

Interviewer: Could you state your name and date and place of birth for me please.

Borland: James Borland born in Carole, Illinois May the 20<sup>th</sup> 1922. I've lived here all my life.

Interviewer: Great and what branch of the service were you in and what unit?

Borland: I was in the Navy I was in fire squadron assigned to a night fire squadron an attachment to the fighter squadron. Flew night training missions from Vera Beach, Florida to Quonset Point to Hawaii on oh I can't think of the tip there right now was down to Puna is a strip what's the other island of Maui yeh which is right south of Wiki and north of the main island Hawaii although Honolulu is the more traffic. Knowing which is Oahu. Barbers Point was a place on Oahu I was sent from the states and we night fight trained there and there more qualification there. There I was attached to a fighter squadron who went on out to the forward area the combat zone.

Interviewer: Now if I could go back for a minute to the late 30s. The depression is on what kind of affect did the depression have on you specifically or on your family?

Borland: Well my father was then a manager of a paint store. Paint, wallpaper, glass other items that goes along with that. He came from the little town of Equality, Illinois have you ever heard of that?

Interviewer: No I have not.

Borland: Okay that's east of Harrisburg west of Shiny Town, Illinois you've heard of that maybe.

Interviewer: Yes

Borland: Okay my mother came from a little town near there over around Norris City, Illinois. That's west of Carlmile, Illinois you may know of that, that's even further west from Evansville to Mount Vernon to Carmi on that highway there. So that was my mother and father and they met in 1920 dated got married in 1921 my dad was sent from Evansville to manage the store in Carole, Illinois in 1921. I forgot the exact date anyway I was born on 10<sup>th</sup> Street here in this town which was about four blocks from where my dad's business was where he was a manager. Now as far as the depression he was manager and he made just a salary probably \$30 or \$40 a week but that bought quite a bit but I didn't suffer anything other than the fact my kids left my mother still had my father bought me a toy like a bicycle a tricycle you know or went to grade school but I didn't have but I was didn't wear expensive clothes but just wore average clothes back then. I can't recall saying well were just kind of have beans or we're just going to have this we weren't that poor but we was very frugal. And my dad had an automobile back then and gasoline was like 8 to 10 cents a gallon. I went to first school I went to was named Emwood I went there five years then my folks moved over to another area about four or five blocks away which put you in another school zone which I went to Lincoln School which you see here in the back of Fred's house.

Interviewer: Great

Borland: I went there my sixth year. That's where I met Fred Leni my friend now you know that's a long time we've been friends over 70 years.

Interviewer: Amazing

Borland: So he and I went to school there went to junior high school. The economy started getting a little bit better you know in the later part of the 30s like 37, 38 or 39 cause my dad I remember bought an automobile back then. Which previously the other automobile he had was a 1932 or 33 Chevrolet. So I guess I wasn't affected too much other than the fact then I graduated from high school with Fred my friend.

Interviewer: Were you the class of 1940?

Borland: 1940 and

Interviewer: During that period of time did you have what level of awareness of international relations or what was going on either in the Pacific or in Europe.

Borland: Not until you know a high school student don't pay much attention he's taking history and geography and math and English running around with the girls learning how to drive going through puberty trying to play a little basketball if he's big enough. So kids didn't think about history other than what our history was there not local actually Germany was having an affect back in the 30s when Fred and I still back in the latter parts of high school. But we didn't talk about that other than I remember our history teacher used to have us cut things out as current events. So that was the only participation or knowledge of what was going on around the world you know. King what Kind Edward was very was taking place back then is that right do you remember the history on the king who took the over as the king of England back then.

Interviewer: Edward Wall Simpson.

Borland: Yes I remember that.

Interviewer: Queen Elizabeth's father.

Borland: Pardon me.

Interviewer: Queen Elizabeth's father

Borland: That's true.

Interviewer: So after you got out in 1940 obviously there's a period of about 18 months there before Pearl Harbor.

Borland: Yes

Interviewer: What were you doing?

Borland: Okay I had a very bad case of acne when I was in the senior in high school very withdrawn people don't know that but or people do realize that's had some kind of if you had acne its so bad that my mother and father took me to St. Louis to see them and they said well we'll put you in the hospital and give you treatments and as a youngster of 16 years old I didn't want to stay up there in St. Louis by myself. So I came back here a doctor gave me treatments here x-ray treatments then that probably turned out the reasons I've had several skin cancers. Because I took one x-ray treatment every week for a year.

Interviewer: Wow

Borland: So that put me out of going to college but I figured that you wouldn't get any place as a high school graduate.

Interviewer: Sure

Borland: So I started going to University of Illinois in the mid semester that would be 1941.

Interviewer: About January 41?

Borland: Yeh January of 41.

Interviewer: Okay

Borland: Didn't like it up there, there was too many students. After going to a little school here and going to a university by that time was like 8,000 people and that was a thought that was a tremendous amount. So I went to SIU and my friend Fred was going to Northwestern I think. Well SIU I was going to SIU and my very close friend one of Fred and my classmates his dad says the war is going to is happening over there and you should be prepared for it. Well we were going back to school when we heard about Pearl Harbor that Sunday night. See you remember Sunday morning with the time zone different were going back to school with the radio on and all the news came on the radio all over the United States I presume and we're going back up to college that the Japanese had attacked Pearl Harbor.

Interviewer: So this would have been you had one semester in the spring of 1941 this is the end of your second semester?

Borland: No see I transferred that summer comes by that's the summer of 41 but Pearl Harbor hadn't happened.

Interviewer: Gotcha

Borland: So I entered Carbondale or SINU at that time in September 1941.

Interviewer: So how did you find how did you hear about Pearl Harbor? Literally where did you hear about it?

Borland: My friend and I were going to school up in Carbondale which is only 50 miles away we came home Friday nights and dated went out dancing and ate at home that's cause going up there to a school

you had to pay for your weekends for your meals. So this way it was cheaper for my folks for me to come home. So we were going back up to school that Sunday evening so I think there must be 8 hours difference between here and Pearl so Pearl was attacked so you can see the time difference there so this is still the Sunday we are going back to school Sunday evening when we heard about Pearl.

Interviewer: Now you said someone had previously kind of at least mentioned that you might want to be ready for something like this. Did it still totally take you by surprise when it happened?

Borland: Yeh it sure did of course the Japanese attacking Pearl Harbor what's happening here but really not cognizant of all the activity that's taking place in the Asiatic Theatre. In China remember the Japanese really did bad things in China I've read something about people they killed in China and so my friend's father said fellows' boys you should get yourself prepared for this and I suggest aviation. So he entered us to Parks Air College. Parks Air College is a subsidiary of St. Louis University in aeronautics. SO we entered the aeronautical school in the I'd say January after Pearl Harbor. And that happened to be at a term when the term began. So we was going up there and then in the summer of 1942 then yes see Pearl Harbor was in December 41. Now we're in 42 so my friend who is on the draft board and my roommate who was a classmate here in town and a friend of Fred's too says what are we going to do. I said I'll tell you his name was Malcolm, Malcolm Patton he passed away since then, but anyway I said I don't want to be drafted. Well while we were at Parks Air College the Army Air Corps had a group in the dormitories there training Army aviation cadets as an outline field from Scott field. Well they and I says well Malcolm lets go over to Scott Air Force base and take the exam is this taking too long?

