

523

AIR POWER IN MODERN WAR
20 March 1946.

246-55
CONTENTS

	<u>Page</u>
Introduction--Brigadier General Donald Armstrong, Commandant, The Army Industrial College	1
Guest speaker--Lieutenant General Ira C. Eaker, Deputy Commander, Army Air Forces	1
General discussion	14
General Armstrong	
General Eaker	
Students	

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GENERAL ARMSTRONG:

Gentlemen, the presence in this school of representatives of the Navy, the Air Forces, and all other components of the Army is, I think, a clear indication that the teamwork of the Ground Forces, the Air Forces, and the Naval Forces needed to win a war continues in the Industrial College. Our work must be influenced by the growing importance of air power in war.

The speaker this morning was in time of peace one of our most distinguished flyers. In war he proved himself one of the ablest air tacticians and strategists of any nation. Gentlemen, the Industrial College is greatly honored by having with us this morning General Eaker, General Spaatz's deputy, who will speak to us on the Role of Air Power in Modern War. Gentlemen, General Eaker.

GENERAL EAKER:

General Armstrong and gentlemen: I appreciate the kind remarks of General Armstrong; but I will tell you, I have not always fared so well. I remember that when I told the troops "Goodbye" in Italy a few months ago was one such occasion. At one time I was telling the WACS what a good job they had done in helping the Air Forces in the war. I thought I was talking to an all-feminine audience, though I doubt if I would have said anything different if I had not thought so. But I was telling the WACS that they had done great work and mentioned the many skills for which they were especially trained. At that moment I became aware that there were some men present, when I heard a loud whisper down at the foot of the platform. One GI leaned over to another and said, "I would exchange any two generals I saw in the war for one WAC too, wouldn't you, Joe?"

General Armstrong has stated that I am going to talk of the role of air power this morning. I am probably responsible for leaving that topic with him. I would like to say that I feel that the role of air power was demonstrated in the war in many ways. Most of you men saw as much of that demonstration as I did. I would not hope to change your minds or any opinions that you may have formed as a result of the performance of the Air Forces in the war. I leave that subject with you with these words: That it is my firm conviction, growing out of the war, that the way we won the last war was by the close application of the three arms in their respective fields, under unified command at the top.

I was particularly delighted in England and in Italy, where I saw most of the war, at the close cooperation that we had between the Ground Forces and the Sea Forces and the Air Forces. In every instance they

had a supreme commander, but they had three coequal subordinate commanders, each at the head of his respective branch. So that, as I say, they worked in complete cooperation.

I heard a little homely story the other day that illustrates why there must be close coordination of effort. It appears that there was a little boy who worked hard and saved his money and bought his first pair of long trousers. He took them home, tried them on, and found that they were three inches too long.

He asked his mother if she would cut them off and hem them up. She said she was very sorry, but she was just going to a Red Cross meeting. He asked his grandmother, but she was just going upstairs to listen to her favorite radio program. As a last resort he asked his elder sister, but she was going out for a date. So the little fellow went to bed with his trousers still too long.

His mother came home from her Red Cross meeting, so she took the trousers and cut them off and hemmed them up. Shortly afterward the grandmother came down; she saw them lying there, so she cut three inches off and hemmed them up. His sister came home about midnight from the party filled with remorse as she had not helped her little brother, so she cut another three inches off and hemmed them up. That illustrates what happens even with willing cooperation without coordination.

I desire to talk briefly about two things this morning. The first will be some over-all aspects of World War II and the next war. I must tell you that some days ago I was at Los Angeles talking on this subject briefly and I mentioned the two wars--the last one and the next one. A heckler in the audience got up and said, "You military men keep talking about war. That is what causes war". I said, "It hadn't occurred to me that when a surgeon talks about disease he was encouraging disease. It hadn't occurred to me that when a minister talks about sin he was encouraging sin. This I can tell you, I can assure all of you that there is no man who hates war as much as the man who has to fight it". But I think it really wise, before we close the book on World War II, at least to find out why we won and the other fellow lost.

I heard a story recently which illustrates a point about this study of warfare. It appears there were three great military leaders of the past who were looking down on the last war from the shadowy realm. There were Napoleon, Hannibal and Sabutai. By and large they did not admire the way the last war was run. Each thought he could have run it a lot better if he had been in charge. But each saw something he greatly admired.

