Wisconsin Veterans Museum Research Center

Transcript of an

Oral History Interview with

Kermit E. Bliss

8th Air Force Photo-Reconnaissance Pilot, European Theater, WWII

1995

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Bliss, Kermit E., (1920-). Oral History Interview, 1995.

User Copy: 2 sound cassettes (111 min.), analog, 1 7/8 ips, mono. Master Copy: 1 sound cassette (111 min.), analog, 1 7/8 ips, mono.

Abstract

Kermit Bliss, a Madison, Wis. resident, discusses his service with the 7th Photo-Reconnaissance group, 14th Squadron, 8th Air Force during World War II. In this extremely detailed interview Bliss relates information on photographic techniques, military aircraft and maintenance, and life at an Air Force base. Bliss details his induction into the Air Force, including training at San Angelo (Texas) and assignment to the Photographic Reconnaissance Operation Training Unit (PROTU). He relates the difficulties with PROTU (a new Air Force unit) like the lack of a runway, proper equipment, and knowledge about airplane operation. Stationed at Oxford (England), Bliss details daily life, reconnaissance missions, differences between reconnaissance planes and fighter planes, problems pilots faces while in the air, briefings, and photo identification. He mentions the major targets of photo reconnaissance missions and the reasons for these targets, and also discusses German photo reconnaissance techniques and photo retouching to create German propaganda. Bliss also touches upon interactions and cultural differences between Americans and the English and alcoholism. Bliss describes his duties as a group commander including shipping troops to the Army of Occupation and the China-India-Burma theater, instituting an educational program, producing a series of photographic WWII books, and determining the causes of plane crashes. He relates his transfer to the Active Reserve, where he was made a Colonel; work for the Madison school district, difficulty finding housing, use of the GI Bill, and involvement with 8th Air Force reunions.

Biographical Sketch

Bliss (b. March 31, 1920) served with the 8th Air Force, 7th Photo Group during World War II. After the war, he joined the Reserves where he achieved the rank of Colonel, and returned to Madison, Wisconsin.

Interviewed by Mark Van Ells.
Transcribed by Wisconsin Department of Veterans Affairs staff, 1998.
Transcription edited by David S. DeHorse and Abigail Miller, 2001-2002.

INTERVIEW TRANSCRIPT

Today's date is March 30, 1995. This is Mark Van Ells, Archivist, Wisconsin Veterans Museum doing an oral history interview this morning with Mr. Kermit Bliss of Madison, a veteran of the U.S. Army Air Forces in World War II. Good morning. How are you doing?

Bliss: Good.

Mark: Thanks for coming in.

Bliss: My pleasure.

Mark: Let's start by having you tell me a little bit about where you were born and how

you were raised and what you were doing prior to the attack on Pearl Harbor.

Bliss: I was born in the state of Iowa in a little town called Sigourney.

Mark: Where is that?

Bliss: It's right in the middle between Ottumwa, Oskaloosa and Washington. Most people have heard of those places. It's a small community there and actually I was raised on a farm outside of a little town called Webster, about eight miles from there. Along about 1939, I was at Drake University going to school and I could see that there was no way we were going to stay out of this war and I decided at that time that there was no way I wanted to be in the Army and I decided at that time that if I didn't do something about it, I was going to get drafted and wind up in the Army. So, while I was at school, I signed up for the civilian pilot training program because I thought I wanted to be in the Air Force and at the government's expense, they taught me how to fly Loscums and I wound up with a private ticket. Then in my senior year near the end of the year, I tried to enlist. The first time I went through they flunked me on the physical for two reasons. One, I had a malocclusion, I couldn't touch my front teeth together and number two, I was too light for my height and so I went on and went to my dentist and I had him make some plaster casts of my teeth and I shipped them off to Washington and requested a waiver, which in the due course of time, I got. So then I went back to try it again. I hadn't gained a heck of a lot of weight so all I did was when they measured me I bent my knees. So I went into the service at about 5'9.25" and I ate a couple of pounds of bananas just before I went in so I went in at 137 pounds which was enough to get me through. Then they said, "OK. We'll call you." So I went home because school was out. To help me along, the University in their wisdom, decided 12 of us in my department would not get our degrees because the Dean had changed our schedule and it didn't comply with University regulations. But, be that as it may, I couldn't go on back

to school to do it at that time so I waited, in fact, a friend of mine was running a restaurant and when he got home from his vacation he found that his employees had probably not rung his cash register for \$600 or \$800 worth of business. So he fired everybody and called me to help him so I was working for him because nobody else wanted to give me a job knowing I was going to get called. I worked for him until I was called. One of the unique facts of the whole thing is another chap who was working for him at the same time who had been in ROTC. He was called before I was. Name was Kenyon Hilsher. He disappeared into the military and then eventually, two guys from the state of Kansas were ill and couldn't make the call for class 42E so I was called from Iowa and another kid was called from New York to fill in the class. We went to a little private flying school called Victory Field at Vernon, Texas. The only military on the base was the CO and a Lieutenant Commandant of Cadets, and a Sergeant who ran the office. Everybody else there including all instructors were civilians. I got in there and there was immediate word for me to report to the Commandant of Cadets. Somebody said, "What did you do?" I said, "I said I haven't been here long enough to do anything." So I reported to the Commandant of Cadets and lo and behold who should it be but the guy I'd been working with in the restaurant back in Iowa. He had been sent there as the Commandant of Cadets. He says "I think it advisable nobody here know that we ever saw each other with the hazing that goes on between the upper and lower class." He said, "I spend my weekends in Wichita Falls, when you get so that you can get off for a weekend, I'll meet you there at some hotel." Anyway, I went on through the system from Vernon, Texas, I was then sent to San Angelo, which was an old natural base. These were both grass fields. We were flying off just plain grass, no runways at all. When we finished at San Angelo, we did our night flying there and that sort of thing and then I was sent on down to Moore Field at Mission, Texas for my advanced training. Near the end of that we were sent to Matagorda Island for our gunnery, air to ground and that sort of thing. We were flying AT6's. Well, the time came for us to return to the field and it was the day we were to graduate. So we got back to the field and landed and were rushed immediately to our quarters where we changed into our brand new Class A officer's uniforms that had been tailored for us while we were off, and put those on and went out and made the formation to officially graduate and they called us into a meeting and I have learned that one of the most important things in the whole Air Force or any military organization is the letter that your last name starts with. They put up a list of potential assignments and said we could sign up for what we wanted. They had medium bombers and heavy bombers and fighters and something called PROTU so somebody asked what PROTU is and the guy said, "Protu, Protu, must be an Indian name." So nobody signed up for it but they had to send somebody there so they scrapped everybody's request and everybody whose name began with A, B or C was sent to PROTU. So, I went to PROTU and in the group I went with there were--

Mark: What does PROTU mean?

Bliss: Oh, that's the Photographic Reconnaissance Operation Training Unit. It was a brand new outfit being formed in Colorado Springs. I went up there with a Baker, two Barkers, a Barley, a Bliss and a Boatwight. We were assigned to PROTU. Well, three of us got there at the same time and interestingly enough, they said to get there the fastest way possible which was the slowest train they could find. It took two days just to get out of Texas. Anyway, we got there and in the station I jumped into a phone booth to find out where we were and I got ahold of the operation and I said I wanted to call the Army Air Base. She said, "Army Air Base? I don't have anything like that." I said that I had orders for something called PROTU. She said she had that and she rang them. I got ahold of a Sergeant and I asked to speak to the OD. He said, "OD? We don't have an OD. I'll let you speak to the Lieutenant." so he put the Lieutenant on and he asked what we were wearing. I said that we were in summers and he said "Dive into the closest john and get into your winter uniforms, it's still cold here." This was May of 1942. I was actually back in primary at the time of Pearl Harbor. We got in and he said to report to headquarters. It's in a garage on Pike's Peak Avenue just about three blocks up from the railroad station. When we got there they took us in and introduced us to the Colonel who was the CO and he asked us if we'd like 15 days leave and said that they didn't even have a runway. So we said yes, we hadn't had a leave since we got into cadet service. We all got orders for 15 days leave and went home.

In due course we got back, we still didn't have much of a runway, but they had brought in some small 65-horse power aircraft for us to fly to get our flying time. The big problem was that we didn't really have any mechanics who knew anything about them and they were set for Ft. Sill which is sea level and we were taking off from 6,172 feet above sea level. So we would run those things about 3,000 before we could get them off the ground and we had to be very careful because if we took off in the morning when it was cold and the sun came up and it got warm and we got behind a hill, we couldn't climb over it to get back to the field, we'd have to land in somebody's cow pasture. But in the due course of time, eventually they got a runway and we started getting our original F4's which was a modified P38 aircraft designed for photo-reconnaissance. Had twin 24-inch cameras and a trimetrigone six-inch camera set up in the nose of the thing. None of us had ever flown a twin-engine aircraft in our life and this didn't have anything where they could check you out. The first time you flew it, you flew it. So then sent in a chap by the name of Peterson who had 60 some hours in P38's and he was our checkout pilot. He would make you sit in the thing until blindfolded, he could name a control or a switch and you could reach out and touch it. When you did that, he said to go fly it. In fact, I was sitting in the cockpit of an aircraft I was going to fly with the mechanic starting it the day that Peterson took off and just as he left the runway, one engine quit. He went back in, the plane blew up and he was killed and that's how they named Peterson Field at Colorado Springs, which still carries his name. In fact, here at the 50th anniversary of it for the first time I met the Peterson family. His brother and his

father and mother were there and I talked with them. It was the first time they really knew what had happened to him. We spent almost a year there in training and it was pretty good training, all in all. Then one of our squadrons was shipped to England, and was stationed near Oxford. We were the second squadron to be shipped. All of our materials, our supplies, our footlockers and that sort of thing all went with the enlisted personnel and the ground staff. The pilots were kept; we were supposed to fly our planes over. Well, as many things happen in the military, somebody changed their mind and they put us on a train and sent us to Prestile, Maine and put us on C54's to go over. But, before this a little bit, nobody liked to ferry the P38's. A P38, anybody could fly it but it takes an engineer to keep the engines happy. So they hated it so if we had to deliver any, some of our pilots flew them. We got a call one day that we had to deliver two aircraft to Sacramento, California and so I and another chap took them and flew out to Sacramento and when we got in there we were wearing high altitude equipment which is the leather, fleece lined stuff and boy when we got on the ground it must have been 90 degrees there--it was hot. So we piled out of the aircraft as soon as possible and got out of the stuff and I put down the stirrup. Now the back of a P38, the trailing edge of the wing when you stand behind it, meets a 6 foot person just about at nose level. So to get on it there's a lever that you pull up and it lets down a stirrup that's locked on and you put your foot in that and rear up and get onto the wing to get into the cockpit. Well, while I was taking my stuff off, I suddenly realized I hadn't taken a copy of the Form 1 which is a record of my flying time. So, I turned around and went back to it, stuck my foot in the stirrup, reared up and some mechanic trying to be helpful had attempted to put the stirrup up, didn't know how to make it stay so he put it back down and hadn't locked it so when I reared up, my foot went under the thing and I was thrown flat on my back on the ramp. Didn't hurt my back, but it ruptured me. In due course of time, I got back to Colorado Springs and went to the doctor. They put me in the hospital at Camp Carson and did surgery on my rupture. I had got out of the surgery, I had been maybe a week and a half in the hospital and word came that we were to leave immediately for England. So, I was yanked out of the hospital a little early for those days, and sent off and they said not to carry anything. Well, when they ship you overseas you got a B4 bad with everything you own in it and if you don't carry it, it's left behind. So I wound up lugging that thing all the way along and didn't do my surgery any good so it later became a problem. We eventually got to England and got to our base at Mt. Farm.

