NATIONAL MUSEUM OF THE UNITED STATES AIR FORCE

Wings & Things Guest Lecture Series

A Rather Bizarre War: The Air Force Learns and Adapts in Korea

Dr. Conrad C. Crane, Director of the U.S. Army Military History Institute, discusses how the Korean War was the first armed engagement for the newly formed U.S. Air Force, but far from the type of conflict it expected or wanted to fight.

I'm honored to be here. This is a great institution. I've got the nickel tour today and was impressed by the people here as well as what they take care. How many Korean War vets are in the audience today? If at any time say something you want to add to or disagree with please straighten me out. What I want to try to do is I've got about of using old technology today. I'm using view graphs instead of PowerPoint. This is just a just a test to see how flexible you are intellectually and also, I would really want to try and go through about 3 hours worth of slides in about an hour to try to give you a lot of ideas about this war that is not from the call of forgotten war which should not be especially with the U.S. Air Force because one of the points I would want to make today is one of the air force's strengths throughout its history. It has been its ability to learn and adapt under fire which is the – when I did their Army-Marine Corps counterinsurgency manual for Jennifer Trayes, the key tenant of that doctrine is learn and adapt, and the air force has been very well – done very well with that. There was a tendency to forget that at the end of the war.

In order to really understand what happened in Korea in 1950-1953, we got to start in the skies over Japan in 1945. I want to start talking about Curtis Lemay's incendiary bombing campaign of Japanese cities. Here, these are B29's near Mt. Fuji. What Lemay's campaign will eventually do is destroy about 180 square miles of Japanese cities, about 67 different areas including mining, their local – the waters. Here's what one of the raids looked like in its heart. That's Osaka. That's what Osaka looked like while it was burning and here's what Osaka looked like afterwards with the conclusion of the raid. That's urban renewal at its best and that's not the atomic bomb. That is just from one of the incendiary raid on Japan. When Henry Stinson was asked why he dropped, why he approved the dropping of the atomic bomb, one of his reasons was to stop the fire arrays.

Now, that takes us to – here this is Curtis Lemay. This is 1948 when he is running the Berlin airlift. A man of many talents, Lemay, probably my favorite air man. Carl Spaatz, he was the greatest air combat commander of World War II whom I think you can make a good argument for that. But the air force city in 1948 this has taken the lessons of World War II from this campaign that Lemay ran over Japan as well as the campaign of Carl Spaatz and others ran over Germany and come up with a justification to raise and ethra for the new independent U.S. Air Force's strategic bombing to destroy enemy nations to win wars with strategic bombing. What you end up with is kind of a combination of the two schools, the European and the Pacific school. You end up with a horizontal school of bombing and a vertical school of bombing. The vertical school of bombing said you take individual target systems while bearings oil to take

down enemy state. The horizontal school which is kind of Lemay method is that well you just take out the cities because the cities contain all the key industry.

But, the bottom line is the reason for the U.S. Air Force is going to be strategic bombing to win wars. And, nuclear weapons fit very well into this model. There's an interesting briefing I found in 1951 where an air force planner described the air force strategy as precision attacks with aerial weapons. They kind of think about that for a while which is basically dropping nuclear bombs in enemy cities to take out all these few target systems. And, Lemay of course is put in charge of strategic command and is in the process of turning that into the really the elite fighting force that it becomes and he's responsible for it. Again, he's a terrific transformational leader turning organizations around but the whole air force is going that way. You've got an air force that shrinks. It goes from like 2 million people about the end of World War II to about 300,000 a couple of years later. It shrinks down to 42 air groups. The only organization growing is SAC. About half of those air groups are strategic air command air groups this time. That's really going to be the main function for the U.S. Air Force as it seem. Another key player in this transformation of the air force is the individual air on the left which is Hoyt Vandenberg. On the right is George Stratemeyer who commands the Far East Air forces. I'll talk about him in a minute. Vandenberg is the command in 9th Air Force of World War II … Air Force. Not only was he a great bureaucratic in-fighter in Washington but he happened to have an uncle who was a key senator which was a great deal while the other services were really hurting by 1950. Vandenberg enabled to keep – at least be able to keep the air force even huge air command. He does very well for his organization during that time period. The air force is going to be the key element in Harry Truman's defense policy again with its nuclear striking power.

Now, one of the key lessons of the Korean War is that you very rarely get the war that you expect, the type of war you want to fight in a location where you want to fight. When I taught at West Point, I often told my cadets I get on the board and I'd say, "Okay, where do you guys think we're going to fight the next war?" We put all the things down and I'd say, "Okay, I guarantee you the next war will be somewhere else." The other thing that I would say is, "Where would you like to fight a war?" And, you know a very narrow list there and I'd say, "I also guarantee that you won't fight any wars there. The places you fight are always very nasty places" as those of you who are veterans know that. Of course when somebody's shooting at you, it always makes it a lot nastier. Korea though is obviously a peninsula. Those of you haven't been there, it's a very mountainous, the areas – you've got coastal areas where the roads and rails go. The rest of the area is pretty mountainous. You're not going to feel like putting anything there. It's mountainous. It's rice patties. The main transportation route comes down across the … down through Pyongyang down through Seoul and down to Pusan and that's really the only major transportation route north and south. And, a lot of the war is going to swing up and down around that. One key piece of terrain that really influences the war is the fact that the only improved air fields south of 38 parallel around Seoul and for the jet aircraft that we are using in this first jet air war, you've got to have improved air fields. So, whoever controls those air fields around Seoul, their jets can basically cover the whole peninsula. If you don't have those air fields around Seoul, it means you're interbasing out of Manchuria which is where the communist jets will base out or you've got to base out of Japan. So, that's very key terrain when you're fighting an air war is who controls those air fields.