Hannibal, on looking down below, was struck with the mechanization. He said, "If I had had those tanks and trucks instead of my elephants, I could have crossed the Alps in a day and hopped the Rubicon overnight". Sabutai, Goughis Khan's great cavalry leader, saw our airplanes and marvelled. Mobility was his forte. He said, "If I had had all those airplanes instead of my Mongolian ponies, my paths of glory would have

525

led around the world, and everybody in the world today would have had Mongolian eyes. The dear Napoleon took a sarcastic look and briefly observed, "If I had had that liar Goebels, the world would have never known I was defeated".

I think we are entitled to make some summation of what happened in the last war and try to arrive at some conclusions as to why we won and the other side lost. For whatever thought of provocation it may be to you, here is my list:

I think that the first reason, which always must be placed first, is because we had more and better manpower. I would like to say a few words about the subject of manpower.

I must confess that in the early days of 1942, when I arrived in England and began watching the British bomber commands, with their tiny little force which was all they had then, to hurl against the four thousand planes that the Germans had in readiness to send against them, and when I saw the type of warfare that the Germans had prepared for us this time, I remembered that it had been said that we in our schools, homes and churches in this country were rearing a soft generation of American youth--I had some qualms as to how our boys would take to this modern type of warfare. I learned how they were going to take it in the early missions of the Eighth Air Force out of England, when with ten airplanes we began the attack.

On one of these early missions there was a plane going in to the target with a skilled bombardier who was leading the whole mission. The whole success of the mission depended on him and he knew it. A German fighter put a 20-millimeter shell in the nose of the plane. It blew the boy to the back of the bomb compartment and tore a great hole in his body. He dragged himself back over his bomb sight and succeeded in getting away--an excellent bombing run, as the photographs showed.

The dead bombardier had a twin brother who was at the plane when they lifted the dead boy over his bomb sight. I said to the brother, the living bombardier, "We think that the loss of your brother would influence your work. Therefore you may stand down as long as you want. You will not have to go on a mission until you tell us you are ready".

He said, "No. I want to carry on as my brother did and as he would want me to do". Next day he climbed into the repaired plane, into the bloody cockpit from which they had lifted the body of his brother, and took off on a mission, from which he did not return.

A few days later I learned of this example: A Liberator was hit by flak and its wing set on fire. The pilot said to the copilot, "Go to the rear and get the boys out. Get them out quickly. When you get the gunners and the radio operator out, you call me on the intercommunication so I may escape; we must move fast, she'll blow up soon".

The copilot went to the rear. As he passed through the radio compartment he saw that the radio operator's parachute was already afire. So the copilot took his own parachute and gave it to the radio operator and assisted him in getting out. He went to the rear and got the gunners out, and then called to the pilot and told him to get going, and he went down with the burning plane.

I cite only these two instances out of hundreds that I saw of similar cases.

I soon learned that the type of American youth in this war was perfectly competent of handling the situation. It was demonstrated in the four years of the war that the soft American youth that we had trained was capable of knocking out the Luftwaffe and every other type of enemy, including the fanatic Hitler youth, wherever they met them. I saw everywhere, in the air, on the sea, and on the ground, the same high type of courageous American. I think it is a fortunate circumstance that a peace-loving people should have the type of human being and the type of homes, schools and churches which can turn out better warriors in a short space of time than the professional soldiers abroad.

There is this, too, about the manpower situation something that I think should be of interest to you: It was a surprise to me. I saw many of the men that fought the First World War. They won that and they did a good job. I saw, I think, half a million boys who served under my command in the Second World War. They were definitely better than the men who fought the First World War. In the first place, they were better educated. They were much more earnest and sincere, and had a better understanding of what they were fighting for. They were healthier, even bigger. In the twenty-five years between the two wars this country did a great job of improving the breed, in improving Americans. For that reason I feel that we have a cheerful prospect for the future.

The second reason why we won, in my opinion, is because we had more industrial capacity to build more of the better weapons of war. Many people would put that first. The only reason I put manpower first is because with the weapons that we know today it takes intelligent manpower to produce them and it takes intelligent manpower to fight them. But no matter how able a man is, he is practically helpless in modern warfare without an adequate quantity of the best weapons, the latest models of weapons, air, ground and sea.

All of us military men who have any opportunity to express our appreciation and our thanks to the industrial leaders and to the men who worked in the factories ought to do so, because our victory was largely due to the prodigious skill with which they performed. They worked long hours. They had the same temperament and tenaciousness of purpose and intelligence which their relatives who were on the fighting front so ably displayed.