Mark: Did you fly to England or what?

Bliss: Yeah. We flew from Prestile, Maine in a C54. That flew us actually to Scotland. Then in Scotland they put us on a train and we went by train from Scotland down through London and out to Oxford and trucks met us in Oxford and trucked us out to our base. Mt. Farm was near what they called the Knobs, which are a very famous landmark in England. These are two hills that the Romans used as readout many years ago and there are great clumps of trees on top of each of these

hills. Made the most wonderful landmark in the world to try to find our base because it was not a matter of finding an airfield, it was finding the right one. They were all over the place. So then when we got into the Mt. Farm and settled in, the 13th Squadron, which had preceded us, we were the 14th, were already flying operational missions. You understand the 7th Photo Group, which this was, was the only photo-reconnaissance group for the entire 8th Air Force. We had no wing at that time. We were directly under 8th Air Force and all our missions and everything came down from 8th Air Force and we flew them there. Initially, the first mission you flew usually was what we would call a milk run. They would send you out and they would give you one target that might have been 20 or 30 miles inside France or something like that. You would fly out and fly across the Channel and take the pictures and come back. It was an orientation flight, basically. Chances of running into problems on it were pretty remote.

Mark: Where did you go for your first milk run?

Bliss: There was a railroad intersection behind Cannes that they wanted pictures of. That was the first one, as I recall, that I flew. After that first one then you got settled pretty much into the regular routine, taking your turn to fly when it came up and you eventually developed target areas. Mine eventually became Frankfurt in Germany and so when Frankfurt would come up, I usually was sent because I had flown it a number of times and knew what it looked like. If the weather was bad I knew the area, the only thing we had to go on was ordinary dead reckoning and pilot instinct. You could look at the ground and figure out where you were but half the time you were flying over a cloud. In photo-reconnaissance the rule was this: If the target was clear you flew. We would take off when we couldn't see the end of the runway day after day because the weatherman said by the time you get back it will clear up. So you made instrument take off and climbed out on instruments. I flew as much as almost two hours never seeing the ground, getting above clouds. The meteorology people even used to brief us on what the top of the cloud structure would look like, where fronts were so we could even do some navigation by looking at the cloud structure.

Mark: Were they correct?

Bliss: Oh, yes. We had the most amazing weather predictions. I've had them tell me that the city of Frankfurt would be free of clouds for a period of 30 minutes from 2:10 until about 2:40 this afternoon. I've taken off and if I got there about 2:10 it was just coming out from under a cloud, I would take my pictures and come back. All this was done with nothing but reports from out over the Atlantic and up in Iceland and places like that. No reports from the Continent at all. It never ceased to amaze me the accuracy of their reports of that kind. In fact, we had one man that used to bet with people when it would rain at our base. He says, it's raining when you can count 50 drops on a windowpane. He would bet it would rain plus or minus ten minutes of a certain time and it got to the point where nobody would

bet with him. I don't know how they did it. He once told me, he says, "Let me take a pencil and put ten dots on a large map and all you need to do is tell me what the barometric pressure is at the same time at those ten dots and I'll predict your weather for 24 hours. I don't know why we have trouble getting good weather predictions in the United States with all the information satellites we've got.

Mark: It is interesting.

Bliss: As we went along we discovered, we went in at 30,000 feet to take pictures because we had no guns. We had nothing but cameras. The idea was to stay out of trouble and if you were intercepted with a P38 the only thing you could do was to get rid of your drop tanks and go as fast as possible and stay out of the way and most of the time you got run out and come home you didn't get the pictures. We found we were having a terrible time getting pictures in Germany so it was about that time--

Mark: When was this?

Bliss: Oh, this was '43 or '44.

Mark: So, it's before fighter escorts.

Bliss: Oh, yes. We didn't ever have fighter escorts until the last couple of months of the war when they started using jets and rockets. Up to that time, we flew all on our own and what we did was we borrowed twelve Mark 9 and Mark 11 spitfires from the British. They never ran from anybody. The spitfire would climb to stay out of trouble. In the first place we went in at 40,000 feet instead of 30,000. It worked very nicely at 40,000, which put us normally 10,000 feet above any of the patrols. If a patrol would start to come up where we were and you could see them, all you did was continue to climb and if you could stay 1,000 feet above them there wasn't much they could do about it and if you continued to climb you could still get your pictures. The scale would be a little poor at times but they had 36" focal length instead of 24" so really at 40,000 our scale was the same as the American planes from 30,000. Our biggest hazard was the 88-millimeter flack. We learned, among other things, that if you could survive your first ten missions, your chances of surviving in photo-reconnaissance were pretty good.

Mark: Because of experience?

Bliss: Experience. Right. A high percentage of the people we lost we lost during their first ten missions. A variety of reasons for that. One of the reasons is that you have to learn to see at altitude. When you look out at altitude there is nothing to focus your eyes on and they tend to go beyond infinity where you don't see anything. So you had to learn to look at the distance and deliberately pull your focus in toward you. You'd see a little blip and then you'd focus on that and that

would be an airplane maybe six or eight miles away from you. But you had to learn to see. To show you what this means, we had a Colonel from the Pentagon come over who had to have a mission on his record so we put him in a P38 and he had flown those, we sent him out with our Operations Officer at the time and says "Keep him out of trouble. The last thing we need is having some wheel from the Pentagon get shot down flying one of our 38's. So they went down to Paris and this was when Paris was not nearly the hot area that it was earlier in the war. Well, as they went in the pilot taking him was giving him the grand tour by radio and was pointing out massive formations of bombers to him. The guy couldn't see them. He would point out a formation of 150 bombers maybe eight or ten miles away and the guy would look and look and look and he couldn't see them. He never saw a plane all the time he was gone. They got over Paris taking their pictures, the guy flying looked up and here's two F190's coming in on them. So, he says, "Stick with me, get rid of your tanks, get up your power, we're running." So the F190's froze almost in cannon range of them. This guy never saw them all the way through. They got him home and the guy couldn't understand what he was so excited about. Which gives you an idea of the problems that you have to learn when you are up there. In ten missions, you'd learn those things. We lost a lot of pilots. Quite a lot of them we lost to flack because they'd use the 88 Miller and they could reach 40,000 feet with no problem to them at all. The accuracy of hitting a little bit of an airplane at 40,000 feet was a bit of a problem with them so what they would do would be send up two marker flack. These leave a white trail. They come up and when those come up they can tell your altitude and then they would throw what we called a box. They would take an area that would be maybe a half a mile tube and every gun in the area would fire into that area and they'd just fill that area with flack. If they could catch you inside the box, chances are pretty good that they'd damage you. Well, the advantage we had was this. We listened to our VHF radios all the time and when radar would sweep through you, you heard a sound and then pretty soon it would do the same thing again. Then all of a sudden when they were pinpointing you, they'd get a very narrow band and you'd hear these noises back and forth across you. The minute they were doing that, you knew that they had found you and were working you so you watched. The minute you saw a marker flack coming up, you immediately turned 90 or 180 degrees and got out of the area. If you did this quick enough when the box came up you weren't there. These area other things you learned as you went along. Once during the period of time, somebody in their brilliance back at headquarters decided that pilots probably weren't the world's greatest navigators so they sent us a professional navigator to do our navigation for us, dead reckoning and this sort of thing. The first day they put him on he figured about ten flights and he was a little puzzled because the reports said we had 120 mph wind up there. He didn't have 120 mph wind on his calculator. So he thought "what the heck, I'll use a 60 mph wind and double drift" which is perfectly logical. The only thing is that in the excitement he forgot to double the drift. So he sent out ten missions supposedly going into France and Germany. I happened to be one of them. When I broke out of cloud, I was in mountains. The only mountains in that area were in

Switzerland and I was supposed to be 200-300 miles north of there. The minute I saw the mountains, I got to looking at my map and the headings and I figured out what he had done. So I made some corrections and turned around on a reciprocal and flew and got back into England. Of the ten of us, nine of us got back without too much trouble. One of the fellows was kind of new at it and fortunately, he was going into northern Germany somewhere and when he got back instead of flying in England he flew out into the Brest Peninsula, which is France. When he got down there he knew he wasn't in England and he got on the radio and called and he got a hold of a place called Bradwell Bay which was a recovery field on the southern coast of England and they gave him a vector of 010 which scared him to death because that was the vector that the German radio operators would give you if they could intercept your call for a vector and try to run you off into the North Sea. But he finally took it and flew it and they sent out two fighter planes to escort him in. He was getting low on fuel and he finally got down to 5 gallons and then he started gliding and when you get close to these big radar stations, they can't tell you anything. If you're within five miles of them they can't tell you a thing. So when he crossed in he was gliding so slowly that the fighters couldn't stay with him and they lost him in the clouds. He started up his engine on his last gallons of gas looking around for it and he was flying under the cloud which is very low and all of a sudden his engine quit and all of a sudden the ground disappeared below him so he just held it then it appeared on the other side and he laid it into a field and he had flown right around the station and landed right behind it. So, he had a problem. That was the last time the professional navigator did any navigation for us. We figured if it was our neck we'd do our own.

Mark: So on these missions you flew how often?

Bliss: Oh, you never knew. You might fly two in a day sometimes, usually not. You might fly three in one week and then because of weather go for two solid weeks that you couldn't fly one. Everything depended on the weather and when the Continent was weather socked in with cloud, we were helpless. There was nothing we could do. Eventually, of course, they started sending the bomber shuttles clear into Russia to reach some of the things. We couldn't reach even with a P38, which had a longer range than the spitfire by far. The Spitfire was designed as an interceptor and with the ordinary tanks in it you had about an hour and ten minutes gas. That was all there was. So what we had was, since we took the guns out of them we filled up both wings with gas, we put a 90 Imperial gallon fiber tank in between the wheels and filled that up with gas to give us as much range as possible and we had basically a 4 hour range. Now you can't fly two hours and back because going into the Continent you invariably had a strong tail wind and coming out you fought it. So you had to figure your radius of action carefully so you didn't run out of gas. The nice thing about the Spitfire was that if you did run out and held your altitude there were things you could do. I on two occasions came back where I had been intercepted and used up enough fuel power climbing and so forth. We flew on the ten-minute reserve a lot of time and you

use a ten-minute reserve up in about four minutes if you really put on the power. I'd get out over the North Sea someplace, get down to 5 gallons and keep my altitude. I'd be at 38,000 and shut the plane down and the British had given us all sorts of figures on how to figure maximum glide range and so we would use those figures and the wind and figure out and usually 140 knots of air speed would give you your maximum range. A spitfire when it was low on fuel, had close to a 20:1 glide ratio. So if you're at 40,000 that's almost eight miles, theoretically, you could glide 160 miles with it. So we would just set it down and set out seat down and fly instruments and call in for a vector to the closest air field and glide and when you get near the air field you would change your propeller pitch back to get the engine turning over and dive it to turn the engine up and land on your last five gallons of fuel and then if you could taxi in you did and if not they'd come out and fill you up and you'd take off again and go on home. This was done by Spitfires, not just by me. There were a lot of people wound up doing this at various times. I don't know of anybody who had to do it that didn't make it. The glide range was so long. I've glided until I made the coast and still had so much altitude left I'd turn down the coast and go to a better airfield before I landed. The one unusual mission that I had to fly, well, there was a couple. One of them I was grounded for almost a month because I was briefed to cover the first glide bomb mission into the Ruhr where the B17's were going to drop these dive bombs and turn away before they got into the flack and it was going to be my job to follow the bombs in over the Ruhr and take pictures of where they landed, which would be an interesting occupation because every antiaircraft in the Ruhr would be trying to hit something at the time. But, the day came for it I was briefed, the weather was terrible and they decided not to do it and since I had been briefed on it they didn't want me to have the chance of going down on the Continent and having somebody get information out of me, so I was restricted from flying operations until they got the mission on. The mission never did get on, eventually it was scraped completely after about a month and then once it was scraped completely, that freed me to go back to flying again.