Now, how many people have served in Korea out there? Okay, then you'll realize it when I say there are three seasons in Korea: summer, early winter and late winter. And, trying to figure out the forecast and forecasting weather in Korea is very difficult. This is a cartoon that was in one of the air force publications you know, bottom line it says, "I don't care how accurate it is. Get rid of it." I mean that's basically what you're trying to do to tell weather in Korea. The part of the problem is the weather came out of the bad guy's territory. It's coming down out of Siberia out of the Soviet Union and they won't share weather reports with us. So, it made it little difficult but it was another taxing thing on airman was to try to master and try to work through that weather. The Far East Air Forces under the command of this George Stratemeyer through his experience in World War II is in a China Burma India theater. A lot of Far East air experience but his Far East air forces are designed for the air defense of Japan. Those of you who've known the museum here, he's got a few – he's got some F-80s. He's got some A-26s and got a lot of those F-82s, those Twin Mustangs. Yeah, I got to talk about that. The first time I was able to see one in actuality today. So, that was my kick of the day. But, that's what his got. He's designed to defend Japan and all of the sudden what's the first thing that the South Koreans ask for, American air power. The first thing that South Koreans asked for is we need American air support and America is trying to respond to it but there are some problems. The first one is, we kind of forgot how to do it. Things like interdiction calls air support, those things weren't being taught in air force schools anymore. The tactical air command had been disbanded and actually they have just become a sub command under continental air command. It wasn't even important anymore. You had a small group of air force officers who had kept the idea of tactical air power alive on their own. People like Elwood "Pete" Quesada. Pete Quesada, the famous close air support guru of World War II and just basically been forced out of the air force. He just basically left with disgust because nobody appreciated what he had to offer. The skills just were not appreciated. That was not the kind of war the air force is going to fight. It was going to fight through strategic bombing war, didn't have to do those skills anymore. Well all of the sudden, the forces in the Far East Air Force were going to have to redesign, reinvent, relearn all these different skills. Well, you've got some dilemmas involved in that.

First one is to talk about aircraft. The aircraft you've got to use are these F-80 shooting stars which are interceptor aircraft. They are, again that the purpose of Far East Air Force, 5th Air Force this time is the air defense of Japan. And, all of a sudden you're going to tell these interceptor pilots, "Oh by the way, you are now becoming – we're going to have to make you close air support guys." Well, some problems with that. First thing they find is, "Well, we got to figure out some way to mount bombs on these things." So, they fabricate on these F-80s. They fabricate supply arms. They put bombs under the wings and they find out the wings crack. That's not a good thing for aircraft but any of you guys don't know that. So, they have got to figure out how are we going get – how are we going to return these fighters into fighter bombers? And, the other dilemma is – because one of the first things we lose is the Seoul area as the North Korea comes south, they're being based out of Japan because that's where the improved air fields are. So, they have a very short loiter time when they do show up over the area that provides support. So, the ground guys aren't real happy with the jet aircraft. What the ground guys prefer are aircraft like these. This is the F-51 Mustang. Now, has anybody knows – who've seen the movie Saving Private Ryan? The ending of that movie is wrong where a P-51 comes in and knocked out that German tank. What should that have been? What kind of aircraft should that have been? P-47, you're exactly right and the guys in Korea realized that. The first

thing they say is, "Okay, we need a real close air support aircraft. We need P-47." And, what the Air Force says, "Great idea. Don't have it." What we have are crated up P-51s left over from d-day and so what they do is they ship – they do that. They ship –some of the air craft show up in Korea still has the d-day wing markings on them. And that's what they're going to use, the main close air support aircraft or the aircraft of Korea F-51s. Now, the ground guys love the F-51s. Kind of like they love the A10 today because they got long loiter time, they can operate from unimproved air fields and right behind the front line, and the ground guys know they are not going to do anything else except close air support. Now, the air force doesn't like these because it's tough to maintain them because there aren't a lot of parts around. They're water cool engines, which means one bullet in the hydrogen and those things are going down. They can't fly the same number as the jets. And, they can't do the multiple roles that the jets can do. So, the air force doesn't like these as much. They want to get back into the jet business. So, there's a real – there's going to be friction between the ground guys and the air guys throughout the war really about the type of aircraft they could use. Now, that situation is exacerbated by these guys and when the Marine show up. Because the Marine show up and of course each Marine division has got 75 propeller driven close support aircraft dedicated in that division. And they also of course you know typical you Marine rifle squad is eight rifle and a two cameramen. Well, that's not actually taken to be derogatory. That's actually positive because they also show up with a whole slew of reporters and the reporters started writing all these articles about how the Army guys love Marine close air support and hate the Air Force. And, which causes all kinds of things from Washington and all kinds of reactions in the high head quarters, at Vandenberg and others. The bottom line is the Marines don't have the artillery they are equipped they are supposed to work with the air craft. The Army guys realize we don't have 75 airplanes to give every Army division. But that doesn't keep guys like, like Ned Almond whose here of course the commander of 10th Corps, MacArthur is chief of staff. Almond loves the Marine Corps style and it doesn't keep a guy. Almond will battle with the air force to get that kind of support all the way through the Korean War until he's assigned the Army war college where one of the first thing he does is write a text book at the Army war college. It tells all the things that are screwed up in the air force. I mean real good joint real good joint leader, that Almond.