We had two logistic factors also--time and space. In both world wars we had a year or more in which to gear our manpower and our industrial capacity to the maximum requirements of war, because we had time; the enemy had

526

no weapons with which to get at us. We also had space. We had great oceans to the right and left and friendly nations to the North and the South; so that the enemy, no matter how much he wanted to, could not lay a hand on our manpower while it was training or on our industrial capacity while it was being geared to the maximum output.

Those, I think, are the four principal reasons why we won and the other side lost.

Now I would like to ask this question: Which of these factors will prevail in the next war? I have no doubt we will have the manpower. We shall continue to improve. We shall always have ten to twelve million men and women warriors.

We no doubt shall have also the industrial capacity. It will probably be even better. We read in the papers recently that our industries are turning out a greater output than they ever did in the years before the war. Industrially we no doubt shall get better by method, by technique and in size.

But I want to suggest that two of these prominent factors, time and space, have been considerably reduced. In fact, they may have almost gone from warfare. And that may be critical.

If the Germans could in 1944, as they did, produce a rocket which could travel a distance of 280 miles at 700 miles per hour 70,000 feet above the earth and deliver a ton of explosives with considerable accuracy on British targets, it is absolutely certain, to my way of thinking, that by 1950 any of the principal industrial nations of the earth will be able to produce a rocket which will have a range of three to five thousand miles, which will travel from one to two thousand miles per hour, sufficiently high above the earth to avoid its curvature and deliver ten to twenty tons of explosives with exact accuracy. I think you will agree with me that when that time comes, the time and space factors will have gone from warfare.

I think this is the meaning for us of this change: I think that the industrial centers of the United States will no doubt be the first targets in the next war. The only reason they were not this time was because there were no weapons with which the enemy could reach them. I have already indicated that they will have weapons ready at hand which can reach us next time.

It is almost certain that it will not be missed by the aggressor the next time that the reason he failed the last time was because he overlooked the fact that he must reduce the manpower and destroy the industrial productive capacity of the United States or he can not hope to win. An aggressor in the future will not miss that point. The next time he will have the weapons with which to accomplish it.

I think, then, that we may well look for weapons to be hurled at us at the beginning of the next war, that the introduction of the next war will be missiles falling on our industrial centers -- Detroit, Chicago,

New York, St. Louis and the western aircraft centers. That is the way it will undoubtedly come.

So all of us who are students, who are studying the warfare of the future, whose business it is to do that, should be very careful to get our sights gauged to this intercontinental concept of warfare. It is an interesting concept that in the past warfare traveled on parallels of latitude. It traveled from East to West. It came to us on the sea. In my judgment warfare is moving from a right to left direction to a north and south direction. In the future warfare will travel on meridians of longitude.

Examine at some time at your leisure, as I often have, a map of the world looking down on the North Pole. Ask yourself where trouble could lie in store for us in the future. You will see that there are three possible areas. One is the Pacific coastal area, from which it came before, the Japanese Islands. Another is midcontinental Eurasia. Another is Europe. There are only three places. You can dismiss the southern hemisphere. Turn the globe over. You will see that there are no war-like populations and no industrial capacity--the two things that are required to make war--in that area. So you can dismiss the southern hemisphere for hundreds of years, certainly for any time affecting us. You can appreciate that those are the three places in the northern hemisphere from which trouble may come.

Draw a great circle route across from those three possible areas to the industrial targets in the United States. You will see that the crossroads of the warfare of the future are bound to be the Arctic.

Many people have asked me as I have gone about lately, as I am sure they have asked you, "What has the atomic bomb done to warfare? What has the discovery of the use of atomic fission done to warfare?"

I asked myself a long time ago what I would do if I were at the head of the Imperial Japanese General Staff, charged with the job of preventing U. S. atomic bombs from being delivered on Japanese targets. It seems to me there are three possible ways in which the Japs might have accomplished that.

First, they might have destroyed the atom bomb-producing capacity in the United States. That would have been the best way, the conclusive way. That would have ended the threat to the Japanese targets from atomic bombs for any reasonable period of time. The second way it might have been done would be for them to destroy the planes and the bombs as they lay on the airdromes in the Marshall Islands before the planes were launched. We did that many times both to the Japs and the Germans. The third way in which it might have been done would be to have fighter defenses and antiaircraft defenses of sufficient power and intensity to have destroyed the planes and bombs as they approached the Japanese targets. That, of course, as you can well see, would have taken a fighter defense and an antiaircraft defense of greater efficiency and greater numbers than any nation of the world has ever been able to produce to date. That is a slim reed on which to lean.