The other interesting mission I flew was one day we got a request for strike coverage which was pretty rare. When they were going to experiment with what they called a droop snoot. This is a P38 that the nose had been enlarged and they had a Norton bomb site up there and they would lock a guy in up there and then they would fly a bunch of fighters in formation on him, each fighter would have one drop tank and one 150 lb. bomb. He would go in and when he gave the signal everybody dropped their bombs in a pattern. They decided at the last minute that it was too late for me to go up to the base and get briefed on it so I was given a rendezvous point over the Channel that I was to meet up with them and this time I took a P38, because these were going to be P38's so I went back to one of our P38s. We kept six of them in the squadron and I went and I joined up with them. They were going down in France on the Loire River to a town down there and when we went down there we started our run, all of a sudden the bombardier decided he was going in crosswind. So he swung the whole formation out 25-40

miles out into the country and brought it around into the wind. Well, by the time he did that everybody in France and probably in Germany knew what we were heading for and give them all the time to get ready. So I said that I didn't like this a bit. I was in formation with them so I started climbing. They were going at 25,000 feet so I climbed up to 30,000 to get above them and as they went in they took tremendous flack. Several aircraft took direct hits and blew up. The rest of them flew through the junk and that sort of thing and I, fortunately, was smart enough that I got up above that. I thought they were going for the marshaling yards so this is what I aimed to take pictures of. As I got over I looked back, because you could never see what you were shooting it was underneath you. Here the bombs were exploding on an island out on the Loire River. I didn't know whether I got a picture of that or not. So, I turned around and went back over the city to get that picture and when I did, of course, the formation had gone on and that left all the flack battery shooting at me. Fortunately, again I was flying higher than they were so most of the stuff was exploding under me. They got a few close but anyway I got the pictures and got out of there. I decided that I didn't want to straggle back with them across the Continent so I took off into the Brest Peninsula and went home another way. Got out into the Channel and then I flew up the Channel and made my entrance where I was supposed to, because you didn't go in at the wrong place if you could avoid it. That was one of the interesting missions that I flew.

Mark: What was the typical mission?

Bliss: Typical mission we would get a request from headquarters to cover the marshaling yards at Frankfurt.

Mark: Was this before or after the raid or both?

Bliss: Could be. We went first and took pictures and went after and took pictures then sometimes we'd go back and see whether or not they'd rebuilt. This was particularly true of the synthetic oil plants. We had requests to cover synthetic oil plants almost on a regular basis because they'd bomb the daylights out of them and then we would go and cover them and when we got back to the point where it looked like they were producing again, then there'd be another raid and we'd hit them again. So you never knew what it was. Each mission was specific as to what they wanted pictures of. We even had one mission that wanted pictures of a street address in Paris. Fortunately, we had an intelligence officer who lived in Paris for many years so we called him in and he got a map and drew a circle on it and said that the address was somewhere in that circle. Cover that circle and you'll have it and so we flew over and covered the circle and apparently we got it because we didn't get that thing later on again. Sometimes you didn't know whether you got what they wanted or not, except for the fact that if you didn't you usually got a request to do it again.

Mark: I was going to ask if you got a chance to see your handiwork.

Bliss: Oh yes, they had on our field, we each had squadron labs. A squadron lab was capable in emergency of putting out roughly 25,00 9x9 prints in every 24-hour period. We also had a group lab, which did basically reprint work on request. It could put out almost twice that. So the volume of photographic paper that went out was incredible. Our film was nine inches wide and it varied. There were 150 ft. rolls and 300 ft. rolls. Whatever you had in after you got through taking pictures of your target, you looked for anything else that might look interesting and just got pictures of it on the way out. An amazing number of things were picked up from just this miscellaneous photography. The first no ball site was picked up by accident that way where they sent off the buzz bombs. That was another interesting story because they got together a bunch of people who understood the German mind and they said if on the French coast you were going to hide these kinds of sites where would you hide them. They sat down and drew about 25 circles on the may and we got a request to cover those from low altitude for us, 14,000 feet. Antiaircraft would love you to fly at that altitude; it was their favorite altitude. Anyway, we went over and covered all those and out of all the circles they covered 3/4 of them and they found one of these launch ramps in-

Mark: So what kind of places did they hide them in?

Bliss: Oh, they were always in the woods. They'd put them in the woods and they'd lay stuff over the rail, except when they were sending them off, like branches and so forth. But of course, when you lay deciduous branches like that you cut them and the leaves change color. They reflect differently and the intelligence people were able to determine that and tell that something was camouflaged under there and also they had to have a couple of buildings and it was pretty traditional the way those buildings looked, even though they were in under the trees. We would get down to the interpreting section every once in a while. I know I was there one day and I walked up behind a gal who was looking through a stereoscopic viewing thing at a couple of pictures and she had a red and a black chino graph pencil. She was drawing red and black circles around little dots. I asked what she was doing and she said that this is a base that lays mines. These are seaplanes. I asked what the red and black circles were and she said the red circles are seaplanes that are loaded with the ordinance to take out and drop mines and the black circles are ones that are empty. I asked how she knew that and she said to look at the wing shadow. The wing shadow was much closer to the wing on the ones that were loaded because they were lower in the water. Oh, they could tell amazing things. The first radar site that was discovered that the Germans had on the coast, the British wanted it. It was in an old chateau and they called together the architects of England and told them they wanted a detailed design of the inside of this chateau. We want to know where the doors are, which way they open and where the light switches are, everything. And, we can't go back and take anymore pictures because it would alert them. They had one view that showed two sides of

the chateau and the antenna. They mocked up that chateau in England and then they sent the Rangers in to the commandos to try and capture it. With them went the only guy in England who knew enough about radar to take it apart so it could be put back together and one guy who was with him and his instructions were if they were captured to shoot the guy because they didn't want his knowledge falling into the German hands. They went in anyway and not only got the site, they got the six operators and brought them all back to England and the boys later said it was just like going home when they went in that building. It was identical. Of course, they had figured out who the original architect was and went back and studied his architectural designs of other things he'd built and then they designed it the way they thought he would design it. One woman in intelligence that we were acquainted with, we met her actually through Sarah Churchill Oliver who was also there and she used to come down to our base for dinner on weekends with a chap who knew some of the boys and she would bring this gal with her occasionally. Her father had been a merchant marine captain all his life and he sent his daughter models of merchant marine ships and she had grown up living with merchant marine ships. She was working with them. They would get a picture of a merchant marine ship and give it to her and ask who what it was, where is it from, what's the power on it and where is it going. Usually, she could tell them. The most unique thing they did was a bull fighter dove on the deck of a merchant marine ship down in the Bay of Biscay one night and fired at it because he knew it wasn't one of ours and they fired back and in the flash of the antiaircraft guns, a little jagged line that showed up on his gun camera film which was the shape of a section of the counting tower. They gave her that little jagged line and asked what it is, where it's from, where it's going and what it's got on it. It took her 24 hours but she told them and they went out and found it and sunk it. She was able to match that little jagged line with the shape of the counting tower of a very specific vessel.

I started out with a typical mission. A thing would come in. Whoever was going to fly would be called in. You'd meet with intelligence, they'd brief you on exactly what they wanted and you'd draw maps through the area, you would sit down with the operations officer and decide where you were going to exit England and where you were going to enter the Continent and you never went directly. You didn't take off and fly right to the thing. You would fly doglegs and so forth so that if they picked you up they didn't know where you were going. Once this was done he would notify the British air sea people of the flight where you were going out and where you were coming in and approximately what time you'd be doing this so that radar, if they identified you, and of course we all had IFF that we would squawk all the time on the way in so that they could identify us as an allied aircraft, and then once that was done, you would go out to your dispersal area and get together with your mechanic and check over your aircraft, which would be already fueled and ready for you and at the appropriate time, you would get clearance from the tower and take off. With spitfires, we would climb directly to 40,000 feet and usually when we got over the Channel we would drop

that fiber tank because it was a big drag and the 90 imperial gallons would get us to 40,000 and get us up over the Channel which was a great saving of fuel and then from that point on you would go and find your target. If it was a reasonably clear day it was relatively easy. From 40,000 feet you can see the curvature of the earth and so you could see long distances and you could see rivers and cities and towns and navigating was no real problem, but unfortunately, much of the time, much of the area was under cloud so you merely flew according to a heading and time and so forth and hoped that you broke out. The rule was if you came to where your target was supposed to be and you had the fuel to do it, you would overfly it by 30 minutes and turn around and try and find it on the way back. If you didn't find it then you'd come home. Or, you'd go find something that was open and just take pictures of anything you could find. Targets of opportunity they were called. Most of the time, or a lot of the time, you could find your target and when you found it you usually made two or three runs over at different angles to be sure that you had it in pictures. Our interval meters were set for a 60% overlap so you always got any object in at least two pictures, from two different positions that would give you a stereo pair, so that when they run the prints you could put them under stereoptic and see it in stereo, which helped in interpretation. Once you run over there and of course all this time you're flying you're keeping pretty good track of what's behind you because trouble always came from the back and out of the sun. If you were intercepted you would climb and get your pictures and keep climbing and go on. One of the funny stories of interception was that after the invasion one of our boys in a Spitfire was coming out and since it was pretty quiet along the coast, he'd let down to about 25,000 feet which was where a lot of the fighter patrols flew. Six B51 aircraft were going in about where he was coming out and saw him and misidentified him and they attacked. He saw them coming in so he reached over and shoved up his RPM to get some power on and picked up his speed and about the time he was getting close he just pulled the stick back from that altitude and went up. With as light a plane as he had he could--they were full of fuel you see going in--he just went off and left them hanging. He went up and the minute he got two or three thousand feet on them he tipped over and started diving a little bit and just went off and left them there. When he got back and reported this, the intelligence officer said, "Let's have some fun." So they watched the teletype and when these fellows got back and were debriefed why they reported attacking a presumably new ME109 type with amazing performance, must have water injection and all this, demonstrated a phenomenal rate of climb and this sort of thing and right after it he got on the teletype "Mark 9 PR Spitfire attacked in vicinity of the Zider Zee by six P51 aircraft. Climbed away from them and returned home. Obviously the same incident, same time and everything and I guess those poor fighter pilots really got their heads bashed around on that one. Eventually, as the war went on, my operation started giving me problems. It had been damaged getting over there and I had flown essentially a tour and the doctor said to send me home on a 30-day operational rest leave and at the end of your 30 days report to Truax and have them do the surgery and get that fixed up. They'll give you a month after that and

then you come back. So I was gone for a couple of months late in the war, back here getting that fixed up. Then, eventually, went back. In fact, I was on my way back, I was in New York ready to fly out the night that President Roosevelt died. Everything stopped. All flights were canceled, nothing moved. Then they finally decided after an hour or so that you can't stop the whole world, so things were put back on. The funny part of the whole thing was that I was going back with a bomber squadron commander that was being sent back too, B17. As we were sitting there a WAC Lt. Col. came along and informed us we'd have to take our 8th Air Force patches off of our jackets before we could load on the plane because they didn't want the Germans to know the 8th Air Force was in England. The bomber pilot asked what she meant and said that one out of every five missions I drop thousands of leaflets telling them that the 8th Air Force is in England so if you think I'm going to take that off now and then sew it back on, you're out of your mind. She went on and left us along.