But, it is. It is a point of friction, about how close air support's going to be used and again remember the air force have kind of – the air force was not the only people who forgot about it. The Army forgot about it too. So, they're trying to develop close air support techniques on the fly in the middle of the war. It's not the best way to try and do it. So, the bottom line is, it's not just the air force that's trying to relearn how to do this, everyone is as well. Of course, also in this mix is Curtis Lemay who is ordered to send to some of the SAC bombers into reinforced Far East air force. He says, "Fine, but if we're going to do this, we need to do a strategic air campaign just like Japan." I'm going to announce I'm going to burn down all the North Korea cities within 2 weeks if they don't give up and that should end the war. And, MacArthur tells "Rosie" O'Donnell who Lemay sends over to command the bombers, "We don't fight that way. We're not going to do that. We're going to maintain – we're not going to go destroy North Koreans cities at this stage." So, what happens is, is eventually they're going to focus on a campaign very reminiscent of the European campaign very much directed at strategic bombing North Korean targets and this is an example of a North Korean chemical plant. It's very accurate. It's very well done and by the end of October they destroyed all the strategic targets in

North Korea and of course by that time they've also driven the North. The North Koreans were on the run after Inchon and everything is hunky dory. And, when the people in Washington get word that a B-29 had spent it's time chasing a North Korean motorcycle courier and dropping individual bombs after that courier they decided the B-29s were not being well used. They were going to bring them back. So, in October, they got the order to stand down. Everything is fine. The war is won and everybody is getting ready to go home. Okay. Pause. Then, these guys show up. You can't often see that this kind of a view point of a MiG-15. But November 1950 all of sudden out of Manchuria, MiG-15 show up. As we now know, they were piloted by Soviet pilots but it was complete surprise to the U.S. Air Force. Didn't expect them to show up, not only do we not expect them to show up. We didn't know what the mig15 could do and we're completely surprised by the capabilities of the aircraft. It immediately shoots down B-29s, chasing away the F-80s. We didn't have anything in the theater that could keep up with it. So, the only way that we could respond is by sending our own guys, our own F-86s which was our new aircraft to try to counter it. Now, what happens when the MiGs are based over here in Anton in Manchuria? They got a very short range, only had a 160-mile range. It's a very short ranged aircraft, the MiG, a very light not as robust as the F-86 which could have a very powerful engine, which meant it was faster than the F-86.

This basically, when it comes into the war in November, it completely blinds our intelligence of this part in Korea which is exactly the time where the North Koreans are pouring into the country. So, what happens is all of a sudden we don't have any eyes up here. They make this area basically a big ally unattainable at that point of the war and until we get in our F-86s and somehow to counter that, they basically – they have air superiority that part of Korea. We lose air superiority in a very key time in a very key part of the war. Now, interesting thing that we find out as we go on is that if we try to get away from a MiG, all you do is fly out over the ocean and the MiG won't follow you. Now, why? Well, because the Russian pilots were told, "Don't get captured." We don't want anybody to know there are Russians pilots in the war and they realize that if they got shot down over the ocean the only people who were going to get them out there were going to be the U.S. Navy. So, if you – so, when you're running away from a MiG, you just headed for the ocean and they weren't going to follow you. But, it does make for a very nasty air war in Northern part of Korea.

Okay. Now, like I said we respond. We send over F-86 Sabres. Yeah, one of the first things – the first 60 Sabres we had, we sold to Canada and one of the first things that we do is tell the Canadians, "Ha Ha! Sorry we don't mean to do that." We take them back and we send them to Korea. Canadians weren't really happy but we'll take care of them later. But, the F-86s were the only aircraft we had to compete with the MiG, again little slower. The machine guns at the F-86s weren't as good in air combat as the cannons on the MiGs or the cannons on the navy aircraft that if the Navy actually shoots down the first three MiGs before the air force gets down. But, they were – the pilots were very good, very aggressive, very well trained and it is as much American training and skill that creates the edge of F86s' have as any kind of a technological way. So, they are very robustly built compared to the MiG.

The next thing that happens is MacArthur, because of the MiGs coming in with expansion of air war the fact that Chinese were starting to show up, he goes to Stratemeyer and he says, "what can you do to help me?" and Stratemeyer says, "We're going to expand the air campaign."