That being the case, if we are to prevent atomic bombs from landing on our industrial areas, there is one safe way to do it available to us

today. Fortunately we are the only nation in the world that has the weapons to do it. That is by the employment of a long-range bombing force. That is the only way we can reach those areas, all three of the areas which I have mentioned, and destroy the enemies atom bomb production and atom bombs before they are launched.

Our long-range bomber force is our primary protection today. Somebody said to me, "Do you expect the Army and the Navy to disappear?" "Well", I said, "I hasten to tell you that I put the Air Force in that category also". I believe present weapons will all be thrown into the discard by guided missiles in the war of the future, by some sort of long-range missiles, and that all our present weapons are now coming into obsolescence.

I hope all three of them will be unified into one proper organization for the purpose of using modern weapons to the greatest defensive and the greatest offensive power. But as we stand today the only way we can prevent atomic weapons from being hurled at us from some section of the world is by destroying them where they lie.

I have drawn up a four-point program, which I think is what this country needs to give it security. I propose this for you to think about.

In the first place I think we should have a professional diplomatic corps. I believe that diplomacy comes first. It is the first line of defense. All of us well understand and know that when the diplomat gives up the job, when diplomacy breaks down, the soldier must take up the burden.

So I suggest that we select our men early who are going into the Diplomatic Corps; that we pick men of soundest judgment, of finest personality, of greatest ability; and educate them for their jobs. I am not saying this to be critical of the State Department. I do not know about our State Department today. That is not my job, my job is military. But I do know what the requirement is. I know that this country is going to be dealing with some pretty tough babies in the future. We had better have our best brains available for the job. And above all, we should give them the best possible training.

The second thing that we should have, in my opinion, is a central intelligence agency. I can tell you from my judgment and from observation of World War II that when the war came, our intelligence units were either nonexistent or very bad. The Eighth Air Force, our first unit to begin striking Germany, had to work up its intelligence organization from college professors, from editors, from statisticians, from anyone we could get. In the years before the war the intelligence service was tremendously neglected. It is one of the very important sections of the General Staff.

I think that the requirement for adequate intelligence in the future is more important than it has ever been in the past. The reason I believe that is because we must anticipate the place from which warfare will come and have more warning of its coming.

So I suggest that all of our services had better get on to that business and get a superior intelligence organization and insure sufficient funds to do the job. If there is any great section of the world where we do not know what is going on, it may well be that its people are building a war chest of frightful weapons to be hurled our way. Once they are launched, there is no way of stopping them. It is as difficult under present conditions to stop a guided missile as it is to stop an artillery shell after it is fired from the gun. We must know where these things are being made. We must know where the people are who have the intention to use them, the feverish anxiety for war. We must have the weapons with which to strike simultaneously or instantly thereafter.

My third suggestion for security is an efficient reorganization of our Armed Forces. I am not giving you anybody else's idea. I am merely giving you my own. I saw many instances in the last war where decisions were arrived at by compromise. Compromise is seldom the best decision. I saw many instances, I am sure you have too, where we were delayed because of the necessity of getting people together and of having to make a decision by compromise. It is clearly desirable that we have unified command. I hope that the most intelligent people in the United States, civil and military, will overhaul our whole military organization and gear it to the future war and not to the last war.

The fourth plank in my platform is the need for teaching a real brand of patriotism to all our leaders and all our people. All of us know that during the war practically every American was working wholeheartedly for the war effort and toward one purpose, with one leadership. But we have seen evidences lately that such is no longer the case.

So we must teach the brand of patriotism in the homes and schools and churches of this country, on the streets and through the newspapers, that will lead all our citizens to put national interest above selfish, petty interest. If we do not do that, this country of ours will pass the same way every other country in history has passed when its citizen was more interested in his own welfare than in his nation's welfare.

The second purpose I had in speaking to you today was to discuss some of the plans for rebuilding our Army Air Force.