We got into England and got out of the plane and there was a bunch of bomber pilots ready to go back and, of course, near the end of the war they sent guys over that were flying two and three missions a day. They'd get in their fifty missions in a matter of two or three weeks and get sent back home. So these kids were going out and they thought we were just coming in so this one kid came up and he was giving the guy with me kind of a hard time about rough it was over there and so forth. We were wearing great coats and the fellow reached back in his pocket and here was all this salad on him. He had his wings and he had all these medals and everything on there and he says, "Listen son, I was flying bombers over here when you were still in diapers. Don't tell me what it's about." The guy looked at me and he says, "Don't look at him, he was over here when I got here." We eventually got back to our base. When we got back, that was when they had started using rockets and jets. So any mission went deep, first of all we got six B51's that had guns on them and we flew them with our own reconnaissance pilots and they flew cover for them and their sole job was not to shoot anybody down, but to occupy any attacking force while the guy took his pictures and got out of there. It was very helpful. The rocket planes didn't work with us too much. The only thing they could do was they could pin you down so they could run you out of fuel. But they were so fast that you could easily turn inside them so you'd force them to head on attack. The minute you would do that, they would approach you, you would cross your controls. In crossing your controls, you would be skidding almost sideways. The gun sights measure the tips of the wings, in measuring that, calculate the deflection. Well, if you're skidding sideways, they would count a deflection and when they would shoot the bullets would go off to one side and they only had a tenth of a second to shoot because they were going so fast. So then they would turn and come back at you and you would make a turn and force them to head on attack again. I don't know if we ever had anybody actually shot down by them. We had a couple of guys that later got back that were in the prison camps and said that they had been pinned down because one rocket plane pinned them down for almost 20 minutes gliding around up there and then

the minute he left, another one showed up. They kept him turning to the point where he couldn't get out of enemy territory before he ran out of fuel and was forced to land. In fact, I think as I recall, he jumped out and let the plane go--that way they don't get the airplane. I wore a parachute for four years and it made a wonderful seat or backpack, I was just tickled to death to use it for that purpose. A lot of worry over getting out of P38's because of that boom. In actual fact, it was not that much of a problem if you had any control at all. What they would do is they would pull it up to more or less stall. When it stalled you rolled out of the wing. Then the plane would break this way and when you slipped off the wing you would go under the boom. So I don't know of anybody actually hit with a boom. We had one chap who climbed into a thunderhead and it took him up and tore the whole tail off of the thing and spinning down he managed to stop the spin by cutting the motor on the outside of the spin and increasing the power on the inside. As it changed direction, he slid out but the plane was sliding sideways and he slid across in front of one of the turbo superchargers and those things run white hot. It burnt through his leather jacket and all the way down and gave him a nasty burn on his hip. When he got out of the plane he was in a cloud, he figured that he didn't dare open his shoot because the vertical currents would take him back up. The only thing he could do was fall until he broke cloud and hope it wasn't right over the ground. He broke cloud at about 1500 feet, opened his chute and landed on a little point of land that stuck about a half mile out into the English Channel on the English side. He didn't know whether he was in England or France at the time. But then he saw land army girls coming toward him so he figured he was on the correct side of the Channel. But, half a mile in any of three directions would have put him in the Channel so he was fortunate and we got pictures of him. He had jettisoned the canopy and ran into the hale on his forehead. Just below his helmet was all cut clear through to the bone where that hail had hit him in the face. He was back flying inside of two weeks.

Mark: I got a couple of more questions about your missions over Europe. From your perspective, what was the most common target of the bombing raids, the rail yards?

Bliss: It depended on the time and what was happening. One of the basic targets, a couple of the major targets were synthetic oil, if we could stop the synthetic oil we could stop the whole war machine. Another one was ball bearings, because if we could stop the manufacture of ball bearings, we could stop a lot of their armor and so on. So ball bearing factories, and they only had one major factory and they hit that regularly and synthetic oil. I don't have them at the moment, I will get them back eventually. The woman that's writing a history of our unit has my books at the moment, but I have some books that show charts where month by month they predict the output of oil in the synthetic oil in the two systems over there. If you look at that, you can see one reason why we won the war. Because it started out with hundreds and hundreds and hundreds of units and it got down near the end where they were putting out four units of synthetic oil. So, that was one of the

major factors that stopped the German war machine. Now when the invasion came along, then marshaling yards became very important because they wanted to know where they were moving troops and we got a lot of what they called dicing missions then. We were not equipped really to do them. 9th Air Force was supposed to be the tactical air force but the trouble was that the 9th Air Force didn't have the range to get to some of the things they wanted so we would get missions to take pictures of marshaling yards at zero altitude. Fly right through as low as possible. We had two planes that covered 62 bridges on the Loire River at one time. They were flying right in the streets. They got pictures of people diving into the gutter as they flew through the streets. Then they'd shoot out across and take a picture of the bridge. One of them claimed a flack tower destroyed because he flew between two flack towers and one of the cut outs didn't work and one flack tower blew up the other one. He didn't have any guns, he couldn't blow it up. One of them took a 20-millimeter shell in the high engine in a turn over the river and pulled out and flew home on the other engine. He had 250 some holes in his aircraft from flack and bullets and so forth, the other fellow went ahead and finished the last eight or ten bridges and came back and had very few holes because he was going through second. They took two in case one of them didn't get back. The interesting thing was they didn't lead the first one far enough so the space in between the two planes a fly couldn't have lived in it. But by the time they shot at the first one, it was a little late to shoot at the second one. Everybody was shooting at the first guy and weren't leading him far enough. So the second fellow had a much better chance. He didn't take near as much damage.

Mark: Did you get a sense of how the air campaign against Germany had effected German operations?

Bliss: Oh yes. We have pictures. Aerial pictures of German cities bombed out. I'd be glad to bring you a handful of them for your files if you want them.

Mark: Yes.

Bliss: Actually, one of the interesting things is Cologne cathedral because if you look at the Cologne cathedral you can't see a sign of damage on the cathedral but there isn't a building within miles of it that has a roof. Actually there was some damage to the cathedral, but not a lot. Interestingly enough, the Germans published a picture of ostensibly the Cologne cathedral with tremendous damage. We had a little chap with us that was a retouched by profession. We took it to him and asked how they did it because our pictures showed very little damage. He laughed and said they were lousy re-touchers, they took out the beams but they forgot to take out the shadows. Here the shadows of the beams which were still up. He said to bring him a picture of the Officer's Club. So we went up and took a picture and brought it back to him and about three days later, he come back with a print of the Officer's Club and the thing was a shambles, the roof was gone, the sidewalls were damaged, it was just a terrible mess. He did it all with retouching

equipment. We were fortunate. Photo-reconnaissance had probably one of the highest educational levels as a total unit of any outfit because when the war started and photo-reconnaissance started, Eastman Kodak's people all headed for photo-reconnaissance. It was something they knew. So a high percentage of our lab people and our officers in Photo-Reconnaissance were staff from Eastman Kodak. In fact, we were run so much like a civilian operation, that every man on our field, including all enlisted men, carried a pass in his pocket that would let him leave the field any time of the day or night that he wanted to. As long as he was at his job when he was supposed to be and did it and was sober, he could keep that pass. He'd go to town if he felt like it, if he didn't have anything to do, if the weather was bad and he knew there wasn't going to be anything they could take off and this sort of thing. If he got in trouble, showed up drunk on the job, the pass would be pulled and then he would have to apply for his passes to get out and so forth. The company punishment books show practically nothing. We had a, as I recall, something like 62% of the enlisted men had at least two years of college. All of the officers had at least four years and a lot of them had Masters and we had a couple of fellows there with Ph.D.'s. In fact one of the sergeants in my outfit, worked for Lockheed, got drafted into the Air Force with us and when it was over he went back to working for Lockheed, he wound up as the loadmaster on the space shuttle. Also, the Blackbird, the SR71, he went back to Lockheed and he was one of the chief designers of the photo system that went in the Blackbird which was the plane the farthest ahead of its time of anything that's ever been built. The other day when they flew it cross-country and turned it in as a museum piece. They decided they might as well try to break the record. They knocked something like 3 hours off the cross-country record and that plane was 25 years old when they did that.

Mark: I saw that.

Bliss: They're thinking about actually reactivating some. But he still lives in Houston, on NASA Bay and worked at NASA. I visited him and while we were there he took me on the grand tour of NASA down there and we got into places that no ordinary tourist would ever see because he had a magnetic card that would open any door in the place. We got in where they were rehearsing with the arm on the shuttle. They have a mock-up of the shuttle in there that has the arm and these people rehearsed and they built up big packages that are practically weightless. They're made with Styrofoam sides and so forth, but they're the same size as the things they are going to be manipulating and they practice taking those out of the bay and putting them back in and that sort of thing. We saw a lot of that. In fact, when the shuttle blew up with all the people on it, they went back and started looking for information on these seals and found out they didn't have much of anything. He had been glomming onto every bit of information on every shuttle that went out and dumping the stuff on the computer in his office. His office had complete records of problems. That was the only record that NASA had of a lot

of that stuff. It was stuff that he had collected on his own time because he felt that some day it would be valuable.

Mark: I suppose we should cover some off-duty topics in England.

Bliss: Oh sure.

Mark: Did you get off the base much?

Bliss: It all depends. When the weather was good, we were busy. When the weather was bad, we got off the base frequently. We were very near Oxford. We went into Oxford, in fact, I and some other fellows had an arrangement with one of the professors there and we would go in discussion meetings where we would discuss the culture and life in the United States as it relates to England and the way they do it there.

Mark; Discuss this with this gentlemen?

Bliss: This would be with a group. They would have a meeting of people, staff and so forth from Oxford would get together and there would be usually two Air Force people and we would talk about all sorts of things. Like cigars for example. In England, the average Englishman, except for Churchill, never smoked cigars until the sun went down. In the States, they smoke cigars after breakfast. This sort of thing. Here in the United States, virtually every home has central heating of some kind. In England at that time, many homes were heated by individual fireplaces all over and there was a feeling that central heating was not too sanitary. Things of this kind we would discuss. I never will forget the night that a Scotsman was at the meeting and there was always free mild and bitter beer at these meetings and he had been partaking pretty liberally of the free beer. After a while, he got up and took the floor and said, "Everybody knows that these Americans do nothing but blow, blow, blow. Everybody knows what's the matter with England--it's been ruled far too long by a degenerate aristocracy of definitely questionable parentage." They grabbed him by the scruff of the neck and the seat of the pants and bodily threw him out of the meeting. Then they very quietly sat down and we went right ahead with our discussion. I was walking through there with another chap, through the grounds of Oxford with one of the women professors one day, she was showing us around the college and this groundskeeper was clipping around the base of a tree and this fellow just said he had to talk to this groundskeeper. So he goes over to him and said, "I try in the States to get a lawn like this and I can't ever get a lawn that looks like this, what's the secret?" The groundskeeper said it was very simple, you just plant a good stand of grass and take scrupulous care of it for 400 years. Then as we were going along, the Thames runs right through the campus walks and on one side there is a lot of big stone walls and the water runs right up against them. On one of them some wag, and probably an American serviceman, had scratched through all the moss and

stuff and printed on it and it says "Use Lifebuoy for BO." The British asked what BO stood for. They didn't understand it so we had to explain what Lifebuoy was and what it was for.