Interviewer: No this is great.

Borland: So we went over to Scott Air Force Base both taking aeronautics both had a lot of physics and math and aerodynamics and things like that that was pertaining to fly.

Interviewer: But had not flown?

Borland: Had never flown well now I'll take that back this friend of mine who sent us his daddy had bought in 1939 had trained had sent his son to a training instructor in Marian, Illinois to learn to fly a cub. So he is it alright to go back into this history?

Interviewer: Sure

Borland: Okay I would ride with him up to Marian about once every two weeks and he would get in a cub and an instructor would teach him how to fly until he got a student pilots license. Then after he flew he came home and he lived out in Miller City which is about 12, 15 miles from here and they he was a farmer and he cut him a landing strip out of the alfalfa field and he would put his cub in a hang built a hanger and flew this cub aircraft out there. Malcolm would fly to town and he'd fly right over well about four blocks from where I live here he would cut the engine back and say hey Jim come out and get me and put it back. So I'd go out and I had a model A Ford then and I'd that's a time ago you know so I'd drive out to North Carol which was a little landing strip out there and he'd land the cub and I'd go get in and we flew around the town. And go to the swimming pool or see the girls or whatever and say about

4:30, 5 o'clock in the afternoon I'd take him back and that was only a 15 minute flight from there over to the farm. But see he could come to town by flying right out by North Carol and we'd be friends and he'd see his friends so anyway that's the fellow that I went to Parks Air College with. So he and I he had a student pilots license and he used to take me up and I'd take hold of the stick but I never really flew. So we decided to go over to Scott Air Force Base and take the physical and the mental examination to join the Army Air Core. So we went over there and what we had studies at both the University and Parks Air College just fit right in the exam was up our alley, we both made very good grades. I passed now my friend Malcolm I was not an athletically included young man I was kind of small at the time couldn't play basketball very well couldn't play football couldn't play track he was the star athlete. He was the captain of the football team high leading on the basketball team was the distance runner on the track team was very athletic he was Adonis. Good looking blonde wavy hair so we got out and I was sitting out in the hall waiting and he come out and I said they told me to come back in probably about a week and I could be sworn in. He said Jim I didn't pass the physical I said hell you didn't pass what is it you didn't pass? He said my eyes where you line those two sticks up like that I never could get them to the right depth perception. And when you put the little things on your eyes you're supposed to turn when the line crosses the dot I said heck you can see as good as I can when were back at school you read and didn't have any eye problems. He said they just didn't want it. So we went back to school because we hadn't gotten out of school we continued to go so I says let's find out what the Marine Core has to offer, let's join the Marine Air Core. He says okay so we found out you go over to the new Federal Building on 12<sup>th</sup> and Market in St. Louis to the 12<sup>th</sup> floor and sign up to be there. Well we went in and said we want to join the Marine Air Core they said gentlemen you can't join the Marine Core you have to become a Navy aviation cadet because the Marines get their pay through the Navy appropriations. So the Marines are really part of the Navy in a manner of speaking. They said if you go up you can take the Navy aviation cadet exam and you go up and make an appointment so we went up and got an appointment came back a few days later and took the exam. The same thing happened I passed sitting out in the hall my friend comes out and said Jim they were right about the eyes and I says well Malcolm I don't want to be drafted and I wasn't to be in the Navy I'd rather be in the Navy than the Army Air Core everybody joined the Army Air Core but we don't see any Navy pilots in our town. He says well they made me a deal I could take pass the program and go to college and take eye training and when I pass the eye exam they would put me over into what was called the B5 program he was in the B7 program. Went to Murray State College you've heard of Murray.

Interviewer: Oh you bet.

Borland: And he I said when do you have to go and he said right now if I want to sign up. He became a B7 student at Murray College in the Naval Reserve and I signed up to be in the Navy Aviation Cadet Program the B5 program. So I says we both signed but they said you're in I said when do I go and they said you will be sent orders to go to preflight school.

Interviewer: So your taking the Army Air Core test was not a commitment to go into the Army you go then take the Navy first come first serve kind of?

Borland: Not necessarily you have you say I've taken the test and I've passed they will send me a notice to come over to have your eyes finally what they put drops in your eyes you remember and to final test and a last interview and then you sign up.

Interviewer: Okay

Borland: And the Navy was practically at the same time but when you take the Navy exam the next day you come over to have your eyes dilated and a little interview you sign up then.

Interviewer: Okay

Borland: So when we in the interim between going over and taking the test back in school I have the notice from the Army Air Core that I could take my final parts to enlist but I wanted to be in the navy instead of the Army Air Core. So I came home and then two months later I was called to pre flight school because the enlistments had drawn up so you had a backlog of pilots going through but not enough training facilities to train everybody so they elongated or made the training more expanded in the beginning before they funnel down to the final training. So I'm home and I'm called in December 1942 that's one year after the Pearl Harbor because I've been to school but I had been in the Navy signed up waiting for a call to active duty since September. So September, October and December I was called.

Interviewer: Where did you go for you say you went to preflight training?

Borland: It was here's it was more than that. First of all they didn't have enough to go to preflight school so they set up a preflight pre flight school. Well that became full so they set up a WTS War Training Service have you ever heard of that?

Interviewer: No I have not.

Borland: Well so I went to Salem, Illinois that's about 115 miles or 30 miles north of here they gave us uniforms but the were CCC uniforms you don't know what a CCC is do you?

Interviewer: I do remember this is

Borland: In 1930s during the Roosevelt administration I forgot what CCC stands for some type of but you stayed in a camp you wore uniforms and you went out and fixed roads and chopped down trees and things like that in fact Giant City Park about right north of here about 50 miles was one of the CCC training camps and its still up there you can see the rocks where they did the ditches there. And they made the roads through the wooded area there now it's quite some area so I went there I'm a Navy aviation cadet wearing a green CCC uniform a pea cutter hat and wool hard wool and black shoes tie a pair. Well they introduced me to and we stayed at a old night club that the Navy had leased from someone and that they made that into a barracks for the CCC or for the Navy pilots in training. I remember out on one of the porches is where they had double deck bunks one right after the other double deck bunks and cold and didn't have hot showers you did have a lavatory to shave by with some hot water but in the basement you went down and they put showers on the floor joust and that's where you took a shower.

Interviewer: And this is December in Salam, Illinois?

Borland: That's true so I was there let's see I was up there for awhile and then I went to Columbia, Missouri and that's where we trained a little bit more and they leased a hotel by the University of Missouri outside by the airport. So we could get out and just walk from the like a hotel across the parking lot and there was the airport across the highway. So we took some training there and from there I went to Monterey, California.

Interviewer: What did your training consist of at this point?