I must tell you that our present position is bad. We have some squadrons in our occupation force in Europe today with one mechanic. We could not raise one single squadron that would have the efficiency which was normal and in the Army Air Forces of 2,494,000 men, on VJ-day. We could not raise a single squadron and be sure of an efficiency that would be comparable with that wartime standard.

What could you expect under a system where the oldest and most experienced are let out first? I am not critical of the War Department for its demobilization policy. General Marshall knew what he was doing. He was the first to say that the result of that policy was demoralization and not demobilization. But he also rightly read the sentiment of the public and the sentiment of Congress, and he knew what policy they would demand; and he responded to it. So I will tell you what the result is. Today we have no air force, but we are busily rebuilding.

52

We are beginning in this way: On the thirtieth of April we shall have one long-range bomber group and one long-range fighter group and one fighter-bomber group, filled up to strength. We will screen the whole Air Force for skilled artisans and train them to a high pitch. We will get them from all of our combat units that we had in the war. They will be able to do a military job. Thirty days thereafter we shall have three additional groups which we can set aside and say they are ready for any emergency. A year to eighteen months from today we shall have built back seventy groups, which will have the standards of efficiency which we demand and which our country has a right to expect for the funds it spends on national defense.

There are some cheerful sides. We have always said in the Air Forces that we should not oppose the methods of demobilization, that we should not try to slow them down. Our theory was that the quicker we complete the wreckage and remove the debris from the premises, the quicker we can quicker we can start rebuilding. So we have done everything possible to get our men out who want to go. You cannot build a sound Air Force of men who do not want to be with you. We want to rebuild with people who volunteer.

I can tell you this: We are asking for 400,000 men. To date we have 268,000. Before June 30th we shall have our 400,000 at the present rate of enlistment.

Our future plans are set up here briefly on a series of charts. In the first I have indicated the principal commands. We have the Tactical Air Command. That is the one that operates with the ground forces. Its headquarters is being set up at Langley Field, next door to the Army Group at Fortress Monroe. (Charts were not available for reproduction.)

Then there is the Air Defense Command. That is an interesting solution we arrived at. You will recall in the last war that when war came, all the leaders dashed off to war, all the combat leaders. At the time when we had the greatest burden placed on our training establishment, those men who were directing it, who had been directing it for a long while, went off to war. We anticipate in the Air Defense Command that the commanders will stay on the job. When war comes, those men will not go to war. Those men will stay there to command those facilities. The three principal tasks of that command are the Air Defense of the United States; the training of the Air National Guard and the training of the Air Reserve.

The National Guard units will be equipped with P-80's, which is our rocket fighter. We hope to have 84 squadrons of them. When they are trained and if war develops, some of them will go with the tactical and strategic air commands to the war theater. A sufficient number will be retained on the job for home and continental defense. The reserve units will also be trained by this command as combat commands to go to the war theater. The main point is that there will always be leaders and commanders who are experienced in peacetime to direct the great expansions when they come.

Then we have the Strategic Air Command, which will be the command operating the long-range bomber and fighter units all over the world. That is the airman who goes to the theatre of air war to direct our long-range air operations.

Then we have the Air Materiel Command at Wright Field, Dayton, Ohio.

And we have the Training Command, which is well known to you. This organization did a tremendous job in the war. Today it is a very small group. It will have a tremendous job to do now, because we will have to train 400,000 men to our normal standards in a year or eighteen months.

There is the Air University, which is a collection into one university of the various colleges that we have had for the education of our people. There are three principal schools under that. There is one for the lieutenants and captains, to acquaint them with their combat jobs; one for field officers, to acquaint them with high staff and command duty; and then there is the senior college for the men who will command the Air Forces in a future war.

There is the Air Proving Ground, which will test our latest weapons. It has excellent ranges for testing all types of weapons.

There is the Air Transport Command, which during the war ran the greatest air lines ever known. It will continue to support our occupation forces and to run our Communications and Weather services.

When I came back to Washington, there were 32 agencies in the Army Air Forces in recent months. The Commanding General of the Army Air Forces had charge of all of them. There is no man alive who can sit on the General Staff, who can keep up our contacts on the civil side and get the funds that will support us, and still direct 32 agencies. Eight is a tremendous number, but that is the minimum to which we have been able to boil them down. That number is not too many to put under one commander. He can devote his attention to those very important services.

Are there questions about the command setup or the organizational setup?