MacArthur goes to the joint chiefs and asks for permission to bomb the bridges over the ally. And, the joint chiefs tell him, "That's fine but you only bomb the southern half of the bridge." Now, the dilemma here is if anyone seen the movie MacArthur or knows, it's got the scenes where Gregory Peck goes ballistic about that order. Well, it was a stupid order. The problem is, anybody that has bombed a bridge knows if you're going to bomb the bridge, which way do you approach the bridge? You don't approach it edge on because any of your chance of hitting it are very small. You want to approach it this way, where your bomb goes short or long it still hits the bridge. Well, but the problem is you can't do that if you can't cross the middle of the river you know. And, the communists aren't stupid. They put every aircraft gun in North in Asia on the other side of the river across the bridge. So, it creates a big – so it basically makes it very hard to hit those bridges. MacArthur also asked for the rights to chase in through China and then he doesn't get that either. So, he's very frustrated when he sees his restrictions. The bottom line – even if you're going to blow out the bridges, as it gets into wintertime the river freezes over anyway. So, the bridges aren't really that important. But, there are a lot of issues with the commanding control and what he can do. What MacArthur does do is he goes to Stratemeyer and he says, "What can you do to keep the Chinese out?" and Stratemeyer says, "I can create a kill zone across North Korea and keep the Chinese from getting South of that line." Now, MacArthur had been served by George Kenny in World War II. Kenny is another great air commander and every time George Kenny told Douglas MacArthur "I can do something" but Kenny did it. So, when MacArthur's airman tell him, "We could keep the Chinese out of most of North Korea" and MacArthur believes it. And, so he says, "Okay, and he basically takes the gloves off, says, "Do what you need to do." One of the first things they do is basically fire a bomb to city of Kang Yeh, the key supply point in North Korea and burned down about 60% of this city. And, what will happen is they will start incendiary campaign of its North Korean cities very similar to what Lemay wanted to do early on. The problem is before they can get much through it, the Chinese armies come in force and basically throw the UN out of North Korea.

Again, MacArthur takes a real wrap for walking into a trap in North Korea. And yes, he is guilty of hubris and ignoring intelligence and some other things. But, he was propelled there by faith in his air power and he admitted later, he admitted afterwards, even in the MacArthur hearings there was a very telling part where he says, "yes I expected too much of my air power." Jacob Smart who was – I him who was like 92 years old who we'll get to in a second here, was one of the key commanders in Korea said that one of the problems was everybody expected too much from American air power and the air guys knew it. The commanders in Washington knew it but they said we were kind of hoisting … We developed this aura of invincibility in order to get funding from congress in order to get steep support, and we weren't going to admit our weaknesses because the press would come after us and we might lose some of our funding. So, they realize they had inflated – they had created inflated expectations but they weren't ready to deflate them until it was too late. So, we got to be careful of what we expect and MacArthur was a victim of some of that.

Now, he also – he continues with his campaign to attack North Korean cities even once the Americans was pushed out of North Korea, one of the first things they do is man a major campaign the bomb Pyongyang. You can see the bombs dropping here. Of course, what's the problem with the fire raid on Pyongyang on January? What's all these white stuff? Yeah, it's kind of tough to burn down the snow covered cities. So, it doesn't work real well. In the mean

time, the war drags on, the air continues to be a key part of restoring UN superiority and start to move North as well as the advent of this guy. This is Matthew Ridgway. He's actually getting a briefing here about air operations. This is Earl Parcher, commander of the 5th air force and this is April 1951 Ridgway is on a trip over there. This is Frank Pace, secretary of the Army. Pace, at the moment, they're getting his briefing. There's a message being sent to Pace telling him to relieve Douglas MacArthur because the announcements is going to be made on the next day that President's relieving Douglas MacArthur. But of course, you know the way those things always work. Their communication center Pusan that's supposed to get the message is broken. So, the message never gets to MacArthur, never gets to Pace and MacArthur finds out about his relieve because one of his aids is listening to the radio and the radio announces that MacArthur has been relieved.

Ridgway takes over. Here he is in Tokyo again with Pace being interviewed by reporters about taking from MacArthur's job. He writes in his memoirs "he was shock to find out how defenseless Japan was." And, what happens in April '51 is not only is there a major Chinese offensive trying to push back South again, there's a massive build up of Soviet air power in Manchuria and there are some Marines building up in Vladivostok and Japan looks defenseless. And, MacArthur also relieved there's a sense of vulnerability that the fact that the cameras will exploit these and what happens in April '51 is for the first time in the war, nuclear weapons are deployed to the far east and they're sent to Guam. And, they'll stay there through the rest of the war. So, the evaluation of nuclear weapons before this … be said, there's no reason to use them in Korea but with the threat that develops at April '51 they are deployed to Guam and they will sit there for the rest of the war. So, there are nukes in Guam if they are not needed to be deployed.

As couple of exercises that are done just to test them, there's one called Hudson Harbor that been much been misunderstood in the press. What Hudson Harbor shows is there are no good nuclear targets in Korea. There's no real – the cities are all gone anyway. The Army's too dispersed and again all you do is give away secrets to the Soviets. The only reason they really use nukes is if we're about to get pushed out of Pusan if you got to kind of save the perimeter. So, until 1953, there are no really valid plans to use nuclear weapons in Korea even though Ridgway really would like to have some of the flexibility using it if he thought he needed to.

One of the big concerns is all the UN – remember I talked about the fact there are only a couple good improved air fields in Korea, and those air fields like this one near Seoul are wing tip to wing tip F-86s. You know we – yeah, the Chinese and North Koreans had a sanctuary in china where we wouldn't bomb. They didn't go after our fields either on Seoul except they had a couple night bombers come in … by planes but if the Chinese or the Russians have actually done a full scale air assault on Seoul area, they could have wiped out our F-86s in the area but they never did it. So, both sides had sanctuaries they exploited.