Borland: They had civilian pilots men who had their license as commercial pilot license and they got instructor license and they would teach you how to fly how to take off and how to fly cross wind and how to make S turns to a circle and how to fly straight and level and how to do a box pattern. We used to go out and would go around a 100 acre field and you would parallel it this was so you would fly with the wind cross wind so that you would fly straight this line then of course the next one you'd have to fly a little different because the wind it a little bit different. And you'd fly a perfect box around that thing so he would teach you how to crab or into the wind as well as teaching you how to land naturally the thing wasn't easy. Taking off as you would go sailing down the runway he would try to teach you to use a little right ruttier use a little left ruttier remember the tark. Have you ever flown?

Instructor: No I haven't.

Borland: Well aircraft engines when they turn off you notice when your automobile when you gun it how it turns that on the mounting? That's tark well an engine with a propeller into the wind has a tark so as you first add power you have till that plane starts going straight you have to use ruttier control to help control the tark.

Interviewer: I understand.

Borland: So if not you would have a tendency to pull you from the tark of the propeller. So those are things you learn as primary just altitude, air speed, compass and engine temperature and oil pressure.

Interviewer: Now did you feel you had a gift for this did you take to this right away?

Borland: I enjoyed it but I didn't feel that I was gifted at it. But I determined that's the word I like to use because I've never felt that I was when I went out for sports that I was good enough and I said to myself I'm going to make a success of this. So I tried extra hard so

Interviewer: So we're into spring of 1943?

Borland: Yes up into March.

Interviewer: March 43 okay.

Borland: That's when I went to preflight school in Monterey, California. But its not flying its all physical this was really sometime ago the first thing you went as an aviation cadet getting you in physical

condition. See they set this CBT and WTS to get you a little bit in some type of training. So when I went to Monterey, California Carmel's near there out there and they had a what was the name Del Monte Hotel which was movie stars went back in the 30s there, the Navy had leased that. Of course later on became the Naval War College there or something I think for a while after. We went there and we stayed in the huge Del Monte Hotel and there was probably 1500 cadets there which was about like four classes. When you went it I would say see I went in in April so that would probably be class four the ones that were in class four and one, two and three and then class three they got there in March they used probably the months of the classes. Which was very strenuous physical training.

Interviewer: Really?

Borland: Really and I not being an athletic type at that time was pretty tough on me. Again determination to do that they would take you on cross country runs for seven miles and I'd never done that before in my life. And there was a lot of other fellows my age who hadn't either and they had the ambulance follow along for the guys that just kept running and they would fall out, pick them up and take them back to sick bay. We played football.

Interviewer: Do you remember anyone around you any ones career as a potential naval aviator ending during that period of time for not being able to get into physical shape good enough or did everybody basically

Borland: No it was a 20 percent washout.

Interviewer: No kidding?

Borland: Yeh a lot wasn't physical they just hell I'm not going to pull through it I'm not going to put up with this I'm not going to take these cross country hikes I'm not going to be abused like this. And they didn't abuse you as whipping you or something like that but you might have to go out and run the 4/40 and the 8/80 and then you go do the broad jump and then we're going to go over and play soccer and then we're going to go play football and then we're going to go have swim meet. And then in the evening you had classes' math, naval history, naval law, semaphore, radio code all those and that was taking three months out there in this Monterey. Which I went out weighing about 170 and went out weighing about 150.

Interviewer: All muscle.

Borland: No fat have you ever probably seen pictures of the cadets eating? There would be 15, 12 and 15 hundred cadets going into this huge dining room all you hear was the walking no talking no whispering no nothing and you walked to your table at the same place and you stood at attention behind it and here's 12 to 15 hundred cadets in this huge dining room as quiet as you could hear me and you talking.

Interviewer: Wow



Borland: And then they would seat and the you sit down and still not talk and then they would say carry on and meals would be brought to you help you know bring the dishes of the food green beans or potatoes or whatever was being served.

Interviewer: How was the food?

Borland: Very very good and you would eat and then they would first of all have you ever heard of what they call the square meal? Well that was just part of the as the new recruits or the new guys there they had what we call the 90 day wonders. Those are the guys who went to school went to college and took ROTC and in 90 days became an inson. And they were the officers that watched the cadets not only some were very good athletes who would be down teaching the football or the soccer or doing the track or calisthenics or the swim coaches. The square meal was part of the indoctrination that was the square meal no talking at that time this was just like a week of indoctrination and but that was soon over then you became one of the group there. But you got up early in the morning like when you first got there you didn't join you didn't go to the hotel you went to a gymnasium which was over by the polo field that was the athletic area. And you stayed there for two weeks as indoctrination and see if you had any diseases and you know right then and that's when they got you up at 5 o'clock blow the whistle it wasn't taps or a revelry on a bugle they'd blow a whistle where you'd get out of bed. And you had to get out of bed and stand at attention and then they would say carry on then you would turn around and make your bunk up because they would not and form then on as long as you were a cadet even in the final phases they used to come by and see that you had the square corners the 45 degree corners you've heard about that the pillow had to be just right the sheets had to be tight the blanket had to be tight. They'd drop a quarter the quarter is supposed to bounce that's just part of it have you heard of that?

Interviewer: Yes sir

Borland: Okay that took place as cadets. So there was the mental or the book work as well as the physical on that. Then you graduate and now you're going to learn to fly Navy you might have flown cubs. So I was sent to Norman, Oklahoma that's the university there you know Norman Oklahoma has a university there.

Interviewer: Yes sir

Borland: South of Oklahoma City.

Interviewer: And this is towards the summer of 43.

Borland: Yes summer this is really about June of 43 I guess.

Interviewer: Okay

Borland: And it was hot down in Oklahoma it was dry and dusty in Oklahoma you know the red dust down there. And I remember that we had to go hit the sack like at 9 o'clock but it was daylight still down there. And hot no air condition they had all the windows up in the barracks and the wind blow you ever heard of the wind blowing in Oklahoma it blew the dust around there. And the same things about

getting up you had to get up at attention you know. And then we'd go to the ground school for maybe a couple of weeks and then you'd go fly in the afternoon learn to fly in the afternoon by Navy instructors these are Navy Lieutenants, Lieutenant junior grade full Lieutenants some instructors who had been through flight training through the Navy and graduated got their wings. And some are sent to flight instructors some are sent to fighter squadrons some are sent to observation scouts some went into patrol bombers some went into transports some stayed as flight instructors some guys don't want to get in combat so they ask for a flight instructor. That's duty in the United States you get to be to see the girls and you quit 6 o'clock in the evening something like that. But anyway the first thing they said you've been flying but now you're going to learn to fly Navy way. And that was the attitude of the instructors they were not but they were like in charge. And that's where we flew the ole biplanes.

Interviewer: No kidding?

Borland: Yes you remember have you ever seen Jag on TV? Well you remember the biplane that he has.

Interviewer: I do now.

Borland: You remember the biplane that's a Navy that's a Stearman.

Interviewer: I'll be darn.

Borland: And they were 7 cylinder engines and 9 cylinder engines. And that was what the Navy and the Navy really had some in to Navy planes that Navy had built but most of them were made by Stearman, Stearman. And that's what we had down there except a few Timms, Timms and that's the last plane that you fly there when you're just flying formation. But when you get there they are going to teach you how to take off how to land how to do slips to the circle how to do S turns to the circle how to do slow rolls, snap rolls, loops, gentleman, shondells.