We have a concept--I do not know how it will work--but you can appreciate it is going to be very difficult to keep people in the Air Forces, that we are going to have a tough time to keep them when they will have to spend more than half their time abroad. We feel that the answer to that is this: We shall have a rotating service through the overseas bases. We shall have an underground operation office, and underground communications--so that the communications will not be affected by falling bombs from an attack in the air--that is what saved Great Britain in the days of the Battle of Britain. Then we will not have what happened to us at Pearl Harbor, in Wake, Guam and in the Philippines.

Our combat units should not be retained at those places. There must be long-range groups, for example, that have their home in the United States, where their people can always send their children to

529

school. They will spend from three to six months to one year in the Caribbean, one year in Europe, as long as the occupation force is there. They will rotate through those bases, where there are caretaker detachments; where there are permanent buildings. From there they can be marshaled where there is any trouble.

I had a little to do with the budget in making the presentation to the Congress. We used this chart. I think it might be of casual interest to you. It shows you what the money is going to be used for, and money is really the root of any organization.

In 1939-1941 we had four billion dollars for the Army Air Forces. In 1942 we had 22 billion; in 1943 we had 10 billion; in 1944, 23.6 billion; and in 1945, 12 billion dollars. When VJ-day came we had 17.4 billion. When we got through after the war with cancelling contracts we were down to 5.8 billion. That is what we had left. In our reduced estimates for 1946 we have \$1,640,000,000. Our estimate for 1947, which we are now in process of defending, has \$1,770,000,000.

It might be interesting to note that this 70-group, 400,000 man Air Force will cost one and three-quarter billion dollars. The Army provides the food, shelter and ammunition. They will cost 640 million dollars. A 70-group Air Force, with 8,000 combat planes, will have an annual cost of about two and a half billion dollars.

I will present this just with the hope that I can show you what the peacetime interim situation is with respect to Air bases. We have made a very serious effort to settle down from the 650 stations that we had during the war to the 85 stations that we require under a 400,000 man air force and to get an even distribution all over the United States. We want it to be a people's Air Force. We want to get the support of all the people of the country.

There are many advantages in having that well spread over the country. You not only get better knowledge by and better support of the people, but you have the stations spread out in different weather areas. When the weather is bad in one area, you can move in another. In some places where there is congestion, that is where you want your fighter unit for defense of your industrial area. In some other places, where there are vacant spaces, there we have bombing ranges, where we have enough space for bombing.

But there is one exception to the business of dispersion. We have tended to put our very long-range bomber stations well to the North. That is in accordance with our concept of the Arctic highway in the war of the future.

I put this up with the thought of rockets. It shows looking down on the North Pole, the new concept of the map. In my opinion we should cease using any other map in our studies of the world.

There are some elements of our plan which I should like to mention briefly. One of them is decentralization. You will note on this chart we have eight commanders. General Spaatz's idea is to decentralize those eight commanders. He feels that we can be busily engaged if we get the

money from Congress and if we prepare the over-all policy and do the directing guidance and then let the commanders run the job without disturbing them by looking over their shoulder too closely. The emphasis is on decentralization.

The emphasis is also on experimentation and research for which we are obtaining 180 million dollars in 1946. We will have some 270 million dollars for that use in 1947. We have the firmest belief that there are great changes in weapons coming in the warfare of the future; and, so far as our weapons are concerned, we mean to have the best.

We believe also that our service is becoming technical, highly technical; more so every day. There is a great feeling in the services that our army offers a full career to the nonrated officer. We think that the responsibility which will be required of our officers will call for more and more highly skilled professional, technical men.

Let me indicate to you what we believe about two subjects--deployment and mobility. We believe that we should recognize the speed and the mobility of air forces; that we should not scatter them all over the perimeter of defense, as we did in the last war. They were caught sitting on the ground out at the perimeter in the Philippines, in Hawaii, Guam and other places like that. They should have been kept centralized. There should be bases from which they could be launched and quickly moved to those places on the perimeter when they are secure. But we believe that we should realize the mobility of the weapons that we have and not disperse them out where they can be caught in indefensible positions.

We believe in having young men at the top. It is due to that great man and wise thinker that during the war we had three or four very young officers, forty to forty-five years of age, recommended and confirmed as brigadier general. That is evidence of the fact that we believe that young men should get to the top. The example of General Eisenhower is a case in point. He was recognized early in his career as an outstanding officer and went to the top rapidly. History may record him as one of the greatest combat leaders of all time.