Now, Ridgway is faced with a problem beginning in June as when negotiations begin when both sides decide we hadn't fighting on the ground. We're going to start to negotiate. Then the questions becomes "how do I use air power", which is the unique UN weapon that, the asymmetric weapon of choice for the UN forces. How do I use air power to try coercing the other side to go along with our negotiating position? And Ridgway – because Ridgway is

experiencing Europe, he was with – commanded the 82nd airborne division. He commanded the 18th Airborne Corps. He's seen the power of American airpower in Europe. And, if you follow the European campaign, you understand that one of the great successes of American air power is the ability to cut off German supply lines. It will make it difficult for the Germans to move around in France and Germany. So, Ridgeway has a great amount of faith and the interdiction campaign can really coerce the enemy into agreeing to our arm's terms.

So, a major interdiction campaign called 'Strangle' was initiated, a lot of parts to it. First thing they want to do is basically destroy the North Korean rail net, and this are pictures of the main rail yard at Pyongyang. That's kind of a high level view. Here's a low level view. It shows they destroyed the rail cars. So, the first step is you want to destroy the rail lines so they can't move materials and then what you want to do is you want them to force them to use trucks and they have this neat little plan where they drop these, they drop these little tacks all over the roads in North Korea. The idea is if you force them out the railroads, you force them on the roads and then we're going to puncture all their tires with these tacks. Of course, there's also bomb in the roads doing anything else. Another thing they their doing, and for those of you who are familiar with the museum will recognize this picture, we're also dropping large amounts of napalm on areas they think there are supplies that along these travel routes.

Korea's the first war where we used a great amount of Naphthenic nukes as the new exploding Napalm. The problem is, as in all situations, the enemy has evoked, and there are certain drawbacks to this interdiction program, why it's not going to work. Number one is there are about 50,000 Chinese laborers whose only role in life is to fix holes and roads and railroads. So we bomb during the day, we have no night capabilities so then they come back at night and they fix everything. The next day it's back kind the way it was. They're also we're not as effective as we think we are. You know, the enemy does things at night to move, and they work around, they have worked around that they hide and they have bridges that they keep underwater and they raise them up in the daytime or the nighttime, so they use them, there are all kinds of things they do that kind of avoid our aircraft. We're trying to do are, the night operations we do have we're trying to use the, during Korea's called the B-26 Invader during the World War II is A-26 Invader. They're out there on the floor; you want to look at them sometime. A very capable aircraft for 4 or 5 parts, 14 floor firing machine guns carries a lot of ordinates, but again no night capability, I've tackled with General Smart about what they're trying to do for night raids and he said it was a real eye opener to get up there and he said that they usually have a search light aircraft and a bomber. And they kind of figured out they were nearer as many activity and they would really try to put search lights down there and find something and go back and bomb it. It was just very unwieldy, very ineffective at night. So, you really couldn't interdict the enemy without this night capability plus the fact that the war is stalemate. The enemy really doesn't need a whole lot of supplies in order to function in a stalemate situation. I mean one of the staff officers looking at this, said, you know, if they get one truck load or motor shells in the front every day, that's enough to handle all their needs. So, there's just not a lot of, the interdiction campaign just isn't going to work. In the meantime, what happens is that life becomes pretty much unaccountable for the B-29s. We've got some dilemmas here, the B-29 flies, you know 250 miles an hour, and you try to escort them with jets that are flying 600 miles an hour. I mean you just can't keep up with them. The MiGs and the Sabres look a lot alike, you know they're both strapping aircraft from the distance, they look the same and we find out very quickly it's not

a good idea to try to do escort missions for F-86s with the B-29s cause they'll shoot, they'll shoot at them as quickly as the shoot I have made. So, we've got problems with coordination, yeah, and this is another one of those missions we forgot how to do. We weren't teaching how to do escort duties cause nobody thought we'd have to do them anymore. So, what we'd try to do a lot of times is try to send the F-86s up to sweep the areas clean before the B-29s went in. What the major would do is basically sit on the other side of the alley and plucked their nose at us. And when the B-29 shows up, they would dash across the alley and shoot at the B-29s and fly back across.

What happens in October 1951, they shoot down enough B-29s that they basically give up. They say we're not going to use B-29s in the daylight anymore. And then basically, that's it, the B-29s were not bombed in daylight again after October 1951. Then basically, the North, the Chinese, the Russians, the North Koreans have won that part of the year war. And when we moved to is short range navigational radar, it's what we used. And this is the radar operator of the B-29 look at its little short end scope and determining where the bomb. The short end worked cause they had this radio, they are basically radio stations that broadcast along a certain van, and they would basically figure out where the target was going to direct their beacons towards that target and basically, the B-29s were either fly along one of those beams until they hit the other beam or they kind of figure out where the intersection is. Bottom line is where the intersection is where they drop their bombs. And actually, the circular area of probable, they develop is 600 feet, which is pretty good, for this era of bombing. That's better than World War II. So, they get very good with it but this night bombing, it's usually by one or two B-29s at a time. There's a real crisis at this time with the B-29 community. We're attacking at dinner tonight about some of the problems they had with new called reservist in World War II, in Korean War. Well, most of the crews come from Korea they are recalled from World War II especially B-29 crews. What happens is, again, this people didn't know they were signed up for that when they were B-29. A lot of these people were surprised when they get this letter in the mail saying by the way Uncle Sam is calling you back to act to duty. By the way, the records were incomplete so some guys were getting recalled just an example I found, one guy was a B-29 navigator in World War II gets a letter from the war department saying you're getting recalled on an act of duty. He shows up in Korea and they say you're now a radar operator. And by the way, he had one mission that overlapped with his predecessor, to learn how to use the radar before the other guy left. But what happens is there's a lot of dissatisfaction these guys being called back to war. There are some people who volunteered to help, but said I volunteer as long as I get sent to combat again. Then they all get sent to combat too.