We would get to London for three-day passes every once in a while. I had no long leaves, two weeks or anything like that, all the time I was over there. But when we would get to London, one of the things that we liked to do was go to shows. London rolled up the sidewalks early in the evenings except for shows. In fact, there was practically no place after the show where you could get anything to eat unless you belonged to a private club. So a friend of mine took me in and got me a membership in the--[end of side A]

Most of the professional actors and so forth were in the military and so a lot of the actors were very elderly. Beyond military age. Unfortunately, we would go into Oxford to see the musicals, The Chocolate Solider and things like that in there. I remember seeing one of the them where the poor baritone in the thing had a false upper plate and it kept coming loose. The wildest one was when we went to see Swan Lake there one night. The ballerinas were a little old for the job but they were doing the best they could and we had some boys from the parachute department that went there that were parachute packers. They were always characters. As she went into the final splits in Swan Lake he was sitting up in the audience he tore a piece of parachute canvas, the most horrendous ripping sound you ever heard and if you ever saw consternation on somebody's face, it was this poor girl on stage. It was a naughty trick, but everybody laughed like crazy. It spoiled the mood though.

Yes, we would get into town. In fact, I was in London one day and walked up to an intersection and a man came from my right and a man came from my left and I looked and I recognized both of them. We'd been college classmates at Drake University. The one on the right was a fellow by the name of Harrison Cole. Harrison was the business manager for the Stars and Stripes, the military publication. The other one was a chap by the name of Bobby Kraft. He was a member of THE Kraft family and we stopped and talked and I asked where they were going. Bobby said he was being transferred. He said he had been flying North Atlantic patrol with B25's out of Iceland to Murmansk, Russia and back. He said that he had been sent down here to go to some station called 2,3 4. I asked him what unit and he said "14th Photo Squadron." That was my unit and here he was being transferred to us. He came to be a member of our unit. The three of us got together and Harrison Cole had a flat on Piccadilly Circus with six bedrooms because they would bring people in to do interviews for Stars and Stripes and he always had to put them up. So he told me not to ever go to a hotel when I'm in London, to come over and see if there is an empty room at his place and if so, that I could have it. So I always had a place to stay in London. One of the first nights we were there he asked me if I would like to hear Glenn Miller. I said that you couldn't get a ticket to that for love nor money. He said that he

could. He called them up and said the we'd like to review the show tonight and that there would be three of us. So we got to go and here's this line, four people wide, extending for blocks to get into this theater. He said that we'd go in the stage door. Then he introduced us to Miller and to some of the people and so forth and Miller signs our short snorter membership cards and so forth and they save a box seat up there for what they call visiting fireman so they put us up in the box. We had the finest seat in the house to watch the Glenn Miller show. That was just about two weeks before he disappeared. I still have his autograph. Do you know what a short snorter is?

Mark: No, I don't.

Bliss: Anyone who crossed one of the oceans by air that was flying personnel was eligible to be made a member of the short snorter club by any other two members. To become a member you had to have a dollar bill and on the dollar bill they would write you up as a member and sign it and you started with that. Anytime you got into a country that had different currency, you would put a bill of that currency on your short snorter card. They got longer and longer as you traveled around the world. The only rule is that if you were ever in a tavern and somebody challenged you to produce your short snorter card and you can't produce it, you gotta buy every other member in the place a drink. This was about the only rule of the whole organization and I know that I asked the Captain on the B54 that we went over on if he was a member. His short snorter measured 26 feet in length. He carried it in a special case because he had been 17 times around the world flying and had put bills on it from every place. I have one bill on mine that I treasure. One of our pilots, Franklin VanWard was shot down and captured and when the invasion came they shipped him toward Russia and the Russians overran the camp he was in. So he and another fellow started back and they started through Germany trying to get back to our lines. They got into Rostov right while the Russians were looting it and he saw a man run out of a bank in Rostov with great armloads of mark notes and they were flying off of the load in the street so he grabbed a handful and they were the old German inflation currency, worthless. 100,000 mark notes. It would take a wheelbarrow load to buy a loaf of bread. Nevertheless, he grabbed a handful and stuck them in his pocket and later they got into some sniper fire so they jumped into this shop and it turned out to be a photo shop. As he looked up and here were all these lenses so he just opened up his little barracks bag and put all the lenses in his barracks bag and took them along with him. Eventually, they got back. When they got back on the station he had been a member of my unit and he said, "Gee, I gotta find a uniform." So I gave him a uniform. I had everything for him except I didn't have any lieutenant's bar. I had long since gotten rid of those. I told him he could get those at the PX. Well, he said, I haven't been paid in two years, but he says, "Here, this is for the uniform." I told him he needn't pay for the uniform that I would be throwing it away soon anyway. Anyway he threw a dirty old handkerchief on my dresser and walked out. When I unwrapped it, in it was a Minor Gorlitz 5' enlarging lens. I

still use it. I've got it on a D2 Omega that I use for making prints. He had a bunch of other lenses but they were big lenses and to make them lighter he unscrewed and brought the lens and left the barrels. Of course you'd have a terrible time replacing the barrel and calibrating it so they weren't worth much. But he had a number of usable lenses and as I say, I have one of them.

Mark: In terms of things like alcohol and that sort of thing, I get the impression that there was a lot of alcoholism--

Bliss: When we weren't flying. Very few fellows I knew ever flew drunk because, after all, it was your neck. But, when the weather was bad and so forth, they drank a lot of English beer. English beer was warm, they mixed half mild and half bitter most of the time, and it was relatively low in alcoholic content. You'd have to drink a lot of it to get drunk. Yes, they drank other things too. English gin was one of the favorites. When the war was over completely, we had had a Colonel as our CO who had been a Colonel of the Old Masters Dragon outfit in the CBI (China, Burma, India theater). They sent him to England, they sent him to us and he hated reconnaissance. Anything that didn't have guns on it was not for him and he hated P38's because they told him that he couldn't exceed a certain manifold pressure or he'd blow up the turbos. He said that any airplane that you can't fire wall and forget it in combat is worthless. So he took off in a P38 and went up to 30,000 feet with it. He let his seat down fortunately, fire walled it and sat there and watched to see what would happen. One of the turbos exploded and threw the turban right at the cockpit and tore the whole top off the cockpit and he come back with pretty chapped lips and a few other things by the time he got back on the ground and so he got himself out of there as fast as he could and took over a fighter unit. He was on the Continent and he came back to our base one day after the war was over and before it was over in the CBI where Japan had started, and I said, "Colonel, any chance of us getting some champagne?" He asked how much we wanted and I asked him what's it going to cost. He said he could get us all we wanted of Mum's 1937 for \$2 a bottle cash American. I said to come with me. We went over to the Officer's Club and I opened up the safe and I had \$4,000 in the safe. I took it down and handed it to him. He says, "You can have two planes to carry this on my base in one week." So, a week later we had a couple of C47's, we sent them over and all this stuff came in in peach baskets and straw. They filled up both those planes and came back with two thousand bottles of champagne. So we sold it for what we paid for it, \$2 a bottle. Anybody who wants it can buy two bottles until everybody's had a chance and then after that whatever is left anybody can buy it that wants it. So we had a champagne party sort of in the mall with that, celebrating the end of the war. In fact, I remember seeing two fellows sitting at a table, accidentally knocked a bottle off on the rug. The champagne was going out and one of them looked at the other and said he'd bet five pounds it reaches the edge of the rug. The other guy said "You're on." They sat there and watched to see if the champagne would reach the end of the rug. I operated with great wit one night. We had a medical base not too far from

us, Manford County Hospital and so I loaded up a bucket with a bunch of bottles of champagne and we went over to visit them and we were visiting some of the nurses and we were sitting at our table with champagne and all they had to drink was beer. I opened up a bottle and the cork got away from me and hit the ceiling and landed in a beer at the next table and splashed beer all over the table so with great presence of mind, I went over and set a bottle of champagne on the middle of the table and said, "My apologies." and walked off and left it. The fellows there took their beer and poured it on he floor and filled their beer mugs with champagne. That's the only really wild, big party that I know of and we had no real problems with it.

Mark: No alcoholism.

Bliss: The only alcoholic we had on the base had been around for years. He was the world's oldest Second Lieutenant. and he was, of all things, our fire Marshall. If it wasn't for the fact that he had a sergeant who knew everything there was to know about fighting fires and ran the place, it would be pretty terrible. This Colonel I was telling you about called him in one day, and we had a lot of trouble with water standing on the base so he calls this officer in and says, "Lt. drain the base." He was of the impression that if you give an officer an order to do something, regardless of what his previous experience was, somehow or other he could do it. Well, the poor guy came to me and said he didn't know a thing about engineering or draining the base so I talked to my buddy and asked if we had any civil engineers in the outfit. He found a guy that was so I called him and asked him to help and so they gave him a pass and went over to an engineering outfit and borrowed a transit and a chain and so forth and come back and after a little surveying they discovered that the mean level of our base was three feet below the level of the Thames River which ran alongside it. If they dug a ditch to the Thames they'd drain the river into the base. So he said there was only one way to do this so he worked up a purchase order and said to take this to the Colonel and get it approved and it was for about \$80,000 worth of pumping equipment. So then they decided maybe they could do something else, so we had all the enlisted men out digging what we called Spanish drains, they'd find a big puddle on the road and dig a hole beside it and fill it full of rocks and drain the water off into that hole. He was the only real alcoholic we had that I know of.

Mark: So was there any thought of you having to go to Japan?

Bliss: When the war was over, they called a meeting of all of our group squadron commanders and group officers and by this time I had been moved over to the 27th Squadron because when I came back the 14th already had a CO and the group CO was leaving so the Commander of the 27th moved up to group and I took over the 27th. They called us in and the CO got up and said, "The book says anyone with 75 points under the point system can be sent home. However, there isn't a man in this room with less than 175 points and somebody has to stay. How

many of you guys are married?" Every Joe in the room but me held up his hand. He smiled and said, "Looks like you have been selected." So orders were cut making me the group commander to stay while all the rest of them with enough points went home. My job was shipping people to the Army of Occupation and to the China-Burma-India theater if they needed them and this sort of thing and also for those that were there and couldn't go home, didn't have enough points and weren't going to get shipped to the Continent because they were too close, we started what was known as an information and education program.

Mark: Which was what?

Bliss: Basically an opportunity for them to brush up on some of the college classes, for example, I had one fellow there that was a good mathematician and I asked him if he would run an advanced math class for the fellows that wanted to take it. He spent 20 minutes reviewing calculus and jumped off into the theory of numbers and they said, "Whoa! You left us. We want a review of calculus." So he went back and taught a review of calculus and this sort of thing. Any class they wanted, we'd find somebody to teach it and then something for them to do in the daytime. Also, we took on some jobs. First of all, we made up 50 books on the history of the war in Europe from our photographs. One book was on bridges. One book was on cities. One book was on synthetic oil. One book was a strike attack book. This sort of thing. We made these up and 50 copies. As long as we were making 50 copies, I talked to the lab and told him to make at least 51 that I wanted a set. So I wound up with a set of them. That's the set of books that our historian has right now. It will eventually go to the Air Force Museum. Anyway, these 50 copies were sent to Washington, D.C. for the archives and I'm sure a lot of men in the photo lab had copies too. Orders came through to destroy all our dated equipment, film and paper and so forth because by the time we shipped it somewhere else it would be out of date anyway. So they used it to print up all these things and then each of the squadrons made a history book. The men in the squadron developed those and they had pictures of all the fellows in the squadron and pictures of the things they did and this sort of thing. These were all printed up and bound so that every man in the unit had a copy of this to take home with him.