Interviewer: Now were they adding to what you already knew or were they changing what you already knew or both?

Borland: You forgot that they were teaching you as if you had never been.

Interviewer: Oh okay.

Borland: They were teaching you like I say Navy way now. Whatever you flew in the cubs back then is just being able to coordinate your flight.

Interviewer: Oh okay

Borland: The night flying was it had to be clear because when you weren't instrument qualified yet. Night flying calls for artificial horizon usually and a directional gyro see a magnetic compass sits there and floats in the liquid you know and its even though it doesn't float fast you know turn around its not steady like a directional gyro when your instruments now are run by gyros on your instruments panels. So as you learn that as you go further in training before you get your wings but you did get your first indoctrination in night flying after you had probably two months of training there.

Interviewer: Now was everyone training for night flying or was this a special group.

Borland: Everybody was everybody was learning to be night flying.

Interviewer: Okay

Borland: I'll give you a difference about night fighters or night flying. Night flying still is okay we're still in primary training and we're leaning all of these shondells, ememans, and slow rolls.

Interviewer: And what is a shondell and what is an emerman?

Borland: Well an emerman is made from a German or is a German term ant the were emen what's why there were emerman and an emerman is flying like this you dive down come over like into a loop you come over and loop and you roll up like this like that, that's an emerman. Shondell dive like this come down on top then you roll.

Interviewer: Okay thanks

Borland: Emerman turn shomdell. I forgot which one I don't know I might have that backwards its been so long after all I'm 82 now and that happened when I was 20 something years old.

Interviewer: You could do either of those?

Borland: You do them because your learning to fly you are going to be a combat pilot even if you don't fly combat per say maybe your flying a transport you know how to do that.

Interviewer: I understand okay.

Borland: Shondells, emermans I think this is an emerman where you turn around and go up on top see the Germans turn around he'd take you up there and he'd roll out like that. Then there was lazy 8s over and down lazy 8s you're learned to do that. But that's coordinative flying then you would turn around and they'd take you out to out lying fields that the Navy had leased and they would put a big circle on it say a 20 acre field and there would be the circle and they would teach you how to slip that plane down and land it in that circle on the dot. They would teach you how to come by cut your engine even with the circle without adding any power go over passed the wind line on e time come back and land it on the circle.

Interviewer: Man

Borland: those are the thing they'd teach you and you'd to that practice and practice and practice those until you become more efficient to do that.

Interviewer: Now is part of the incredible precision of this the fact that you may be lading on a carrier taking off on a carrier?

Borland: That's probably I don't know if the Army Air Core did they probably did that but they to give the ability to slip to come into a field you learned to fly whether you was being Army or Marine or whatever

to you'd come in and you wanted to do sharps field procedure you'd come slip right over the fence row and then drop on the other side. It becomes a more efficient pilot then just being able to fly straight and level around. Because they want to teach you military flying that's what your being taught before you the primary this is primary training before you left that you start to learn to do some formation flying. So that was the Timms that was the low wing plane with the cockpits up above open cockpits just for the windshield and the low wings. And you would take off and you would learn formation take off. They had a huge big asphalt or black top area out there and it there wasn't runways they were just out there and they had a windsock out there and you'd take the wing and you might be there a guys her taking off and another one over here off of this area there. So and the same way you had to pick yourself out a place to come in to land and be carful your looking around that your not drifting around and some other guys taking off or in some other guys path. I can't think of how I should have been prepared for this.

Interviewer: Oh this is great.

Borland: Then after you have formation flying for a couple of weeks you learn to fly formation. Formation you learn to fly is keeping your wings at the same angle that the guy that your flying formation on. If his wing starts going down you keep your wings and that's how you can't turn around and he's turning and you try to skid around so to make a nice formation you keep your wings level with his. Down up turn so you learn that and you'd be the leader and then you'd be a wing man and you'd be the wing man they flew in a "V" column.

Interviewer: Now how many planes in a "V" column like that?

Borland: "V" three here and two wing men.

Interviewer: Gotcha

Now you see probably in some particular aviation sports or expeditions or what have you see maybe an S5 in a "V" like that but those are just but that's now a years ago I think the British flew a formation like that but it wasn't maneuverable enough to be in combat. I'll include at this time once you learn the formation flying then as you get into combat flying you fly four. Leader his wing man section leader and his wing man so you see four. The reason that's a combat outfit that way because if you're attacked at the time by planes that your not able to compete against in other words a Zero was more maneuverable than the Hell Cats or the Car Sates. So you don't try to out maneuver them that's the same way with the German I think the Messerschmitt was more maneuverable than say the Spit Fires maybe. Okay they became a procedure called the thatch weave. That was the Navy pilot come up with this idea so if you had these four planes flying leader, wingman, section leader and your being attacked you go into the thatch weave you break out like this and you turn towards each other. This group goes underneath the other group so you're protecting this guy's rear end and this guy's protecting your rear end. And as soon as you cross you learn that is the weave and you continue on that way. So your protecting each other and when at that time when you come around like this there is 12 guns to bare on the enemy who's on the other guys tail supposable and that's class the thatch weave in the Navy. I don't know if the air force had that because the Navy captain in fact he was on board our ship during WWII which I've got a picture of in here as on the admiral staff. Admiral McCain was on board our ship who was John McCain's father.

And I had talked to him because to Admiral McCain as I'm talking to you. Very famous admiral I never talked to Bull Halzie, Bull Halzie was riding the Missouri in our task group you could look over to the battleship and Bull Halzie was over there in WWII. We'll get to that later if you want to go that far.

Interviewer: You bet.

Borland: So we're learning formation flying I've jumped up a little bit ahead. You graduate from there and you go to instrument training basic first. Basic is when you go in there and you just learn to fly formation. One time formation take off formation landings formation all day long after some weeks of that you go to two weeks of instrument flight training you fly these same plans which is a more horse powered engine than the ones you were flying. You were flying the Stearmans you went to the Timms which is probably they had like homing engines and then you went to Balties which was about a 450 horse power engine and those where you learned to fly in that was a 2 seater then the others were 2 seaters too for the training the instrument or the instructor would fly one cockpit and you'd fly the other. He would pilot the front cockpit and you'd fly the rear cockpit. Anyway you went to instrument and there's where you learned basic instruments standard instrument rate turns under the hood you cannot see out you use artificial horizon which I was telling you gyro scope. Directional gyro a turn and bank indicator a turn and bank indicator is inclinometer like a ball in here and if your flying straight and level or even make a coordinated turn you know about the part where you can swing a bucket of water without loosing a drop?

Interviewer: Yes

Borland: Well if you're not coordinated and you slow it down the water starts coming out.

Interviewer: Absolutely

Borland: Well the same way in flying if you make a coordinated turn the little ball on the inclinometer will stay right there in the bottom of this inclinometer and at the very bottom of it is a turn and bank indicator shows the degree of the bank that you've got.

Interviewer: So you read both of these at the same time?

Borland: That's a one, one instrument is the turn and bank indicator.

