

Transcript of General H.H. Arnold's Speech to AERL November 9, 1944

General Henry H. Arnold, Commanding General of the Army Air Forces, addressed employees of the AERL at the Hangar on Thursday, November 9, 1944, at 4:00PM. After a few introductory remarks by E.R. Sharp, Manager of the Cleveland Laboratory, and Dr. George W. Lewis, Director of Aeronautical Research, NACA, and General Arnold spoke as follows:

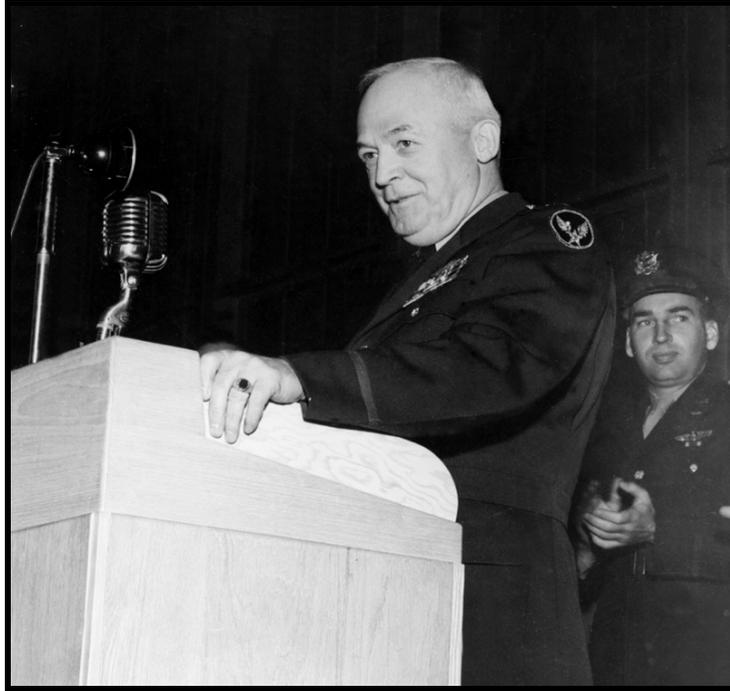


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You know, Doctor, after looking over my audience, I'm going to give my prepared speech back to Captain Sheffield, and if you want it for your record, you can ask Captain Sheffield for it and I am sure he will be glad to give it to you. Now, on with the show!

I think that you people here are entitled to a little bit of background on this thing that we call air power. I think it will better enable you to do your mission here at the laboratory. I am not a stranger to the NACA activities, in spite of the fact that this is my first visit to the Cleveland laboratory. I have been following the work of NACA for a long time; I have watched them ever since the last war. I have been instrumental in giving you various problems that confronted us in the operating side of the air forces. We in the air forces are duly appreciative of what you have done for us; how you have made it possible for us to use the greater advantage and with more efficiency our airplanes, the engines, and the component parts that make up those airplanes and engines. When we get stuck in a development problem; when we look forward into the future and try to anticipate the activities of some other nation, or to be ready for the developments of the future, we

normally go to the NACA and ask you people to do that work for us. And we are very grateful for your whole-hearted efforts and your cooperation with us.

If you think back to the last world war, you will see that the air arm at that time did not play a very important role. Nobody knew exactly how they were going to use it. We dropped a few bombs, shot down a few enemy planes, and did a little observation work. But what air power really was, no one knew. General Billy Mitchell had more advanced ideas on the subject in this country than anybody else. Trenchard over in England had his ideas, and came very close to those of Mitchell. But during the years that have passed between 1919 and 1944, the airplane developed; it grew up. It was not a device in 1940 that was tied to the ground because there was too much wind or because the weather was bad. The airplane became an honest to God weapon of war.