And what happens is there's a regulation pass in 1950 that's suppose to make it easier for commanders to recognize somebody who's been strained in flying, and it's called the fear of flying regulation. What it says basically, if you have an individual who for some reason's undergone a lot of stress and seems to be left in to fly, you can pull them off flight duty or they can pull themselves off flight duty without prejudice, until they think they're ready to fly again. And what happens is, is you have basically a wave of combat refusals to B-29s troops, over thousand in the United States and there were 200 in Korea. And they say, oh, I'm afraid to fly today. Drives Lemay nuts. Lemay basically wants to castrate every one of them. *[Laughter]* The one that drives Lemay craziest is one example of a guy who goes up in front of all these crew of flying boards and says and brings his wife and says you know, I'm not really afraid to fly

but my wife is afraid for me to fly. Oh, Lemay writes, you got to read Lemay's papers on that, that's just the great. But, it is a crisis and it really affects morale throughout the bomber crews. I mean its deadly business to be a B-29 pilot and a B-29 crew. And a lot of them don't want to be there. So what Danny Vargas has to do, is, the one thing you've got to stop to involuntary recalls. What he does is start to rotate his B-29 crews out of Europe to Asia as well. Basically, it's a 6 month combat drill. So they work to do these 6-month combat chores, all the sacked crews are getting combat experiences in Korea, but it's not the kind of war they're suppose to fight. They're not dropping nukes they're dropping conventional bombs, they're going after small targets and not bombing cities. They got to relearn the business. What Lemay also does is he, another key part of Armors' agreement, Armors' negotiates as they go on is the two keys sticking points of the POW repatriation and bringing units back into Korea. How many units can be left in Korea once the armors are dis-assigned? And there's one thing in there that says basically that you can keep the same number of aircraft in place that are in place in Korea when the armors are dis-assigned.

Remember all the good airfields are around Seoul. So the North Koreans and Chinese are trying to build airfields in the north, so they can bring in the aircrafts that are based in there. So when the armors are dis-assigned, they could keep in the country. So the B-29s take this on as their mission to keeping any new airfields from being built. This is an airfield at Sunchon; this is sure at night bombing at its best. All those little dots, they are bomb fields. And this is, that's the main runway. So you could see what the beep, this is where that shore end radar navigation bombing. You could see they basically destroyed that runway. And also, allowed the Vietnams for the planes over here. Smart told me in his interview, that he thought that we guys are good at this but he thought back by the 5th 1953, the communists are not really serious about trying to put any planes on these airfields. He thinks they're just blow in the airfields to distract the B-29s. So when we go bombed them, and not bomb something else. It's such an effective operation. What Lemay does, is he takes a lot of guys, his staff and sack who haven't seen combat actions and sends them over to work with his B-29s crews. A lot of them were young reservist, young guys being recalled, no guilt. The oldest, the old man is 25 or 26 and he sends one of his fighter jocks over and I found these pictures in a file of Tom Powers. Tom Powers was Lemay's, right hand guy and sack the model for Jack the Ripper and Doctor Strange Love who had this particular excerpts from this Colonel and his files. These are pictures; this Colonel sent this picture back to Lemay's headquarters. Here are some pictures of the guys I'm working with in this B-29 crews. *[Laughter]* I read at some of the captions, this one here is – What back up to the alley again? This drooling picture over here says – Nope, combat's not affected me at all. And, the one at the, again, for those of you who are combat veterans can have figure out, this, this middle one, this very angry looking one. What do I think of the mission planning? Well I'll tell you all about it. And then, this one over h ere, what that says down there? You're damn right; you ain't keeping me out here for 7 months. That was just some interesting set of pictures coming back from this Colonel.

The problem to get solved by 52, but it is a real dilemma within the Air Force and there's this Court Marshal, there's a lot of problems. We're trying to resolve these problems and eventually it gets fixed. Basically, we've got a personnel policy but the air force is still faced with a problem of how are we going to win this foreign air problem? I mean the Korean War was the first war we tried to resolve with air power alone basically. I mean the ground guys were

restricted of what they can do. We're going to have to do this with air power. And what we get is a bunch of new leadership. Key guy this is Auto P railing. Anybody know what he did in World War II? Who he served as the air commander for? George Patt, he was George Patt air commander in 1910. Probably Patt's favorite guy in World War II, every night they would sit down and put down a bottle of Scotch and talk about the next day's air operations. Wayne is, in some ways, his attack wolf and sacks shoots forward. He maintains interest in factual air power from his days of patting and he is put in charge of the Far East Air Force when Stratemeyer has a heart attack in '51. And Wayne is going to re-instill tactical air power, and the essence of tactical air power into the Far East Air Force. His right hand man is Director of Operations, this is Jake Smart. He has worked for Hap Arnold in World War II and one of his idea guys, the guy comes up with ideas for the raids in Ploiesti the famous oil raids in Romania, got shot down in 1944 and spends the last year in the war in a prison state. Comes out again and by this time, becomes the number two guy under Wayne in the Far East Air Force. And Smart decides it's time to come for smarter way to use aircraft. It takes a couple of smart Colonels sense and offices I want you to stay in this problem if not for the better solution interdiction for your part. And these two Colonels come back and said, we got it, we want to do something called air pressure.