Interviewer: Okay wow

Then you have the directional gyro which is a caged gyro instrument so if your heading true north you cage the gyro instrument in other words lock it in turn it to zero uncage it and the gyro spoke hold it on to zero to what but it turns easy it does not float around. As your turning to the east it shows 10 degrees, 20 degrees, 30 degrees, 40 on around till if you make a complete turn 180, 270 and 360. Well to do that not only do you have a turn and bank indicator and you have altimeter which shows the altitude that you're flying at you have an artificial horizon. And it's on a gyro and it's got a little picture of an airplane here put's it on a little scale like that and there's the gyro scope with this bar. As the airplane turns the gyro scope hold this like this and makes it look like you are turning which you are

turning but that's gives you an artificial horizon that you don't by a gyro scope. Can you understand that?

Interviewer: Yes I sure can.

Borland: Okay so you've got a directional gyro which turns slowly exact the amount of degrees but you can set that on anything you want to you don't have to set that on north and I will tell you later how you use it in getting aboard an aircraft carrier at night time.

Interviewer: Okay great okay.

Borland: So this is basic instruments artificial horizon how to fly this plane. It looks like your turning and you are turning but it gives you instrumentation of your turn. The gyro is moving the directional gyro turn shows the degrees that you're turning and the amount of degrees that you're heading. The turn and banking shows you also not only does the artificial horizon tell you the amount of degrees that you're banking from 10, 20, 30, 45 degrees of bank like that a 90 degree turn thing like that. They've got them now so they will do them all the way around at the time ours would get to 180 about 185 degrees and then it would tumble.

Interviewer: That's still to get to 185 that's still remarkable.

Borland: But what you say that you were turning like this then your instruments would tumble the artificial risers not your directional drive but your artificial then you had to level it off cage it and pull it back. But your turn and bank indicator would just go over to the peg to the maximum for the turn. Of course you have other instruments but those are basic flight instruments.

Interviewer: And these are two seaters with an instructor with you as you do it.

Borland: But he's teaching you how to do this.

Interviewer: And the first day you don't have the hood up?

Borland: No right he's just the first day he's teaching you how to fly the directional gyro how it turns how easy and how to cage it an uncage it. And then he's going to teach you watch your turn and bank indicator how many degrees if your banking 30 degrees your turn and bank indicator shows that your banking 30 degrees right or left sideways. And your artificial horizon will also show 30 degrees up there. You altimeter is whatever you set back at the field that you took off on a barometric altimeter. Altimeters work on barometric pressure did you know that.

Interviewer: Yeh

Borland: You knew that okay so that's the reason when you hear someone say what's the barometric pressure when the planes come into the field because that is the setting that you can set so that you know this field is 320 feet above sea level and you've got the barometric pressure that that's the correct level.

Interviewer: And those were pretty accurate?

Borland: Yes

Interviewer: Those were pretty accurate?

Borland: Yes pretty accurate. But late on in night fighters it's not accurate enough because you don't see anything you're flying like in an ink well and your flying over the water and you cannot tell if the barometric pressure changes from the ship at the time even though you can ask for a barometric pressure. I'm talking about we used a radio altimeter that's as accurate within feet.

Interviewer: That's pretty critical.

Borland: It has to be for night flying aboard above the water. Okay so now we're leaning the basics of instruments and now we can fly and we've learned to take off get on the instruments go someplace turn around fly another place and come back completely on instruments. And we're plotting for it here lets you know how fast you're going like 60 miles an hour in an automobile you know you're going 60 miles an hour. Well at 120 you're going to go 120 right?

Interviewer: Yeh

Borland: So you've got ca little calculator they didn't have computers then they had little calculators. I've got one at home if you want to see it sometime. That's how you and altitude makes a difference in air speed. So you have to depending on the temperature is the air speed will be different.

Interviewer: Now remember you can go 60 miles an hour in the air and if there is not wind in any direction you will go 60 miles in one hour. But if you're going into a 30 mile an hour wind how far are you going to go in an hour? Thirty miles because you'd half that, it's relative into the air not across the ground. You're not measuring speed across the ground your measuring speed through the air.

Borland: Right so tail winds, cross winds, head winds make a difference flying. So what else can I go to about instruments other than the fact you learn more and more about instruments how to fly without being able to see the ground.

Interviewer: Was there a point at which they said okay this is basic instrument training and then there's advanced instrument training?

Borland: Yes

Interviewer: Did that take place in the same did you do those in the same area?

Borland: No

Interviewer: You did not?

Borland: You learned basic because from basic flying to instrument flying now you'd be able to fly at night time under instrument conditions and you have to practice that because back then they had what they called radio range station. Have you ever heard of that?

Interviewer: No I haven't

Borland: Well that was a means of how planes went from one area to another area on a radio range. There was a tower out in an area that sent signals in four directions. Now it wasn't necessarily true north and what have you, you would look up your map and see which way this one south leg was what was as you got on the you heard this you did not see it it came over the radio. You'd tune it in to this frequency of this range station they don't do this anymore this is old timey like the scarf of and the goggles and what have you. But you would tune this radio station in and they the quadrants were "A" quadrants and "N" quadrants so if you got across like how many quadrants you've got four quadrants haven't you?

Interviewer: Right

Borland: This would be "A" across this way is "A" this would be "N" and this would be "N". You'd tune in the station and you picked up the identity of the station the name like and it came on the radio like quote that's what you learned back as an aviation cadet back back at preflight school, radio code.

Interviewer: Right

Borland: So if you hear this tada tada you're in an "A" quadrant. As you go towards the station that is sending out the signal it increases in volume so what your supposed to do if you know if your hunting where you are in this you know your on this range station but you don't know and you know your in "A" quadrant whether it's the south quadrant or the north quadrant. So we turn our radio down so we just barley can hear it we keep on this heading we know approximately which way they are going so because it tells the degrees of the beams. If you get an increase in signal you know you're going towards the signal you turn it down so you just barley can hear it and if it fades out your fading away from your station. But if it increases we know we are going toward the station now we want to find the beam to go directly over the station. So we fly we look and we say now I know I'm in the south "A" quadrant if I fly slightly to the west I'm going to run into those beams. As you get closer to the beam it starts the sound goes from like here's the "A" quadrant tada (real low) as you get closer to the beam tadaaam, tadaaam as you get directly on the beam daaam, daaam

Interviewer: One tone

Borland: One tone you happen to drift off to the other side that's the "N" quadrant isn't it?

Interviewer: Yeh

Borland: Daa Diii Daa Diii correct yourself to get back over on the solid and you have to learn if the wind was turning you'd turn around and get yourself crabbed that your flying straight toward the station. As you get close to the station the volume is increased and if you went over the station there is a code of



silence. Nothing and then back over to being loud again. Now it's reversed the inside of the leg is going to be on your right side this time because it's reversed there because of the quadrants. So you learn to ride the beams and that's how you navigated across the United States back then. That's a long long time ago a long time ago that's back in the 40s. Of course there's a lot of new navigational aids now we used to use the last time I was flying we used basic ADF Automatic Radio Directional Finder. So you if I was going to St. Louis from here I could tune in KMOX and listen to music and my radio indicator would point the direction as I if it was off to the left from 0 as I move the nose that way the needle would come back. If I was heading straight for the station the needle would be straight up and down.