Our leaders in the wars in the future should be trained for those big jobs. For that reason we should select the best men and push them forward rapidly. That does not mean everybody, because not everybody is a leader. But it means we should be very careful in our colleges to keep close observation of the men, pick our potential leaders early, and push them ahead rapidly.

If you will permit another British example: I was told that their Chief Air Marshal Porter was picked twelve years before the war started to be chief of their air staff. They sent him through every job that would better qualify him for that assignment. He was a bomber commander, a fighter commander, and in charge of the experimental department. He spent long years in the Air Ministry in charge of personnel. Every job they had that would better qualify him they gave him in those twelve years. When the war came in 1942, they had a pre-eminent leader thoroughly trained for the job.

We are also going to send a large portion of our officers to educational institutions. We feel very keenly about that. One of the things that made our success in the last war was the fact that we had qualified leaders. Our schools were largely responsible for that.

We believe thoroughly in schools. We are going to have five hundred to one thousand officers in our own educational institutions. We are going to put all we can into the other schools. We want to have five hundred in civil educational institutions for purely scientific schooling, for one- or two-year courses. Some of them will be senior specialists, for whom it will require ten to twelve years in an educational institution before they will even take part in the theaters, because some skills will be required that will take that long to learn.

I am not a graduate of your College. I wish I were. I have always admired it. I was here many years. I spent thirteen years in the War Department. I have always admired this school and always longed to take a course here. I would like to say this to you: I believe that you should realize your opportunity in being here and should take full advantage of it.

Above all, do not become narrow partisans. If there is one thing I learned in the last four years of war it is that the men who came to top in the Army and Navy and Air Forces, in all of our military management, were the broad-minded fellows, not the narrow partisans. The man who had a cavalry saber or a quartermaster insignia or air forces wings branded on his thinking never got very far. He may have done good work in his field, but he seldom was selected as a leader.

I also suggest that the military man in the future must be a useful member and citizen of the community. I believe he can be. But frequently in the past Army men have lived inside their army walls and have shown no interest in the communities that they lived in, and they have gotten away with it. But it has come to the point now where we should appreciate the temper of Congress. If we want the Military Services to be supported in the future, they must do something worth-while in the community in peacetime. I think every officer should be so far as possible a useful citizen of his particular community.

I think all of us should look to the future. We are going in the next ten years to see the greatest leaps in military concepts and military weapons that have ever been made before. We will make greater progress in the next ten years than has been made in the past four centuries in military weapons. We must look to the future.

I well recall General Brown telling a story one day to illustrate the fact that military men are sometimes slow-thinking. He said he was visiting a military post at Fort Missoula. He had a habit, when visiting military installation, of asking the sentry at the gate, "Do you know your special orders?" He asked the sentry at Missoula that. The sentry said, "Yes, sir. I do". "What are they?" The sentry said, "They are to allow no hostile Indians to pass my post".

General Brown fell back and said, "How long has it been since you have seen any hostile Indians?" The sentry said, "I have never seen any". "Let me see those orders," The sentry reached down in his desk and pulled out this moth-eaten copy of the order. The sentry was right. The order was signed by General Custer.

I believe we have made some progress since those days. We are a lot more forward-looking than we were in some stages in the past. But I cannot urge you too much that military men must no longer be locked inside the walls of their forts. They will have to be public-spirited citizens of the United States and of the world.

I appreciate very much your kindness in listening to me this morning. I want to tell you that we want to help you. We will be happy to cooperate with you individually, or with the organization in which you go back to duty, at any time.

We will make mistakes, and we will frankly admit them. I hope military men will tell us when we are wrong. I hope the civilians will tell us when we are wrong. If we can make it right, I hope to have men in charge who will make it right.

If there are any questions, I will be happy to answer them. I probably won't be able to answer them, but I will do my best.

GENERAL ARMSTRONG:

In connection with this one and three-quarter billion dollar appropriation for the Army Air Forces can you tell us approximately how much of that is going for the procurement of materiel, and if that sum is sufficient to maintain a strong aircraft industry in the United States?

GENERAL EAKER:

Yes, I can tell you those figures. I had the job of defending them recently; so I happen to know them. Our procurement of airplanes will run to 1691 for the year 1946. It will be 1740 for the year 1947.