This is the way they summarize the goal of this new useful aircraft. In some, re-finding lucrative targets in North Korea is not an easy task but assuming not an instrument able one. Finding targets for destruction is basically a problem of directing available reconnaissance and intelligence effort toward that end. At present, it is not so directed. It's believed that once this concept of destruction is fully stated and may known to all operations and intelligence agencies, targets can be found, developed and successfully attacked. Thus, within present restrictions the maximum pressure can be brought to bearer on communist forces. The idea is, if we destroy, we're going to put pressure on the leaders by destroying key systems, key elements of their military path. Then we can get with them the theater. Now, part of the problem is they're not really sure of who they're trying to influence. Moscow, Beijing, and Pyongyang although we know who's calling the shots. But they feel if they can cause enough destruction in key target systems, they can make them respond. They have an advantage, and Ridgway was replaced, Ridgway goes off to command NATO. And he was replaced by Mark Clark, right here, General Mark Clark. Mark Clark was in Italy where interdictions didn't work real well, just doesn't have much faith in interdiction and he's willing to listen to new ideas. This is James Van Fleet and takes over Eighth Army. Van Fleet's big concern is a shortage. And he wants closed air support. He and the Air Force have some rocky relationships throughout the rest of the war because Van Fleet was always asking for more air support. But Clark gives permission for this new campaign, this new destruction campaign.

The first target system picked out, a hydroelectric plant, the North Korea Hydroelectric plants mostly along the aisle especially the big dam at Suiho but there are all kinds of other systems. These target systems have not been bomb before because our allies were really nervous about it. They consider to do use target more suited for civilian than military. So, there's a lot nervousness that are being, that an expansion of war, that might cause reaction to the Chinese and the Russians. Clark gets approved from the joint chiefs to bomb it and the air force picks up the idea how can we take down a hydroelectric system. Cause, what's any good air staff who'll try to talk about it to get a new idea about air power to do a deal with the target systems to find a

movie about it. So if we're going to try to bomb down North Korea, what movie are you going to watch? The Dam Busters, exactly right. That's a movie they get, and Smart sit around, they watch the movie, the Dam Busters and it comes to the end and they say we can't do that. We don't have any bombers like that. We don't have bombs like that. We can't do that. So what they realized is they're going to have to bomb the 10 stocks of power transformers. So that's what they do. And they get out, and they, the next difficult destruction, they blew up all the power systems to transform all of the dam hydroelectricity and they take down their hydroelectricity system. It was great for the POWs in North Korea because they don't have to watch another propaganda movie for months. It made Manchuria dark but the main impact wasn't in Beijing, Moscow, or Pyongyang. It was in London, where Churchill's government almost fall and the British turmoil panic, they were about to start World War III. And, the secretary of states got to apologize to the Brits and we have to look at the Brits appointed deputy to Clark and he got real nervous about the expansion of the war. It doesn't seem to cause any reaction.

Next thing we go after, we decide we're going to bomb some key supply centers in North Korea. Supply centers means any standing building. *[Laughter]* And that's what we do basically knock down every structure in North Korea and we drop leaflets like this one which basically say, we know there's enemy troops around and we know they're using areas for storage. We know they've got factories there, we're going to bomb them, and runaway. This is the same as what they made in Japan. You know who gets to stop the Japanese- the U.S. State Department. The U.S. State Department says if you drop these leaflets that make us look like this is a terror campaign. So they stopped dropping the leaflets because they keep doing the bombing. That's okay. *[Laughter]* The State Department doesn't have any problem with the bombing, just the fact that we are dropping leaflets before we bomb. So, oh, well, the bottom line is continuous and we'll talk about the damages that result in the end.

This is the a, probably, actually the Air Force doesn't mind. This is a typical leaflet mission. *[Laughter]* They pop open that door, they try to stuck the leaflets out. This is not one of the more popular jobs in the air force at this time. The final target system we decide upon which happens in May of 1953, very controversial system is North Korean Irrigation damage. The air force plans to come up with this, see this is an attack on the North Korean Rice crop. Clark and Wayland, Wayland especially will not approve of that, that's going too far. We're not gonna destroy their rice crop. So the planters go back and they scratch their heads and they say, Aha, and they go back to Wayland and say, Look, we found the fact that there are key rail lines that runs south of these dams. We'll blow up the dams we'll wash up the rail lines. That will get through the destruction campaign. So Wayland approves those particular rails

Here's an example of what it looks like that D line down here, this is the key rail line that goes to Pyongyang. That's the whole blown up in the Chosin Dam and that's the water flowing down cut the rail line. What it doesn't know is the fact that 25 miles this one is Pyongyang and the water floods Pyongyang as well, the North Korean capital.