Interviewer: Okay

Borland: And do I know. Now they've got DMEs that tell you how far you're away from the station.

Interviewer: You've got your global positioning system.

Borland: Yeh yeh GPS and all of that now it's all in a computer and it's all put out in the information. But this was a long long time ago when we learned to fly before they had all of these things. Okay

Interviewer: Hold your thought let me see how we're doing on our time. Right where we were we were kind of at the end of the advanced instrument training.

Borland: Right okay from that you would be able to fly some instruments you don't want to get yourself involved too hard because you're not really efficient at it. But you're probably could save your life or get back to the field or whatever in the instrument condition because later on you really get involved in instruments as you get into finalization. In other words once you get your wings and you're in combat flying type aircraft. So anyway from basic instruments we went to celestial navigation I was really lost their because celestial navigation is basically for someone whose going to fly transports or patrol planes. And you'd have one of going and of course you'd have night classes of reading the stars plotting how to plot from the North Star and different stars I can't really remember much about it because there was only a week of it. You get concentrated depending on the type of training you get later on for whatever type flying you're going to do naturally you're not to do celestial navigation flying a fighter plane.

Interviewer: Did you know at this point you were headed towards fighter planes?

Borland: No

Interviewer: Okay

Borland: These are everybody's flying the same type aircrafts going through the same type of training. We're going to advanced training now this is the advanced final training before you get your wings. And this was flying I don't know if your familiar with the plane they call them AT6s or SNJs or Texans. You see some getting fighter training in tactics and they will take you up it's a low wing silver with two wings you've seen about 600 horse power engine in it.

Interviewer: I have.

Borland: Well that's the SMJ in the Navy's designation Scout Navy J is for North America at the time. And there's 1,2s and 3s and that depends on the times of the how like automobiles of the year their made some differential. From there you go down to the advanced training and there before you get there you're asked you were sent to a meeting and asked what you want to do. Now they are either going to train you to be observation scout, that's where you're on a cruiser or a battleship flying a C-plane that's caterpillar off of the battleship or surveying an area to see how they're shooting. You remember that's how they get you know they're 300 yards past the target that's the observation scout and they come back and they take off on a from the thing. Now how do you think they get back aboard the airship the back of that battleship or heavy cruiser? They make a slick the ship turns as the ship turns the waves level out because you watch in a lake as you turn your boat how smooth it is behind you well that's what they do they make a slick. Or if right behind the ship is a slick if they have to but it's not as smooth as it is if they could make a turn. So when they're on the way back they turn around and land in the slick on the towards the stern of the ship. Down comes the hook and there's a place they hook the pilot stands up or his rear observation and it's usually a two seater job ones the pilot and ones the observation man or radio man. They get up and hook the hook on it it tightens up then they lift it up put it back on the battleship. Have you ever seen pictures of that?

Interviewer: I have not.

Borland: Well that was back in WWI or not in WWI before training in WWII and in WWII.

Interviewer: So in the late 30s they would have already been doing this?

Borland: Yeh in the late 30s they started doing that. Later on when I first got in ships held their position by radar. Prior to that they had to be in column you remember seeing the battleship running up in columns. Because they didn't have radar positioning and WWII it started in 1942 I guess radar became so that's how they started putting their positions in a fleet or task group or a task force. So anyway you make some designations of what you want to do say oh I think I want to be a scout you know operations I want to be a pilot fly C-planes. Then they had you could sign up maybe I'll tell you later in a minute if you want to be a C-plane pilot. In other words you fly patrol planes in other words one of these multi engines that land in the water.

Interviewer: You bet.

Borland: PBYS you've probably heard of PBYS

Interviewer: Yes

Borland: Or seen pictures of those. There was three or four different types. Then there was the big Marsh which was the four engine one made by Martin. That was another type training because you wouldn't be taking fighter training if you were going to fly P-Boats patrol planes. Mostly it was PBYS then there was land based bombers. Land based bombers were basic transport planes the Navy hauling Navy personnel from one plane to another not many supplies because you couldn't haul that many supplies in and that was another type. A lot of guys said I want to be a commercial pilot an airline pilot if I take that

I can get all of this Navy training and that's true. Then there was the bombing squadron for you if you wanted to be a bombing squadron then there was one to be in the fighter squadron. And let me get my thoughts about this I'm trying to think well anyway I thought I wanted to fly a patrol plane a boat you know

Interviewer: You literally have a meeting where you're all sitting there

Borland: That's right

Interviewer: And you do get a vote or you get to pick.

Borland: You fill out a form.

Interviewer: Okay

Borland: What I was going to say it depends on how full it is whether you might get in or not also at this meeting you remember I was telling you about the Marine Core?

Yes

There's the time cause you've been a Naval aviation cadet wearing the blues and the white hat and the white shirt black tie and black shoes or the white uniform with white shoes and what have you. Now's the time for your designation I want to be a Marine that's graduate a second lieutenant in the Marine Core or an Insan in the Navy. At this time you make a designation these are things it affects if they have a certain percentage that they allow of the class say if they had a class of 100 and they've got an opening for 20 Marine pilots whenever they get in the amount of time then they take who has the best records gets the 20. And there might be 10 guys or if there 30 guys tens guys don't get to be in so their going to be what else they put in their application for patrol plane or fighters or dive bombers or what have you. At the time I said I wanted to be a Marine but I changed my mind and I wanted to be a Navy pilot. And my buddy he finally when I'm about that far he is finally finished at Murray became eligible to go for flight training he passed his eye exam.

Interviewer: Oh great

Borland: So he passed and he was then going to go to flight school. We communicated by letter or talking to each other or writing to each other. So I had made I said I'd really like to fly patrols you know and they said fine and you could fly that and also be qualified to be an airline pilot. Because if you can fly that you can fly an airline pilot too and you do except you'll be able to land on the water. Of course you land on sea and water.

Interviewer: Right

Borland: Well that's what I was going to put down but as a Naval aviation I didn't put in for the Marine Core and they really had room enough more than was applicable. The applicants didn't fill their quota and then they'd turn around and try to ask guys you know say would you like to be a Marine your going to be flying the islands you won't have to fly off no aircraft carrier you don't have to do this and they

pulled. But I wanted to be a navy pilot and I thought I wanted to fly a P-Boat that's what they called it. Well as a navy aviation cadet you have to go to chapel on Sundays if you don't whether you're catholic or protestant or whatever you are you still go to chapel. And I went to chapel one Sunday and I was coming out and the chapel was right next to a fighter training base and just as we came out of chapel three planes flying wing tip to wing tip vertical went around that chapel like that. I said look at that those guys are flying that's what I want to do so when we put in for that I put in for fighters. All pilots want to be fighter pilots a lot of them want to be a dive bombing squadron or torpedo squadron. So I got the fighter squadron and from that you fly the same type planes as a dive bomber or a torpedo plane but the training is a little bit different you still do gunnery and you still do drop bombs. But more concentrated than certain areas if you was going to be a patrol plane you'd go over to the patrol plane and you're not going to do any fighter shooting you know shooting the sleeves and targets and driving bombs rockets and what have you.

