground forces into Europe. The early 1950s brought us both the means and the necessity to "place Soviet air bases and bombers at the top of the target list. This was the first step toward the Air Force's concept of strategic counterforce." General LeMay expressed what has proved to be misplaced confidence in the nation's top-level leadership:

> Today we are not hearing as many proposals for the adoption of bargain basement alternatives to a counterforce posture. There was a time not so long ago when some people seemed to think that all we needed as a deterrent was the ability to destroy a few Russian cities. Almost everyone who has thought this problem through has rejected that proposal for a posture based on strategic advantage.[26]

The Vietnam War, engineered by Mr. McNamara's "Charles River School of Strategy," soon began to cost so much that our ability to challenge Russian military strength was abandoned. We were reduced to mutual assured destruction or the "MAD" plan. Since we did not wish to pay the price necessary to overcome Russian military power, we offered our population, undefended, as a hostage against our use of nuclear weapons. Yet nuclear weapons are necessary in our NATO defense plan. The old, desperate expedient of launching missiles against cities on warning of a Russian attack, without knowing the Russian targets, was considered briefly after the Russians launched Sputnik. This suicidal proposal was abandoned as quickly as our protective silos could be built. According to Edward Teller, inventor of the H-bomb, the mere suggestion of such a murderous plan was the most immoral idea in history. Now that our silos are vulnerable, the amazing (cheap) answer for high defense officials has been to revive such a plan again, as what they call a viable option.[27] It may be suicidal, but it is cheap.

As long as we builders and operators of air power allow ourselves to be branded with potentially self-destructive "bargain basement" strategies, the population we offer as hostages will scarcely regard us as worthy of confidence and respect. The first requirement for the salvation of our pride is establishing clearly that a strategy of civilian slaughter, involving necessarily our own people, is not military in any sense. Until we can divest ourselves of the albatross of false blame for such a horrible evasion of human and military responsibility, we shall be regarded, increasingly, as heralds of the Apocalypse.

The only way out, of course, is up. Most of us have failed to understand the basis of the once great enthusiasm for sea power and later for air power. That enthusiasm rested on the hope that each offered an escape from the devastation and the civilian casualties of land warfare. We forget, for instance, that air warfare in World War II, by preventing a deadlock, saved more casualties than it caused. We forget that the fascination of Star Thek, and especially of Star Wars, is based on warfare far away in the sky, with no threat to anyone but the distant participants. Such a reaction is not foolish at all.

A decision in space is the only possibility now for evading a holocaust on our already polluted globe. Yet the official attitude toward space is that it is some kind of semi-religious and sacred sanctuary, while our cities, crowded with humans, are fair game. This foolish notion, as our colleague Eugene Emme will probably testify, is the result of our lassitude in getting our heads up far enough to see where the thrust of our future effort should be. Established land, sea, and air power remain the basis for such a thrust. But up and out is the only departure from the booby-trapped cage of options our politicized, computerized, and richly vocabularied civilian controllers have built for us.

The widening gap in our history, which means the gap in our understanding of the past and our planning for the future, lies between our airborne achievements of World War II with its two sequels and our space potential of the present and of the future. Unless we awaken and bridge this gap, we may not earn for ourselves a future. Only a bold, thorough, and uncensored treatment of history can suggest for us such a bridge.

Unfortunately, recent history is being written almost entirely by our slowly awakening journalists. Official histories are slow to appear; and most are deliberately non-controversial, with no lessons drawn or implied that might be applicable to our present crises. Other historians tend to follow the popular anti-military myths. In fact, some two decades ago, a deputy chief of military history, moving ahead of the tide, observed, "Serious dangers attend any historian who wishes to prophesy, or to get into the realm of what he thinks should not have happened."[28]

Prophecy should indeed be restrained. But as for judgments of the past, who can be so hypocritical as to deny them? Does spreading timidity have to ignore all that should not have happened? Where is the spirit of the great historians of the past?