Mark: Kept the men busy.

Bliss: That kept them busy. Also, I took on a job of ferrying out Hitler's archives. Because down at Bertisgarten they had found a cave in which they had all the photo-reconnaissance pictures of Russia that the Germans had taken. Now the Germans had wonderful photo equipment for groundwork but they never solved some of the aerial problems. One of the big problems they never solved was static electricity so a lot of their negatives were ruined by static discharges as film rolled rapidly through the camera. We solved the problem by heating the cameras. If they were warm, it didn't happen. Unfortunately, to heat the cameras we had to take the heat away from the cockpit, so it ran sixty below zero in the cockpit. But

at least the cameras were functioning. They didn't frost up and they didn't produce static. Anyway, I took three C47's for a cruise and we would take an intelligence officer and we would fly down to Salzburg. Then we would take a jeep and drive up to Bertisgarten and stay overnight in the post hotel while they'd load our planes up. Then we'd go back the next morning and take the planes back to England. We refused to go out at night because it was a short runway and Salzburg was just to the left at the end of the runway so you couldn't take off and turn left you had to turn right. When you turn right you were going up a blind canyon and with the loads we had on to get turned around in that canyon and back out meant that you had to get up some altitude and you'd get as close as possible to one wall and make your turn and clear the other wall by forty or fifty feet at least and get back out of there and we wouldn't do that at night. We would fly our load back to England and it would be unloaded and then we'd go down and get another load. We flew several loads out of there. We started also a vacation-type shuttle to Bieritz. We put a crew on a C47, two crews on them actually, and we would load it up with enlisted people and so forth, fly them down there. One crew would stay with them, the crew that flew them down would fly back. Fifteen days later, a crew and a full load would fly down there, they'd stay and the crew that was down there would bring the bunch back. We shuttled back and forth to Bieritz, which was a lovely spot for vacation and so forth. When that was over, I took the last flight down to pick up the last bunch, so I got down there for a day was all. I never did get my two weeks that time, but I got down there for a day and brought them back and after all that, I finally got the unit down to where we had about 200 men left and I discovered that the 222nd Bomb Squadron was scheduled to return to the United States and that they were way under strength. So I talked to headquarters and they cut orders and transferred all of us into the 222nd Bomb Squadron. So, we could come home with them. The only thing I regretted was that during the war when we were going to have the Spitfires, they thought first we were going to get Mosquitoes so we went up to DeHavilland and went through Mosquito School with some mechanics and learned how to maintain them and I got pretty well acquainted with some of the people at DeHavilland and when they were making their first get at that time, they took me over and had me sit in the cockpit and asked me questions about what I thought about where the controls were and so forth and they were having trouble with it landing too fast. I said "Why don't you put Fowler Flaps on it like we have on P38's, not only do they create drag, they also create lift and slows the landing way down. I'll bring a plane up and demonstrate." So I went back to the base and flew a P38 up there and landed and showed them the Fowler Flaps and then I went out and landed without flaps, they had a big, big grass field there and then I went around and put flaps on and landed on a little strip with flaps and showed them how you could slow down to about 80 miles an hour with flaps on. Also, you can use them for maneuvers; you could pull those flaps up to 250 m.p.h. air speed if you pulled what was known as a maneuver area and not the full flap. After I did that for them, when they were going to fly the demonstration for their ministry, I got invited up to observe it. They handed out a mimeographed sheet as to how to

conduct yourself around jet aircraft and don't wear any loose articles of clothing, don't walk behind it, and don't walk too close in front of it and so forth and Jeffrey DeHavilland was in it, the engine was started and he was ready to go when the Chief Engineer thought of something he wanted to tell him. He went right across in front of the thing and his nice felt hat went inside the engine and there was no screen in it at that time and oh, it made expensive noises when that hat went into the compressor. So Jeffrey shut the thing down and got out and walked off and everybody went home and two weeks later after they dug all the felt out of the compressor, we went back to see the demonstration. Then when we found we weren't going to get them we were going to get Spitfires, I took mechanics, we went up to Rolls Royce and went through the Rolls Royce Merlin School where they taught them how to maintain the Merlin engines and it was a very, very interesting time in Darby, England. I went through the course with them because I wanted to know something about it too. I'd learned a long time ago from Peterson, he said "The pilot that lives the longest is the pilot that knows the most about the power in his aircraft, the engine. A heck of a lot of people that crash, crash because they don't know enough about their engines. If they knew enough, they could make it run long enough to get them down." So, I had always worked with Engineering. In fact, one of my jobs while I was there was Technicians Crash Officer for the base. I would go to crashes and attempt to figure out what happened to them and I would fly tests for any of the squadrons that had a plane that they couldn't figure on the ground. I did that at Peterson Field after Peterson was killed. I inherited his job. This made it also that we had to deal with the Lockheed Overseas Corporation, which was up in Langford Lodge in North Ireland. So, frequently, we would take the shuttle, I would take a warrant officer and we would go up there. When this one guy climbed into the thunderhead it tore the tail off the thing. We found the parts and there was a trim tab push rod where a bolt had broken and it was all broken and we decided that that broke first and if that broke first that would flutter and make the tail come off. So, as a result, we went up there and they said, "That bolt is the strongest part of that thing, the tube would bust long before it would." We argued with him and finally I said, "To get us out of your hair, let's prove it. Get a couple of them." So we took a tube over and put it in tension and sure enough the tube pulled in two. Put it in compression and it bent like this and all of a sudden the long column end ran right down the thing into the bolt and bent the bolt over 90 degrees in shear. Nobody had ever figured the shear strength of the bolt. As a result of that, they grounded every P38 in the world until they could put new trim tab push rods in there that were nuts up with a heavier bolt. So, I spent a lot of time doing things like that and it cut a little bit into some of my operational time, but not a great lot and then when we came back they put us on the Queen to come back.

Mark: The Queen Mary?

Bliss: Yes. I was called up to the headquarters which was in what they call Piccadilly Circus and informed that I had been appointed to be the police officer. That

didn't mean that I kept the peace, I was assigned ten officers and 40 enlisted men and it was their job to keep the boat clean. Pick up cigarettes butts that anybody threw away and strip it and so forth and particularly, if anybody got seasick to clean up the result. Well, we hit a bad storm and my 40 enlisted men were getting sick about as fast cleaning it up as you could shake a stick at and so I was drawing 40 more men all the time. We, eventually, got through it. I talked to one of the officers and he said it was the worst storm that the Queen Mary had been in his recollection. It was rolling 18 degrees off center, even with the stabilizers running. One of my jobs, which I really didn't like particularly, was that I must observe the dumping of the garbage. So I'd go back on one of the upper decks and they would put the garbage in these big containers on trolleys and they would run out over the fantail and dump the stuff off into the ocean. I had to stand up there and watch them. Well, here you had a 25 wake behind the Queen and you had 50' waves going on both sides and the back of it was doing lazy eight's as it rolled and so forth, and I come as close to being queasy back there as anywhere. The minute I would get through I would go down through the center of the ship and sit down for about an hour and settle down and I never missed a meal but I went to one of my meals where 250 officers were assigned to it and there were six of us in the room eating. But, we eventually got back.

We got back into New York. They put us on a train for Chicago and it had one car that was supposed to be a mess car to feed. So we were having to send people in, the whole train was just full of personnel, send them down there in shifts to be fed. They fed all the time trying to get somebody a meal. Eventually, we got into the edge of Chicago and the engine dropped us and there we sat and we sat and we sat. Nothing happening. While I asked if there were any experienced railroad men and I found two fellows that worked the railroad for years. I told them to get out in front of this thing and follow those tracks and follow the switches and see if you can find out why we're sitting here. So they disappeared and in about an hour they came back with an engine. He'd been sitting in the yards about two miles up waiting for us to come in. They hooked on to us and hauled us out to Ft. Sheridan and we got out at Ft. Sheridan and in Ft. Sheridan, why we had an out take physical. That was where they discovered that I didn't have any laterals in my upper jaw. This is one of the reasons I had a malocclusion. But nobody had ever written that down when I went in and there is a regulation that you can't get out of the service unless you got all the teeth you went in with. They were discussing how they were going to make room to get two laterals in my upper jaw and I had a real job talking them out of it. Eventually, I got out and came back to Madison on a train, got into the station on West Washington Avenue, grabbed a taxi to go home. My folks lived out on Chamberlain Avenue. This guy takes off out through Nakoma. I wondered where the heck he was going but he eventually wandered around and got there and he tried to charge me \$2.50 for it. In those days, it was a 50-cent ride. So, I said, "Look, I live here. You didn't have to drive me all over Nakoma to get here. Here's 50 cents, that's what the ride was worth." I went off and left him. That got me home. Then I joined up with the local

meetings of the Reserve and continued functioning here in the Reserve from that point on.

Mark: The war was over and you were home. But you weren't discharged?

Bliss: Right. I was transferred to what they call the Active Reserve, which meant I was subject to being recalled at any time. I was obligated to belong to a unit. I was obliged to attend so many meetings a year to maintain my status, which I did. For this, I got points. On the point business, you got a point for every day of active duty. You got a point for every meeting you attended. If you attended 35 meetings a year, they give you 15 extra points so you'd get 50 points a year. If you wanted to take correspondence courses you could buck that up from 50 points to 60, in other words, you could earn an additional ten points. When you got to the point where you retired, they would then calculate all your points, add them all up and to figure your retirement benefit at age 60, they would take these points and you would have a certain factor for each grade. I got a promotion while I was in the Reserves so I wound up a full Colonel and so then when they figured that out, they would take that factor point so and so percent, multiply that times the number of points and that is your monthly check that you start collecting at age 60 and collect as long as you live.

Mark: In the immediate post-war years, you still have to find a job and find a place to live and all that sort of thing. Having just been out of the service, what were your priorities?