There was a committee appointed--a very wise course of action--that had on it the Assistant Secretary of the Navy, the Assistant Secretary of War, a representative of the Civil Aeronautics Bureau, and one from the State Department. They worked out what would be required as a plan for a healthy aircraft industry, which could be a workable nucleus for future expansion. This is the program that they worked out:

The committee said that the aircraft industry of the United States must produce three thousand military planes in peacetime year by year in order to stay even at the economic state of health, with a possibility of the expansion that will be required. Now, out of our budget figure of \$1,750,000,000 the sum of \$640,000,000 is for the procurement of aircraft engines and the related equipment. We hope that our budgets when approved will permit us to keep up our industrial production to a figure above the minimum level prescribed by the Air Coordinating Committee.

GENERAL ARMSTRONG:

Any questions, gentlemen?

A STUDENT:

General Eaker, it is quite evident, I think, that guided missiles will play a very important part in future wars, as you have indicated. Could you give us a little more information on what we are doing about the development of guided missiles, if it is not secret?

GENERAL EAKER:

I must tell you that I am not the best authority on that. We have, in response to our belief in the importance of that subject, appointed a Deputy Chief of Air Staff in charge of that. He has been working in very close liaison with your people in the Ground Forces. It would not be appropriate, it seems to me, for me to discuss that, both because of my lack of detailed knowledge and because possibly it would be inappropriate from the security point of view.

If that question of security is not in the way, I will see that a conference can be arranged to present that feature to those members of the class who will have occasion to take part in such study.

I will say this much in passing, my worry is this: That you will get some money, we will get some money, and Ordnance will get some money for this same thing. We will all simultaneously progress just so far and run out of money and there we will quit and there will be no adequate long-range weapon. If we put all the money in one pot, where one command is given the whole business instead of three going three ways simultaneously, we might come up with something that will be available three years from now in the way of a proper long-range weapon. I think that is the principal thing.

A STUDENT:

I want to ask about a certain squadron, if it is not taboo. Is there a colored squadron taking over the Lockland Air Base?

GENERAL EAKER:

It is a group of three squadrons. There is a fighter-bomber squadron, a fighter squadron, and a light-bomber squadron, which form one composite group. It is at Lockland. It is a part of our postwar plan to retain that air group. It will have the strength of about 1,200 as combat units and about 1,200 in the ground services, or about 2,400 persons there.

You see, we have in the Air Service today about 40,000 colored men who have volunteered, and all of them want to train at an Air Forces station. There is some advantage to that.

I had a colored fighter squadron working for me in Italy during the war. They did a very good job. The reason, in my opinion, they did a good job is that they had an outstanding leader, Colonel Davis, a West Point graduate, at the head of that group. He is a remarkable young leader.

A STUDENT:

Do you think that they will cause trouble in the town?

GENERAL EAKER:

We scoured the whole country for a site. Many sites were considered by a board of officers, including Colonel Davis and his father, General Davis. They scoured the whole country and looked at many sites.

I think they look on Lockbourne as an appropriate place. One reason is because there are some thirty to forty thousand colored people in the town. The Wilberforce University is close by. That offers a place where they can go to school. It is close to the training area with which it will work.

We are going to see how it works out. We hope it will work out all right. There is good leadership there. I think there is a good prospect of it not instigating any trouble.

A STUDENT:

You spoke of the National Air Guard. I have understood that we will have several Regular Army officers detailed for groups in several state organizations of the National Air Guard in the very near future. Would you care to comment on that?

GENERAL EAKER:

Yes. The National Guard Bureau has worked out the policy for making assignments. They are making the assignments on a purely population basis.

Some states that are particularly air-minded have come in and said, "We want an air guard". We pointed out that it so happens there is one airman to every ten thousand population. So you can appreciate that where you have six million people, you will be able to support six hundred airmen or two squadrons. If you have twelve million, you can support a group. That is the way it works out.

We hope every state will have at least one squadron. The more populous states, which have trained personnel, will support two or three groups.

Those assignments are being made by the War Department to the National Guard Bureau with our cooperation and active help. I must tell you that the program is not at the moment under way, because it requires legislation. We are just now after that legislation. But that is the plan.

GENERAL ARMSTRONG:

General Eaker, I think we had better have a little mercy on you, sir. Thank you for your very substantial contribution to the Industrial College. I am very glad that you diverted your talk from the announced subject to give us what you did. It is exactly what this group, I think, needed to hear from the Deputy Chief of the Air Forces.

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(19 April 1946--200)S