A long generation ago, John Cuneo, one of the best early historians of air power; was critical of most air power histories. "Besides presenting an obviously incomplete picture," said Cuneo, "they unfortunately are written by authors who are advocates rather than historians."[29] Recently, Robin Higham, our most active editor and publisher of air power history, explained that "the history of air power has been much confused . . . by a lack of historical perspective on the part of its exponents."[30]

Mahan's long labors in the salt mines of previously non-significant naval history were inspired entirely by the conviction that his effort was necessary. It was his response to a revelation of general history that, as he expressed it, "The United States in her turn may have the rude awakening of those who have abandoned their share in the common birthright of all people, the sea.“ [31] Indeed, before he died, another and greater sea began to become navigable.

Long ago another prophet, Sir Charles Cayley, had seen the new sea as "an uninterrupted navigable ocean, that comes to the threshold of every man's door," and that "ought not to be neglected." To extend Mahan's basic concept into the present we need only to add the still controversial words "air" and "space" or their equivalent. It would come as no surprise to the departed admiral that his principles are expandable to infinity. To all seamen from the unrecorded beginnings to the nineteenth and into our present century, the sea was infinity.

The basis for sea power and air power development was the historically demonstrated requirement of all great nations for access to the sea, and later; by extension, the power to use the sky. It was seen that nations lose their chance for survival as great nations if they lose the power to use sea and air space and to prevent others from using this space effectively against them.

Concepts of warfare expand, eventually, as human activity expands. Areas of warfare often expand ahead of concepts, as new capabilities of navigation reach out, first across the seas, then into the air; and ultimately into space. The first great expansion left the narrow limits of traversable land to cross the global oceans. From there, curiously, progress extended up and down at the same time and established a peculiar commonality between aircraft and submarines. Each operates in only one medium, yet in its medium each is supreme and each operates there alone. Naval historian Theodore Roscoe has noted that in the last great war Japan was drowned in the third dimension, losing most of its vital shipping to aircraft and submarines.[32] But the third dimension is limited on the way down and has no limit on the way up. This means that whether we like it or not, the zone of war can no longer be limited.

Sea power expanded, very slowly, beyond the limits of land power. As global strategy followed the spread of warfare in the age of sail, it set the pattern for air power as the range of aircraft extended. As the age of globe-ranging air power was launched from land and sea, the age of space is now being launched from land and sea, but also through and from the air. Whether we speak of aerospace power or just air power extended makes little difference.

Since we now are long past all hope for deceptively simple answers to questions raised by our topic tonight, we should admit that we are now considering the impact of recent air power historians on air power. This is not the moment for blanket self-decoration, despite Ken Whiting's demonstrated understanding of Russian strategy which exceeds anybody's understanding of our own strategy; despite the timely social work of Alan Osur and Alan Gropman;[33] despite some useful and partially available

monographs which have been said to "smack of interservice rivalry;" despite the readable and much appreciated Schweinfurt story by Thomas Coffey.[34]

It has been said that a major problem of military history is significance rather than quality or quantity, since there are more than half a hundred dissertations annually in American military history alone, nearly a hundred academic military historians and half again as many university courses, and hundreds of military historians in defense agencies.[35] Undoubtedly, air power history comes up short in all these categories, partly because air power history is short and partly because air power leaders, with notable exceptions, are short of interest in the subject. We were off to a bad start when we were funded for just seven volumes of World War II history, which were excellent, while the Army alone was funded for ten times that number and at last report was still typing away.

Nevertheless, despite handicaps and fluctuating support, some excellent products have appeared. Al Goldberg's oustanding brief history of the Air Force was readable, yet sound, and appropriately embellished with nostalgic pictures.[36] I.B. Holley's unique synthesis of policy, technology, and industry is out of print and disappearing from some libraries.[37] Eugene Emme has produced NASA history that reads better than reports of its present delayed capabilities. One phrase alone is worth an anthology: "The unknown will, as always, yield up many yet-undreamed-of-rewards."[38] This principle was accepted for Mahan's sea and Mitchell's air but for whose space? Perhaps the Russians' space.