Bliss: The first thing is I had three months terminal leave that was paid. I hadn't had any leave when I was in service. That gave me three months of goofing around. My folks had moved to Madison during the war. Dad's business brought him up here. He was with the co-ops and he was an assistant manager of Dane County Service Company. So I came home. It was about that time that my sister, who is much younger than I, was working with a group of kids to develop a youth center in Madison and since I had three months terminal leave, I was hauling them around to night meetings promoting this and eventually, the Madison Community Center was opened. When it was opened, I still was on my terminal leave and so they asked me if I would serve as President of a new organization called Young Adult Club, which was the 18-35 age group for social programming. So I said "Sure." In the meantime, I was considering developing an organization to do photo mapping. I talked to the people out at the airport at Middleton about this and frankly, I didn't have the capitol to set the thing up. But if I found someone there who was interested, I had the knowledge if I could get together with somebody that had some capitol to go in, you needed an aircraft, you needed some cameras, you could get the cameras easy, war surplus, and there was a need. Engineering outfits, all sorts of people, cities even wanted aerial photographs of the place. It looked to me like it would be a pretty good deal, but I was not able to raise the necessary capitol to get the thing started and then the director of the teenage

program walked in one day and informed the building director that she had taken a job in Chicago and that she had cleaned out her desk, she was starting it the next day so she was leaving. They called me and asked if I could fill in as an emergency. So I went in as an emergency, just as a volunteer to work with the thing and then they offered me as a half-time job and I said "No, I gotta find something I can make a living at." They said they couldn't hire me full time because I had to have a teaching certificate. I said, "Did anybody ever ask me?" I've got a certificate in the state of Iowa, is that any good to you? So they went to the State Superintendent of Schools and got me a certificate based on the reciprocity with Iowa and gave me a teaching certificate in the state of Wisconsin on a probationary basis. But, once I'd had it for two years it became permanent and so then I went to work for them as the director of the teenage program under the Board of Education in the City of Madison. Time went on and I later moved over to the young adult organizations and with that senior citizens clubs and eventually the director of the thing. Then retired and moved to Florida and I was made Director and finished out and I was 39 years working for Madison Metropolitan School System in that position. My Monday nights I reserved for my Reserve meetings. Most of the other nights I was working because recreation is an evening job. I stayed with that right up until the time I retired.

Mark: So after the war finding work wasn't a problem.

Bliss: No.

Mark: What about housing. Did you have trouble finding a place to live?

Bliss: I was living with my folks at the time but then in due time I got married and at the time I got married, apartments were hard to come by. But, I had a brother-in-law that had for years rented an apartment from a man by the name of Taylor who had some pretty run-down apartments in the Williamson Street area and so forth and he talked to him and he found one of his apartments that was being vacated so rather than putting it on the market, he let us rent us. So, we moved into that apartment at 747 Williamson Street, affectionately known as Taylor's Tenements, and he didn't mind what we did in the apartment, if we wanted to fix it up. So, we went ahead and fixed it up ourselves. We put all his furniture out on the porch and bought our own furniture. We put a new top on the kitchen counters and so forth and painted the place on the inside and fixed it up so it was very nice and we started looking for something better. It took us almost two years to find something and then we found a second half of a duplex out on Fairfield Place which was much, much larger and a much nicer apartment and we moved into that. Once we got that, we started looking for a house. It took us about three years to find a house. We finally found a house we liked, I looked at it and said that I liked it, but that I couldn't pay the asking price, but I would offer such and such and forgot it because no way he's going to accept my offer. But I got a call the next day from my real estate man and he said "You just bought a house." I

later found out the gentleman had mortgaged his income property to get money to build this place for himself and then he'd been taken ill. He was going to have to quit his job and he needed to save his income properties for income and he had gotten down to the point where he had to sell. He needed money now and I was in a position to hand him a certified check for the full amount once the title cleared because I was privately financing it. So I found out he had turned down \$1500 more money than I offered him just two weeks before that. He had refused to accept that. I just lucked out. I caught him right at the right time so then we moved out on Kendall Avenue. We've been living there ever since.

Mark: Did you finance that on your own or did you use some sort of GI loan?

Bliss: Never used a GI loan because I had an elderly aunt down in Iowa that had a boatload of money in federal bonds and so forth. She said, "Why don't I lend you the money? You'd pay me a better rate of interest than I'm getting on these bonds, because I'm only getting 2% on them." So, she loaned me the money in addition to what I had for it and charged me 3%. So I went along and in the due course of time, she passed away and I discovered in her Will that my share of her estate was forgivement of the balance of my loan. So, that and also a few dollars and discovered she had a 1942 Chevrolet Deluxe prewar, still had the chrome bumpers and everything and it sat in the parking lot behind the hotel she was living in at the time she passed away. It hadn't been started in two years. Found the keys, it fired right up just like it had been run every day. So the estate charged me \$50 for it and I brought that back and used it for a second car for a number of years. It had 170,000 miles on it. Never had an engine overhaul, but then eventually I sold it to a man for \$80 who wanted to restore it. I had no real problems after the war.

Mark: For someone who had been through college, the GI Bill wasn't the--

Bliss: I used it for schooling. I went to the University on it, graduate school. I got a Master's Degree in Personnel and Guidance because they didn't offer it in recreation.

Mark: Long after the war?

Bliss: It took me six years. I started in school fairly soon after I started working for the Board of Education. But, they would only let me carry 25% of a graduate schedule, which at the time meant 3 credits, because I was working full-time. That was the regulation. So, they only charged me with .25% of a semester every semester, so technically, I could have gone to school for 16 years with the GI Bill. Actually, I went six and after six years, I really couldn't take summer school very well. I tried it and I took one class in summer school which was an audio-visual class, but I was doing it all the time because the class met every day and I just couldn't keep up with that and study and so forth. So, basically, I went to regular

semesters where I had a class three days a week and even after that was all over, I still had time coming and I decided the future in recreation was in art crafts rather than junk. So, I thought I should learn something about this so I went to the University and I talked to Professor Berthaler in the Art Metal Department into taking me on as a student even though I'd had none of the prerequisite art courses. So I did jewelry with him for a couple of semesters and then I went over and I threw pots with Harvey Littleton for a couple of semesters, learned something about that, not that I ever wanted to teach it, but I wanted to know enough about it to know that if I hired a teacher and she came to me and said, "I need a new kiln," that I would know whether or not she really needed one. In fact, I would volunteer to baby-sit the kilns with Kid Clay Bailey was working for them at that time and stay all night down there watching the things and shutting them down when they were done, simply because I wanted to know. After I got that we had a chance to take on an organization that was known as the Lapidary and Mineral Club that Professor Bierthal had sponsored for some time and the new head of the Art Department said this lapidary is not an art it's a craft and he wiped out the budget for maintaining the equipment. Well, he couldn't run a course without equipment so he had to quit the class and there was no more equipment for them to have so one of the women came to me so I said, "Okay, you have an organized group already, if you want to move over to us, we'll sponsor you and loan you \$400 to buy a slab saw which is what they really needed, because a lot of people had been buying equipment themselves, and we started the Lapidary Mineral Club going in the Community Center. It's still there and has a lab now of over \$20,000 worth of equipment in it that they have purchased over the years as a club. Anyway, I didn't know much about minerals and so I went out and I got ahold of the head of the Mineralogy Department who taught a Mineralogy 6A which is identification of minerals and so forth, I hadn't had Geology 1 or Geology 2 or any of that stuff, but I said that I would like to take this course. He said that if there were any vacancies I could take it. So I did six credits in Mineralogy 6A to learn something about minerals and so on and so forth. All these things helped me in my work. I had to agree not to use this credit for a degree credit but in the school system you have to earn so many credits every so often to maintain your position in the salary schedule and these credits were useful for that purpose and that's what I used them for.

Mark: Did you use the GI Bill for that?

Bliss: Yeah.

Mark: I just got one last area I cover and perhaps we can go back to some other things then and that involves veteran's organizations and reunions and things like that.

Bliss: Well, I joined the VFW while I was in service. But when I got back here, for some reason or other I went to the VFW meetings a while but it just--it was not for me.

Mark: Why is that?

Bliss: First of all, the use of alcohol carried over into it and I have never been much for drinking alcohol, I like a little wine once in a while, and that's about the extent of my consumption of alcohol even to this day. So, I just quit going and dropped my membership. I understood that the American Legion was the same sort of thing and so I didn't participate with anything for a while. Then a number of years ago, a couple of members of our old 7th Photo Group decided to get a reunion going. The 8th Air Force had started annual Historical Society meetings and a warrior out in Nebraska in a little town and a couple of fellows down in Phoenix got together and they dug up all the old records they could find and started searching for it and they found without too much trouble, about 400 of the 1200 people that belonged to the unit at one time and started meeting with 8th Air Force. So I been going to those. I was president of it, the first president of the organization. I tried desperately at the time to set a term limit on president because I had seen what happens if someone stays in the job too long, but I couldn't talk them into it so the guy who was elected after me is still the president now 20 years later and it has not been the best for the organization, but nevertheless, it still exists. Now we are meeting as an independent meeting one year and meeting with 8th Air Force the next. We went back to Colorado Springs where we were founded originally and met there for one of our meetings and it was possible to get out to the old base which is now, of course, very heavily into satellite stuff and so forth. That's the headquarters for a lot of the satellite reconnaissance and that sort of thing and we just took over the Andrews Hotel for our reunion there and we still have some members that live in Colorado Springs and helped organize it. The last reunion we had was in San Diego. I was there last year with the 8th Air Force. We'll be on our own next year and we'll be in Virginia some place. They move them around all over the country because we have people scattered throughout the entire United States and by moving them around people get a chance to go without traveling too far.

Mark: I want to go back to a couple of things. You said you had a Pearl Harbor anecdote. I kind of collect those.

Bliss: At the time of Pearl Harbor, we of course, were on this base with only two military people there. Everybody else was a civilian. Victor Field, at Vernon Texas. This was when I was in Primary School. Well somebody immediately thought that we were going to get sabotaged, we must mount guards on our aircraft. So we looked around, the only thing that resembled a gun on the base was a 12-gauge goose gun that the CO owned as a shotgun. So, that was turned over to the so-called Sergeant of the Guard who was the only enlisted man we had. He was made Sergeant of the Guard and cadets were scheduled to do four-hour guard tours to protect the aircraft. All the aircraft were put in the hangers; we were given an MP's truncheon and were locked in the hangers with the

airplanes. The theory being if we heard somebody trying to get in we were supposed to get on the telephone and call up and tell somebody about it. Of course, the first thing anybody would do would be cut the telephone line if they're going to do something like that, but nobody ever thought of that. This was in the northern part of Texas in the wintertime. It was cold! We would stomp our feet and fool around for four hours out there in our fleece-lined flying stuff trying to keep from freezing to death and after four hours somebody would come down and take the padlock off the building. We were locked in, we couldn't get out. If there had been a fire, we'd have been in there with it. Then we'd get out and go back to our bunk. There was no place to get hot coffee or anything. We'd just go back and go to bed and this whole procedure went on for literally weeks after Pearl Harbor and then somebody finally got smart enough to decide that if they were going to sabotage anything, the last thing in the world they would monkey with was a little bit of a primary flying school in northern Texas.

Mark: There are bigger targets.

Bliss: Right. So they quit all that nonsense so we didn't have to stand guard anymore. We went from there to San Angelo and there is some interesting stories in San Angelo too. First of all, two of the fellows owned Model A Fords. So a bunch of us took what they called TR., transportation request and said we could get ourselves down there and so we loaded up both of those things and we had one bottle opener and two cases of cold pop. Well, it was cold when we started out. As we would go along if somebody else wanted the bottle opener, they would drive formation and hand the bottle opener back and forth from one window to the other. We were doing this in Texas going along merrily on one of the roads and we came to an old gentleman popping along ahead of us on the road in his car so the two cars split and one went on each side of him and came back together in front of him and I looked back and he was going this way behind there. Anyway, we got ourselves to San Angelo and in primary school we had civilian cooks and we had the worlds' greatest food. I mean there was steaks, we had a quart of milk with every meal, chocolate and white, vegetables, we had everything. When we got to San Angelo, it was an old established base and it was basically Mexican food. Tortillas and beans and this sort of thing which none of us liked particularly well, the sand blew constantly so the food always had sand in it and when you marched in the sand, you would march with your eyes squinted on the guy ahead of you and if he walked off into the ditch, you went after him because you couldn't see anything. We were the last of the blues by the way. The cadets originally wore blue. 42E was the last of them and when we finally graduated, we just went off and left our blues there. We had no further use for them. In San Angelo was the first time we saw anything that resembled a gun. They called all the cadets together and they issued us 1918 Springfields that had been packed since World War I. They gave us an hour to clean those up and stand in inspection. Well, I grew up with guns on a farm. My father was rather strange about that in that he always believed it was the unloaded gun that shot people.