Interviewer: Now could you tell among the guys you were there with what the highest percentage wanted to do or was it pretty much evenly divided based on taste and personality?

Borland: A lot of guys didn't want to leave home.

Interviewer: Really

Borland: They'd want to get their wings and be an officer but the wanted to go back to Norman, Oklahoma or Norfolk or someplace and be a flight instructor.

Interviewer: Yeh

Borland: And from that you will teach other aviation cadets and you'll be in half of the United States and go on over to the old club every evening and get married and have a good time.

Interviewer: Yeh

Borland: You'd be surprised the amount of guys that wanted to do that. And but there was a lot of guys who are tigers them damn Japanese I want to fight them we're going to show them who's the boss. I probably had that attitude a little bit especially when I saw because they was really winging it around.

Interviewer: Yeh

Borland: And I liked that flying upside down rolling so I got gunnery I got the fighters and then we started gunnery school and they had a 30 caliber machine gun just one mounted on the nose of this plane and it shot between the prop. When the propeller was like that it shot it went up like this got loaded and shot 30 caliber and you'd charge it up there and the ammunition was up there and it was right above your nose there right off of the wind screen. Well you had to take your turn pulling the sleeve as well as shooting at the sleeve so it gives you a little say you want to be confident because you don't want to shoot up the sleeve making there are different runs you make. You learn to make overhead un side runs opposite runs low side a high side is a say this is a target and you go over here your up maybe two or three thousand feet above it like that and you roll over and come down and learn

how to shoot the sleeve or the target they were pulling they called it a sleeve because it is probably two and a half foot diameter and probably 30 feet behind and their pulling it behind form the plane. So you learn to you ever duck hunt?

Interviewer: Yes

Borland: Well you have to lead its like dove hunting this dove comes by you have to lead him.

Interviewer: Sure

Borland: Well it's the same way with that sleeve you've got to learn even though you're flying at a certain speed your coming at an oblique attitude

Interviewer: Yes

Borland: And the more perpendicular you are to the flight to the target the more the lead is as you decrease around like this there's less lead. And in fact that's the reason you take your turn toying because they don't want these guys coming shooting like this or shooting back behind and you look and see those tracers go by and that's not too happy.

Interviewer: Right

Borland: You think you're going to give your buddy a little hell when you come back say I saw you come in flat side like that and you're going to be towing tomorrow.

Interviewer: How many feet were between the plane and how much tow line was between the plane and the sleeve?

Borland: I'm going to say probably I don't remember but I'm going to say at least a hundred feet.

Interviewer: I hope so.

Borland: At least a hundred feet. And you do not carry it with you to drop it out the back you take off with it in the fighters.

Interviewer: Okay

Borland: Now later on the bombers take it out because their staying on target until you come out and shoot at it. This is only in jet squadron in jet squadron when the bombers were taken I was in jet squadron too if you want to go this far.

Interviewer: You bet.

Borland: But they'd turn around and they'd hook it on the tail of the aircraft and they'd take it up the runway and your back here and you see the guy with the sleeve up here and you hold on power and get it rolling to about there and then you'd let it go. And you'd go on down the runway as you come around and you see the guy right here with the sleeve holding on to the tail of it because he is going to snap it

like that. You'd come by and you should have flight speed in other words the climbing speed enough speed and you pull back on the stick so you go up like this and then right before you get stalled you lean it over and that acts as a pulley. So you went by like that he snapped it like that and the line goes up like that and then goes over like that so you don't drag it across the runway. If you drag it across the runway you're going to tare it up. So they teach you that you know and its mostly one guy could do that but it's your turn buddy you flat it's my turn tomorrow. Now you say well how do you tell whose bullets are whose? You probably never thought about that how do they know whose bullets went in to the sleeve? Not just one guy because there's four to six guys down there later on in combat type aircraft there's just four of you and in jet there's just four of you. But anyway the bullets are put in the range that holds the bullets you know for a machine gun. There's a tray with a color with about this deep of color in it some is green some is yellow some is red and some is black so they take the bullets and dip them like that and just the tips of maybe a quarter of an inch got the paint on them. And that's not a drying paint but you see its just the tips and it doesn't affect the lands of the gun you know when they fire just the bullet comes out with the little tip nose tip of it got paint on it. And that's a nondrying just goes through the cloth leaves that red or leaves that black. So they know if you come around and you shot a round and you got 20 in there what did you do you shot 20 percent you don't shoot 20 percent really unless your really good. Anyway that's what you'd do day in and day out to become more and more proficient. You come he's coming you learn how to come underneath him like that and shoot the head on sleeve you learn to go over him like this and roll over and do a vertical sleeve high side, flat side, low side you do all of those because in combat how do you know he's not going to come flying any particular way. You're going to meet him in many different ways.

Interviewer: You bet

Borland: You really don't think at least I didn't in combat about this guy in there. I'm thinking I'm going to shoot that plane down I'm going to be the better to do that. That's the reason I'm trained for. I'm not thinking about well I'm going to kill him does that sound unique or different.

Interviewer: It's understandable.

Borland: I'm not thinking about this guy with the goggles and the Japanese person in there.

Interviewer: Sure

Borland: I'm thinking about the plane I'm going to out maneuver to shoot him.

Interviewer: In the particular task that you have to do.

Borland: Yeh

Interviewer: No that makes perfect sense.

Borland: People don't understand that they think gee your shooting at this guy your trying to kill him I never really in all the combat I had I never really thought about I'm trying to kill him. I am trying I don't care if he bails out I'm going to win the attack here and he's not going to be able to attack if he bales out

and I'm not going to shoot him on the way down. Japanese people Japanese planes would shoot our guys that bailed out. And some guys it made so mad that they would do that I never got that mad at the time to shoot one that probably only happened once or twice to me. But I never was that belligerent to do that to a person regardless and not liking Japanese I don't necessarily care for Japanese people now.

Interviewer: To this day?

Borland: That's true I just its for years they tried to kill you you know I'm just not forgiving of that I maybe that's not a Christian but whatever I'm just not a forgiving person for that. But anyway getting back to the story they teach you the gunnery how to do all of these different maneuvers and how proficient you get. They also take you out to learn to teach you how to drop bombs. A bomb is not just in Navy fighter pans and in dive bombers you dive at the target bombers have a different type of bombing scope when they are flying straight and level and drop for trajectory. The trajectory do to you depending on the angle of your dive and the and where you drop it is how far it's going to be. So we had a certain altitude to drop and a certain dive angle to dive at. And you dive by your artificial horizon because your going your diving below the artificial horizon and sooner or later you can tell what your looking at but when your diving down like this the horizon your down like this and the horizons is up here when your going down like this.

Interviewer: Right

Borland: But you want to concentrate on the target and you say am I diving at 70 degrees you look on your horizon and that whose you what you are because the bar is up this high.

Interviewer: How many bombs under there how many bombs on the plane?