On that sad note we may now consider our deficiencies. According to army historians, who seem more capable of self-criticism than we have been lately, the major deficiencies are common to all types of military history: army, navy, and air. They are: a dearth of successful integration of technological factors into narrative, an area where air power historians have an edge, though not in major works. Worse is our sad lack of synthesis, or "putting it all together;" and, finally, our weakness in biography. In both the latter, air power is down, well down.

Of the digesting and interpretation of massive research into a major work we have just three examples at the moment. Most recent is David MacIsaac's definitive work on the much abused and misused strategic bombing survey report.[39] The other two are the work of the most dedicated and productive Air Force historian now living, though he is not well. Frank Futrell's history of Air Force doctrine will be indispensable long after the otherwise unused sources are forgotten and destroyed. His United States Air Force in Korea gained better treatment and has been used constantly.[40] No other accounts are available. It was admitted by Air University officials that the massive Vietnam history project known as "Corona Harvest" should be greatly reduced unless people capable of helping Futrell distill it and put it together could be found. No one was found, and Frank's health was failing. The massive effort now lies overclassified and unused, while other historians, poorly informed, go on writing histories that, loaded with error; will become fixed in tradition. The military lessons of the Vietnam war, freely spoken by colonels, may not please all above them, and in any case may never be declassified and presented in usable form.

Our weakness in biography is almost equally damaging. While the Army and Navy have biographical works on some eight generals and admirals of World War II and after, we have only an interesting and somewhat underrated autobiographical work on General Hap Arnold,[41] and a well-written though discursive biography of General LeMay by distinguished novelist MacKinley Kantor.[42]

Fortunately, we are seriously rocking the cradles of elementary aviation and of military aviation. Charles Gibbs-Smith, following Fred Kelley, is doing an in-depth study of how powered flight, like powerless balloons, was born of two brothers. Col. Al Hurley has studied Billy Mitchell's overactive mind as he stood alone against slings and arrows and got himself reduced to half-dip retired pay, which he refused.[43] Hurley is now digging a deep trap for Air Force history, which has been almost as elusive as Air Force doctrine. We are painfully missing the impressive story of General Carl Spaatz, the George Washington of Air Force independence; of General Hoyt Vandenberg, the most spirited and determined chief; and of durable General Nate Twining, the great stabilizer and the last

survivor of the period when chiefs were allowed to talk and to act like chiefs. Finally, we need an account of Gen. Thomas White, the gentleman diplomat who formally clarified Air Force strategy and doctrine only to see it mangled by aeronautically illiterate think-tank forces from the north and west.

Lack of biography may be our most crippling weakness. It may have encouraged such aberrations as a recent dictum from a history administrator warning that "we are interested in issues, not personalities."

There was no understanding of systematic warfare until the story of Napoleon was written. Mahan recognized that he had not created an understanding of sea power until he had written a biography of Nelson.[44] It became his most difficult but in some respects his most successful effort. Not until you read Forrest Pogue's story of George Marshall's heroic struggle to avoid a drain on American manpower near the close of World War II can you understand the chronic problem of our manpower limitations in war.[45] As Emerson said: "Perhaps there is no history, only biography."

We may agree with Benjamin Cooling that we "need to spend less time administering pedantic programs and more time pondering the great issues raised by the material they hoard."[46] It is scarcely possible to understand issues without knowledge of the men who created them.

Having painfully reviewed our deficiencies, let us note with dubious comfort that sea and land power historians, despite their achievements, share the same basic problem. As Benjamin Cooling of the Army War College put it, "Somehow, historians and particularly military historians have failed to convey the utility of their discipline to those charged with national defense today."[47] Also, uniformed historians of live issues, such as Mahan, could not survive today, and neither could the Vandenbergs, or even civilians on government sponsored payrolls. The journalists had to take over the serious and timely issues.