But, how to use that weapon—that was something else again. The Germans started out with their Luftwaffe with the impression that they could take that Luftwaffe, operating with their army, hit the strategic objectives in back of the opposing army, deprive that opposing army of its communications, of its supplies, and make it immobile; and as soon as that other army became immobile, then the German army could chew it up in piecemeal. And that is what they did with their blitz forces when they went through Czechoslovakia, Poland, Belgium, France, Holland, and tried the same thing against the Russians, with this difference—in between they tried to conquer Britain from the air. They did not realize that in order to have that air power, you must maintain a constant strength, so that when the other fellow loses planes, loses crews, your air force is just as strong as it was when you started. So that after the Battle of Britain, when the German air force looked over their missions, they found that they had not licked the Royal Air Force. They had greatly decreased the strength of the Royal Air Force. They had a greatly decreased the strength of the Royal Air Force, but at the same time they had lost a great many more airplanes themselves than they could replace.

And then, for some reason or other, they changed their whole policy with regard to the employment of their air arm, and they tied it to their army; they made it a component part of the army, practically—certainly, for all intents and purposes. They forgot that the reason they had been able to move so swiftly through the other countries they conquered was because they had used the strategic air arm in the destruction of those objectives far beyond the reach of the army—objectives so essential to the movements of the other fellow's army.

And then Germany went against Russia with their air arm still tied to their army. In my opinion, that was the turning point in the conquest of Germany. No longer could they carry the war beyond the frontiers of the other fellow's country. The Royal Air Force, through necessity, was built around the defense of the British Islands. The Japanese air forces started out with the idea of having a strategic air force, they quite well demonstrated in their attack on Pearl Harbor. They also used the same principles when they moved with that relentless army and navy and air arm of theirs, down through the Philippines, the Celebes, Sumatra, Borneo, Java—until they had us worried whether or not they were not going down and take Australia, too.

We in the United States had doctrines, principles, and we had a technique for the employment of our very small air force. We had planes that were as good as any in the world, but because we were edited the information as to the equipment of those airplanes, we were not ready to put them in combat. Once we got that information our airplanes were just as good as – and in many cases better than any that any other nation had. In spite of the fact, you all remember that period we went through when the columnists and radio commentators were all taking a pot-shot at us and asking, “Why doesn’t the Army Air Force build airplanes as good as the Japanese Zeros, as good as the Messerschmitts, or the Focke-Wulf 190?” You people here at the laboratory know as well as our people that once we got our hands on those airplanes, we found they were really—some of them—very mediocre planes. As one of my pilots said after he had flown the Jap Zero for the first time---“It’s a fine Sunday afternoon airplane, but I feel awfully sorry for any one who has to use it in combat.” So all we had to do then was to get the numbers and apply the normal improvements to our own airplanes, to get in the fight in a big way, and attain superiority in the air. We knew that with our bomb sight, we could do precision bombing; we also knew that we were a match for any air force in the world when it came to fighting in the air; we knew we had the youth of America—outstanding your men, who were head and shoulders above any other air men in the world. So we had no fear of that. It was just a question of applying the principles that we had been teaching, determining, finding out during that long period when we were sort of starved for funds and could not build up an air force.

The first time we met the Japs on equal terms, we found this—that the Jap is a creature of Habit. If he comes in over this particular hill and down this particular route on Monday, you can expect him to come down that same route on Tuesday, Wednesday, and Thursday. And all you have to do is to make your arrangements accordingly. And you can knock down every airplane he has on Tuesday, and if he has any left at all back there, he will still come back the same way on Wednesday. We also found that the Jap is not a versatile flier; he hasn’t initiative. He has the determination; he is fearless; and he will fight to death. But fearlessness and determination are not sufficient when you meet the very versatile young men of the United States, with all their initiative and imagination. So today you find the Japanese air force turning out large numbers of airplanes, sending them down along their supply lines to the various islands in the Pacific; and each one of their airdromes in turn completely bombed out, airplanes destroyed, and then probably bypassed. When the Japanese put up a new line, we would go through the same thing as before. Their losses were terrific; they lost their best group commanders, squadron commanders, and flight leaders. And when we bypassed their airdromes, they lost their maintenance personnel, I possibly can picture of what has happened to the Japanese air force. They have the desire; they have the number of airplanes; but they haven’t the “know.” And they lose airplanes by the hundreds.