Therefore, our guns in our gun rack were always loaded. All you had to do was pull the safety off and pull the trigger and it would shoot. Anybody that picked one up did so with the idea he was picking up a loaded gun and we never had a gun accident. But, I had grown up with rifles, I got a rifle for my 6th birthday, I got a shotgun for my 9th, this sort of thing. So before I went in service, I went to an old sergeant who had been in the Army for many years and I asked him what he could tell me about the service, that I wouldn't normally know that will help me. He said "Number one, if you ever see a piece of paper with your name on it, get a copy of it and keep it. Number two, if they ever issue you a rifle, inspect it. There is a thing called a blast port in the rifle. If you don't clean anything else, run a confounded pipe cleaner through the blast port because that's probably the only thing they're going to look at." So, when I got my rifle I cleaned it up and got a pipe cleaner and cleaned out the blast port. I was one of the few that didn't get gigged for having a dirty blast port in the rifle and had to walk tours. But the worst part of it was we'd carry these things on Saturday formations and march and it was hot. The cosmoline would boil out of all the cracks in them and get on our uniforms. It was terrible to get off, so I fudged one night and put my gun in the gun rack so it didn't get locked in. After everybody was asleep, I got my gun out and sneaked over to the cook's shack and they gave me some tools and I took the gun all apart and put it in the oven and baked it for a while and then cleaned it all and put it back together. Got all the cosmoline out. After that, I didn't have any trouble with it leaking all over. But we hated those Saturdays. They pulled us once into San Angelo for a big parade for something or another; I don't remember what it was. There were parades for three miles and the idiot that was in command of it ran us for three miles at right shoulder arms. He never gave a command to change to left shoulder arms. That meant holding it like this for three solid miles marching behind the horses of course, trying to not step in it. There wasn't a person who could put down, they'd reach up and take the gun off like this and they couldn't straighten out their arm. It was just paralyzed.

Mark: I have maybe five minutes left and I'm interested where we started really and that was getting into the service. You described how you sort of confound the authorities to get into the service, whereas, Vietnam experience is quite the opposite and wonder if you could explain why you wanted to get in so bad and what was the attitude of young men such as yourself?

Bliss: Well, there were two reasons. One of the primary reasons, frankly, was that I had absolutely no intention of winding up in the Army. My father had been in the Army in World War I and I was not enamored with what I heard about it. And, I liked airplanes. I got my first ride in an airplane when I was maybe 7 or 8 years old. An old Ford trimotor landed in the cow pasture out behind this little town of Sigourney and my dad took me out there and for a dollar you could get a 30 minute ride. They'd fill it up and take off and fly around and the metal on the thing would flap and bank and so forth, but boy I thought that was wonderful so I was interested in airplanes and as a result of that I decided that if I were going to

have to be in the service and I could see that everybody was going to have to be sooner or later, I wanted to be in the Air Force. That was why I signed up for the civilian pilot training program. Because I figured a lot of the stuff I'd heard was that a lot of guys had got in the Air Force and pilot training washed out in the first six weeks because they couldn't solo in ten hours. If you didn't solo in ten hours, you got a check ride and if they didn't like the way you were flying, then they would ship you off to bombardier school or something else. So I figured if I knew how to fly an airplane when I went in, my chances of being able to fly military aircraft in ten hours were a lot better. So, that's why I got a civilian pilot's license. That meant nothing to the Air Force. Civilian flying is one thing and military flying is another. You fly the military way. There is three ways to fly: the wrong way, the civilian way, and the military way and you flew the military way. Then I had no troubles soloing in my ten hours, I think in 8 or 9 hours he let me go and I soloed and the other interesting things about those planes that people might now know is that you didn't have no radios in those days. You couldn't communicate with your instructor. He communicated with you. They had in it what they called a profanity strainer. Your helmet had tubes that came out and came together like a stethoscope. This tube went back to the back and he had a thing like a small megaphone and when he talked into that, you were supposed to hear him. Well, with the noise of the planes and so on and so forth, one of the few things you could understand was the profanity when you weren't doing what he wanted you to do. So that's why they called it the profanity strainer. If he really wanted to get your attention, he would stick the thing out in the wind stream. You'd get this tremendous blast of air in your ears that practically ruptured your ear drums. Therefore, you paid attention.

Mark: As to the young men trying to get into the service, and you went in before Pearl Harbor.

Bliss: After Pearl Harbor they just felt them and if they were warm they got in. If they had two years of college you could get in the Air Force and if you got in after Pearl Harbor they sent you to basic training--I never went through basic training. I was flying six days after I was called in.

Mark: You were in college at this time too.

Bliss: Well, I was out of college. I had graduated, technically, but they wouldn't let me have a degree. That was the other thing, when I was in Colorado Springs, I went to Colorado College since we had three months there with no airplanes to fly, I went to Colorado College and did five credits by examination. A three credit and a two-credit course by examination to make up the things that Drake said I had to have. Then when I tried to send those to Drake, they tried to tell me they wanted to transfer all of my 125 credits out to Colorado College and let them give me a degree because of the 50-hour rule. Well, I got finally to the President and I said that it seemed inordinately strange to me that you're doing this when

Northwestern and most of the major universities were granting degrees to seniors who had completed more than half of their work and went in the service. I said that while I was there I lived with an editor of the Des Moines Register and Tribune. I think he would be most interested in this story. Of course, this is a privately endowed college and the last thing they want is unfavorable publicity so he decided right away that maybe they could do something about it. I asked if he would put that in writing and he said, "You won't take my word for it? I said, "I took the word of a Dean in this college once, that's why I'm in the fix I'm in. Put it in writing." So I took it over and showed it to the Dean of my college and I didn't tell him I'd already taken the work, I flew back to Colorado Springs that night in a P38 and the next morning I went over and had them wire them the credits before they forgot about them. So, I technically got my degree in 1943 while I was in England. The college still keeps sending me things for reunions of the class of 1943 and I didn't know one single soul in the class.

Mark: About the guys going to college. America was divided as to going to war. I'm wondering what the sentiment was on campus among the young men?

Bliss: I didn't see a heck of a lot of sentiment one way or the other at that time. First of all, I enlisted early before I had to. Most of the guys hadn't made up their minds at the time I enlisted and then you see I got out in June and I went back home and I was home from June until the following November because they didn't call me. That was when I took this job in this restaurant. Wonderful job. Paid me \$12 a week and I worked from 10:00 a.m. to 2:00 p.m. and 5:00 p.m. to 2:00 a.m. seven days a week and I got \$12 plus meals. Anyway it was something to do. Then when I went on to service, that was the first of November and of course Pearl Harbor came up December 7th, the next month. So, I didn't have much contact with civilians other than in this little town and there were people there that were getting drafted and so forth. The draft was functioning at that time, but I didn't run into many people who expressed much opinion one way or another. I was in service before they really found out that "I've got to go, what am I going to do?" I think I was smart enough to figure that out early and get in on the ground floor. And, you talk about luck! Most of the pilots that went through with me that were sent to fighters or bombers and so forth, two or three years later maybe were 2nd Lts. or Captains. I went to PROTU. PROTU had nobody. Every table of organization was wide open. There was places for full colonels at the head of squadrons supposedly so promotions came much more rapidly in there. I was traveling in England one day on a train, I was a Major at the time and I ran into the man who had been my flight instructor in advanced school by the name of Jake Wilke. He had an enlisted man with him. He had finally gotten out of training command. He was now a 1st Lt. I was a Major. He had had a nose wheel collapse on a P38 and when it went over he made the mistake of grabbing the canopy and 18,000 pounds had fell on his hands and smashed both of his hands and he had holes drilled through all of his fingers and all of them on traction. He was in England, finally, he'd gotten out of the training command but he was stuck

there for years and there was just no promotions in the training command. You could be a 2nd Lt. instructor for the rest of your life. To get into an outfit that had nobody, open TO, was just a tremendous advantage.

Mark: Wide open.

Bliss: Wide open. In fact, the only problem I had with it was when I had a squadron I had room for Lt. Cols. in operations and I couldn't promote them because Elliot Roosevelt came up from Africa when they kicked him out of Africa and formed the 8th Reconnaissance Wing. We report under the wing. What he did was he promoted a lot of his fair hairdo boys and would transfer them and assign them on the table of organization to one of our squadrons and then reattach them to his headquarters so I was carrying four or five Lt. Cols. that I never saw and that kept me from promoting anybody. We fought that all the way through. He was not a popular man. Elliot Roosevelt. He put out the regulation that all dogs at the time of the invasion would be kept confined. One of the guards in one of the houses heard something one night and something moved, he gave the command to halt, gave the sign, nothing gave the countersign, something moved again, he shot twice. That alerted the Corporal of the Guard. He run out with the jeep and the big flood light on it. He punched the button and bailed out of the jeep. They had a five second delay to let him get away from it before the light came on and here it was the General's big Irish Wolf Hound. First shot right between the eyes and the second one right behind the front shoulder. I almost got shot one night by a guard. I was riding my bicycle up to the end of the town and got challenged. I had a generator on my bicycle and when I stopped the light went out. That upset the guard no end. "Turn the light on!" I said that I couldn't, that it was a generator so finally he said to advance and be recognized and turned on a flash light and fortunately he knew me, but it was shaky time for a minute.

Mark: Those are my standard questions. Do you have anything you'd like to add.

Bliss: I don't know of anything in particular. You understand the system for air medals?

Mark: No.

Bliss: Every five missions you were technically granted an air medal, five air medals were a silver one instead of a bronze one. So when you got your first air medal you got a little ribbon. When you got five more you put a bronze one on it and every five you put it and when you got four of them on, you took them off and you put on a silver one. This was the whole thing. So, air medals had nothing to do with anything other than the fact that you were doing your job. Beyond that, other medals and so forth were granted for specific acts and had to be written up but the air medal was automatic.

Mark: I didn't know that about that particular medal.

Bliss: Then there were all sorts of battle ribbons. There was one for the air war in Europe, one for the Normandy campaign, and this sort of thing and if you were in an outfit, also there was unit citations. The 7th Photo Group got a distinguished unit citation and this allowed everyone to wear that over here. Then eventually, the 8th Reconnaissance got a unit citation and we were part of the 8th Reconnaissance Wing so now we got to put a star on it because we received it twice. So a lot of that salad that was on there was for stuff like that. When you get into the air medal and some of those things, those were done for specific acts and I think that there was an awful lot of guys that did performances that merited that but didn't ever get it.

Mark: Do you think there were some who got it that didn't deserve it?

Bliss: Well, I often wondered about my own.

Mark: Since the Vietnam War and after when they had things out like candy, do you think that was the case?

Bliss: To a certain extent. Part of the problem was that we were an orphan organization for a long time. We didn't have any wing fighting for us we were directly under the Air Force and they were busy. So that was part of the problem. Then when we did get a wing, nobody at the 8th Air Force liked it. Everybody hated Elliot Roosevelt because he had snubbed all the generals down there by not moving into their quarters they offered him. He came down and took over half of our base hospital for his personal quarters, so we wound up holding sick call [Tape Ends].

[End of Transcript]