Here's another example right here. It's the Chosin Dam where we blow up 20 foot gap and that water also washed the streets of Pyongyang and also the wipes about 27 North Korean villages and wipes out a whole bunch of their rice crops. North Koreans will scream, bloody murderer

and nobody seems to care about that time. At that time, everybody's kind of deaf to North Korean good points. But that doesn't have much impact as the North Koreans realized that all we going to do is lower the water level of these reservoirs and build multiple rows of dams and they basically negate the policy. So we had a couple of good strikes but then they basically solved it. And one thing that's happened in all of these raids, in hydroelectric dams and on the irrigation dams is that we got a change in the way air power operates. They key raids are not being delivered by B-29s anymore. They're being delivered by these guys F-84 thunder jet fighter bombs. So all of a sudden, these key bombing business got away from these propeller driven large jets, larger bombers had gone down to this smaller jet fighter bombers. This is also our first nuclear fighter bomb. We also developed small nukes to be carried by the F-84s. So this is a revolutionary aircraft. Doesn't get enough credit, we've got a couple of raptors; they're out in the display as well. It's really a transformation the way air power's being conducted.

This is an example of an F-84 strike dropping Napalm on enemy position. Again, very effective, much better closer support from the F-80s or the F-51s, very good closers to put aircraft. It also happens of course in '53 is the election, Dwight Eisenhower becomes President. And Eisenhower thought that his threats to expand the war were finally getting the North Koreans, Chinese and Russians agree with the Amnesties. Best evidence is his warnings never got there. That really is because Stalin dies, there are riots in Eastern Europe, and China is concerned about getting Taiwan back. They're tired in beating American airpower down on the ground, and then the destruction of North Korea is not because of nuclear threat. Though there are plans to do that. Frustration's growing. Clark had got to a plan called Oplan 852 that if the armors' talk break down, we are to send a couple of armor divisions to Korea for a drive on Pyongyang would have made a landing in one side and kind of cross the short part of the Peninsula and also to execute a nuclear campaign against North Korea and China, who would involve dropping between 480 and 640 nuclear weapons. And the day the Amnesties being signed, in July, at a meeting of the NSE, that plan is ready to be executed because nobody trusts the communist to follow through. So if the communist have violated the Amnesties in the month or so after July 1953 when they signed it, Oplan 852 would have gone into effect with the hell with the pay and I'm not sure I'll be delivering all those nukes but that's the plan. 480 and 640 would have devastated that area and would have caused a lot of B-29s cruise as well. What happens even without those nukes though is almost a complete destruction of North Korea, 18 or 22 major cities or more the 50% destroyed. Most Koreans are living in caves and hobbles. There are some South Asia experts who say the main reason for North Korean nuclear program today is to prevent this. The North Koreans remember this and their idea the only way that we can deter American airpower from doing this to us again is by having some kind of a threat that teach American their way.

Now, the impact of the war has a different effect at the United States. The Air Force comes away convinced that the dam raids and air pressure worked, and the reason that the enemy finally gave up was because we finally figured a way to punish them enough. Every service sees nukes as the future. The navy wants its own nukes, they get nuclear aircraft carriers or a bunch of them get nuclear submarines, nuclear measles. Everybody wants nukes. Even the Army develops the atomic rate called the Davy Crockett. Have you ever seen Davy Crockett? Davy Crockett was a nuclear motor. The blast radius of the weapon was larger than the range. *[Laughter]* Think about that. The destructions were to dig in real well before you fire it. But everybody goes for

nukes. The Army starts with four rounds of atomic divisions. Wayland goes from being Commander in Chief from being Tactical Air Commander and the fact that the Air Command was a better boss. He develops something called the Composite Air Strike Force, which is actually a pre course to the aerial expeditionary force we come up later. He develops these packets of air power that can be transmitted all over the world for contingencies that they become the key element of the Lebanon Crisis 1958. The air force develops this disability to syntax air power all over the world. The problem is, even packets consumed by nuclear weapons. In order to get more funding in more robust force structure, Wayland and his successors strike a false bargain to nuclear and they get their own nuclear bombers. And so we go to Vietnam with the F105 Thunder Chief which was designed to do one thing. Drop nuclear bombs on Russian airfields in Europe. And we end up going into Vietnam try to make an end to an air interceptor and a closer air support aircraft, very similar in what happened in Korea. In fact, the problem is that Vietnam is Korea all over again. We forget everything from Korea before Vietnam. There are studies … who is commander of the air force during the war got an early interview with what he does in the 60s where he says I'm getting these reports back from Vietnam that we're not only making all the same mistakes we made in Korea where we find a whole bunch of new ones to make. We happen to relearn everything all over again. We've got the same problem; we can't get any joint commander in control. In Korea, there's so much acrimony between the navy and the air force and the Marines they doing the command in control is that they basically cut the country up into pieces and so air force, you take this piece, navy, you take this piece. So we don't have to worry with what kind of coordination. Same thing happens to Vietnam again. Joint operations, they're just really not joint in most cases. We got to relearn that again in Vietnam. We've got the wrong technology in Vietnam. We've got the wrong doctrine in Vietnam. After Korea, the line is in air force doctrine is preparing for general war means we'll be ready for any other contingency and unfortunately this lesson that all serves us to continue to learn all the way through the Iraq. That if you're preparing for conventional war that doesn't mean you're ready for all these other conflicts as well. One of the reasons why I want to talk about Korea tonight in this environment is because the key to modern warfare is learning to adapt it. And the air force has had a great history of that and the problem is, is going to be the same problem after Afghanistan as how do we avoid forgetting again.