It was not easy to use the whip on journalists, but there were other methods, such as the golden carrot. In the early 1960's journalist Richard Fryklund was the principal historian of how we developed and debated the strategy of targeting populations, a strategy which guaranteed the sacrifice of our own. His book 100 Million Lives is still the best historical account of that strange happening. On the last page he wrote: "A final obstacle to the adoption of a rational strategy was the unfortunate effort by Mr. McNamara to cut off authoritative discussion of strategy. . . . Even conversations about abstract theory of strategy were banned. . . . Fortunately for us all, his rule could not be enforced."[48]

It could, of course, be enforced on everyone or anyone paid by Mr. McNamara's Department of Defense but not on journalists. Eventually, Fryklund and a journalist friend were appointed to Mr. McNarmara's staff as the senior officials in his Directorate of Public Information. Other journalists, too numerous to mention, were influenced in a similar manner, either by accepting political appointments or suffering restrictions by publishers responding to political pressures.

With journalists alone capable of digging beneath the surface and not always succeeding, it is scarcely surprising that "those charged with national defense today" seldom seek enlightenment from historians. Nevertheless, there are ways of bringing reality to light, as Gen. Eaker and a few others have demonstrated. One way is the writing of recent history by influential participants. Here again, air power has not fared too well. At least four army generals in recent years have written histories of the Korean and Vietnam wars, with considerable assistance, quite properly, from army historians. We have none from the air leaders except for Gen. Momyer's recent Air Power in Three Wars and Adm. Sharp's Strategy for Defeat. "[49]

Official military histories have long been denigrated, not always with sound reason. Alfred Vagts, sympathetic but critical, said, "If confession is one test of truthfulness, then there is little of reality in military memoirs. The history of warfare, he said, is "dependent to a large extent on the writers' desire to preserve reputations, their tendency to cliches, . . ."[50] Obviously, there has been improvement in recent years, but iconoclastic historians, such as Peter Karsten, have revived the old derogatory theme. Less dogmatic historians admit that the split between "official" and "counter-official" military historians has damaged both.[51]

The introduction of oral history into military history has helped to make military history more believable. From the time Adm. Eller encouraged Navy cooperation with the Columbia program, this breeze of fresh air has produced more convincing truth than many times its weight in documents. Anyone who has attended a training course at Maxwell AFB, supervised by Dr. Hasdorff and Col. Dick, has witnessed in these sessions a revival of the old spirit, when air power history was considered a revelation and not just an officially supervised chore. The introduction of active veterans of recent actions into all our history programs is also inspiring.

Only in recent years have air power historians begun to exploit the greatest advantage of their field: that so many important participants and their associates are still alive. Ardant du Picq, a long time ago, wrote a passage which expresses a truth that many historians have found too great a challenge: "No one is willing to acknowledge that it is necessary to understand yesterday in order to know tomorrow, for the things of yesterday are nowhere plainly written. The lessons of yesterday exist solely in the memory of those who know how to remember because they have known how to see, and those individuals have never spoken."[52]

In the air age some have spoken and spoken well, but not enough. As Frank Futrell discovered in writing his last book, "Men who believed and thought and lived in terms of air power were the makers of the modern air force." Their thinking was not limited by the current military policy or by the national policy of the moment. It was not even limited by the prevailing state of technology. Their perspectives, their awareness of history, taught them how these things change. Had they been awed by the national policy of isolation in the 1930's, a lack of advanced air power in Europe and the Pacific would have drained American manpower before the decisions there could be reached.[53] There are young men today, necessarily silent, who believe and work with the same dedication as the air power pioneers. They see the same need, or an even more urgent need, to be able to operate in upper space as effectively as we have in the lower space. It is this spirit that must prevail, though machines and circumstances change.

In the past our great problem was our rate of loss of leaders. Gen. Doolittle recently named four men as leading air power thinkers: Mitchell, Arnold, Hickam and Andrews.[54] Many of us can remember the last three, but all are gone. Mitchell and Arnold died early; Hickam and Andrews crashed in their planes before or during World War II. Spaatz, Vandenberg, White and many others of similar significance are gone. Despite the commendable efforts of many, our traditions and the memories that made them have been neglected, our costly lessons from the recent past are in danger of being forgotten before they are really learned. That is why we are here.

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