Now, let’s go to the German air force. They are much more imaginative; they are smarter than the Japs. We were told that if we did take them in there, the Germans would not fight us; and our answer to that was that if they don’t fight us we will go in and bomb Berlin everyday until they do fight us, because we can put into the air on air force in

greater numbers, and maintain those numbers, than the German can. We have a system for training our pilots which enables us to turn out pilots in ever increasing numbers. We have an industry in the United States that enables us to turn out airplanes at least five times as fast as the Germans can. And to have the theoretical knowledge in the United States to enable us to turn out better airplanes than the Germans can.

Now, how does this work out? We set about destroying those things in Germany which would do the most harm to the German fighting machine—ball bearings. We hit the first ball bearing plant, the Germans cut their ball bearing production down to 30 percent below normal, they began to worry. So when we went in the next time, we had the whole might of the German air force waiting for us, and our losses were heavy; but the German ball bearing factory at Schweinfurt was no more. Then we hit the other ball bearing factories in Berlin, in Paris. We did the same thing with synthetic rubber; we did the same thing with their transportation; we did the same thing with their oil. We hit Ploesti in Romania many times until finally there was nothing left of the refineries at Ploesti, and Germany was denied practically all of its natural oil supply. Then we began hitting the synthetic plants one after the other. We found they needed power, so the RAF and the AAF went after their dams from which they got the power, until today Germany is only getting 25 percent of its normal power in the Ruhr. We found out that their transportation, when we destroyed their railroads and they did not have the gasoline for their trucks, was by using canals. So we picked out critical points on aqueducts and blew the side down on the canal, with the result that you find barges by the score, lying in the mud, unable to move.

When we landed on the beaches of Normandy, that was a wonderful time for the German air force, if it had the wherewithal, to do what a normal air force would do to demonstrate its might—over 5000 ships of one kind or another in the harbors in Southern England—and not a single German airplane came over there. That wasn't by happenchance—it wasn't luck. And when the actual movement over the channel took place—4000 boats a day, without a single German airplane attacking; a bomber's dream—and not a single bomber. It wasn't accident that all the bridges were out over the Seine and the Louvro at the time Patton made his breakthrough. It wasn't accident that there hadn't been a train or a convoy move into that section of northwestern France for many days prior to Patton's breakthrough.

What happened to the German air force? Today, paradoxical as it is seen, they have more airplanes than they have ever had in their history; and yet time and time again we go in there without a single German airplane coming up to stop us. I will tell you what happened to them. When we hit their oil, they began to cut down on the use of oil; and when they cut down on the use of oil, they had to cut down on the flying hours of their airplanes; they had to cut down the movements of their trucks, so they could not get the supplies; and it wasn't long before they were in such straitened circumstances that the number of pilots they could train was not equal to their attrition.

So today you find the German air force so short of pilots, and so short of oil, that they cannot fly the airplanes they have sprinkled all over Germany. I give you the facts so that you will have the background of what our air force has been doing.

We had, when we hit these warms of fighters, to increase the range of our fighters, to increase them to such an extent that they could go all the way into Germany with the bombers. That meant a redesign of these airplanes. The Germans were not asleep; their minds were still working; so you find them coming out with the buzz-bomb, the rocket, and the jet-propelled airplane. As you all know, we have been working on the buzz-bomb and the jet-propelled airplane—and we've done pretty well on them. But they are in a position where they can use them.

The Germans are going to fight—the same as the Japs are—as long as they have a man left to fight—just so long as their fanatic leaders have the bluff on them they have now. When the time comes that they fear our bombers—when they fear what is going to happen to them as a result of our constant hammering on the ground and in the air—more than they do their fanatic leaders—that is when the Germans are going to break up internally.

And that is our job—to carry our bombing missions into the Germans in ever increasing bombers, until they are so scared of what is going to happen to them from the air that they are willing to throw up the sponge and say, “We quit.”

Just one word about your work here. You've got a dual task. You've got a job ahead of you to keep the army and the navy air forces equipped with the finest equipment that you can for this war. You also have the job of looking forward into the future and starting now those developments, those experiments, that are going to keep us in our present situation—ahead of the world in the air. And that is quite a large order, and I leave it right in your laps.

File from NASA Headquarters History files: “NASA Lewis—General—1941-59”, File No. 4859.