Borland: Well we carried miniature bombs we're not carrying big bombs we're learning practicing how to drop them. They were probably this long (about 6 inches) probably about this big around (about 4 inches) cast iron they had fins on them metal fins just long and the end of it there was a place like a shot gun shell went in there. And when that hit that shot gun shell would go off and make that big smoke part and probably some of the bombs would be gathered up to be reused and some were broken. Because you maybe start at an altitude back then you probably start about 6, 7 thousand feet roll over and make your dive at this target. And release at maybe 2,000 or 1,500 feet and pull out.

Interviewer: Okay

Borland: Now there's a story about this. The bombing is the last thing that you take in the advanced training your doing some but your trying to get more proficient bombing but your still doing gunnery and your doing bombing but the gunnery came first and then you do the dive bombing. The rockets don't come until you're done with advanced training. Anyway this was March 1944 see I've been through 43 and I'm in 44 training all this time from 42 to this time in different types of training. Well I'm within two weeks of graduation and it's March and what is March basically weather what do you think about in March? Wind

Interviewer: Sure

Borland: Windy March

Interviewer: You bet

Borland: Well it's as windy in Texas as it is in Illinois. And I'm going out and I'm doing fairly well in bombing I'm not making bulls eyes all the time but enough to make myself qualified. So the instructor takes me out and says I'm going to qualify you Mr. Borland on your bombing but they aren't qualifying in gunner but I told you how they do that you know the marking like you had to shoot like maybe 8 or 10 percent. And I'm qualified in gunnery so he takes out he's in there flying with you he flies the plane out to the target area and he circles the target.

Interviewer: Okay

Borland: And he can tell and he's got his map there with the target and he Xs where you hit on the target there because it's got a big circle and a smaller circle and another one and a bulls eye. And like the bulls eye would probably be 25 feet of solid white and then 50 foot circle and 100 foot circle. Of course when you're coming then in an airplane that's not really looking so big.

Interviewer: Right

Borland: Well it was windy that day I went out there and I had bombs all over Southern Texas I'm teasing about that.

Interviewer: Yea I know.

Borland: I wasn't even getting maybe ones in the 100 foot circle maybe two cause I would turn around dive down like that and the wind was blowing so fast you would cork screwing down trying to get on the target the wind was blowing so hard. And so we come back and he said Mr. Borland I can't pass you. He says hell you only got a couple in the big bull's-eye I said well it was pretty windy up there. He said you will have to learn how to compensate for that and says we'll wait a couple of days and maybe the wind will calm down and maybe you can do better. Well a couple of days passed by and it hadn't well it had calmed down some but it was still pretty damn windy. And he says you better qualify today because is not you might have to go back through the training because you passed all your other trainings but they might put you back to some part not qualify you for this particular as a fighter pilot. I said we'll go so we took off and I'm by myself in the plane and he's down there I said I'm going to qualify as I told you earlier I had made up my mind that I had not been successful in a lot things but I was going to be a successful fighter pilot. So we went down there and I rolled it over and I carried the bomb almost to the target I almost landed on the target and I did all 8 of them that way I mean there was probably 5 of them in the bulls eye because I was right down. When I was pulling out I was going across the fence.

Interviewer: Oh Lord

Borland: I mean tree top high. Several times he abolished me about that said you carried that a little low there Mr. Borland now let's don't have that anymore. I said either I'm going to make it or I'm not going to make it. So we got back and he said you know you were really low and I said Sir and I think he was a



Lieutenant I said I want to be a Navy fighter pilot I was going to get those son of a bitches if I had to land down there and park it drop them down there and take off. Bad attitude you are in that's the kind of people we want. Then in a couple of weeks I got my wings and I was sent to Vera Beach, Florida and these are the guys I was sent with and that's when I first got there (showing the interviewer a picture).

Interviewer: Could you if you could just hold that up. Could you tell up again who those gentlemen were?

Borland: Well this was taken down there but not with the original guys that I first took my training with. I don't have I don't think I have an original but this was with the guys I was still taking training with. What do you want me to say like this guy here?

Interviewer: Yea just who they are.

Borland: That one there is Gus Alstead who was from Tacoma, Washington. I saw him about 6 or 7 years ago I've tried to communicate with him but I don't I cannot find the telephone number. The next one is me. The next one was a very close fellow who just died about two years ago his name was Leal Williams called him his nickname was Will. He and I were roommates aboard the aircraft carrier during WWII which I'm going to show you the aircraft carrier. And these are all night fighters and the next guys in the khaki pants there his name is John Carter and he was from Strathern, Pennsylvania. We was in Hawaii out at Barbers Point got up in the mornings and went out carrier qualifications they carried us out there just to qualify the pilots. Well you make your procedure around the carrier and saw Jake that was his name his name was Jake Carter turn come around land on the carrier took a hard bounce went off the bawl he didn't make the landing he skidded off the bawl.

Interviewer: Oh gee

Borland: A carrier going 30 knots cannot stop you know it's a huge ship.

Interviewer: Right:

Borland: And I saw him go off the bawl and go down like that cause I was on the down wind leg and saw it. Of course we ceased flight operations then because we had lost a pilot never picked him up. The next guy is named Niles Jarrett he's from Miami Beach, Florida Miami, Florida. He and I became real good friends of course we were in operational together because he had began was a dive bomber pilot flying SBDs and wanted to transfer to fighters and they put him in the night fighters with me at Vera Beach, Florida and we became very good friends and flew a lot together. He was a lieutenant and I was an Inson. And the next guy is named Jessie Creasman Jessie was from Georgia and we became friends but not as close as Williams and Jarrett. So those are the guys they were all night fighters.

Interviewer: Yea that's alright. Great now Vera Beach.

Borland: Vera Beach, Florida fighter training had to go trough fighter training which was again gunnery out over the ocean about 20 miles out to sea to keep from the guns firing back shore. Did gunnery every day dropped again the miniature bombs with the combat type aircraft it was Hell Cats F6F Hell Cats.

Interviewer: Okay

Borland: And that was everyday and become a fighter pilot. So we're ready to go to a fighter squadron because we are qualified as fighter pilots. They came by and showed us a night fighter a twin engine F7F Bear Cat not a Bear Cat it was a I forgot what they called it now. Anyway they dangled it in front of you and said if you guys switch over to night fighters you'll be flying this type aircraft. Boy I looked at that it was about 40, 50 knots faster some type twin engine wanted to fly that wanted to be that so I says you can count me in. Well probably out of the flight group which I don't have a picture of 3 out of 6 guys went to night fighters I was one of them and went in a fighter never saw that airplane again. Just used the same Hell Cat only it was rigged for night fighter put a radar on the starboard end wing put a radar inside the scope in the center of the instrument panel. And then we started procedures for night practicing night intercepts night navigation flying complete instruments taking off almost complete without seeing anything and that was complete training. So finished the night fighter training was sent to Charles Town, Rhode Island.

Interviewer: Okay

Borland: That's south of Providence and we was up there was in I was attached to a night fighter squadron BFN110 everybody in there was night fighters. And there would be four of you take of we learned night take offs instruments I mean we had to make instrument landings back to the field it was soupy but that would make you an instrument pilot you know a qualified night fighter. Well they after that we were sent to Barbers Point, Hawaii on the Island of Oahu.

Interviewer: And how did you get over there.

Borland: On a ship I forgot the name of the ship it was a troop carrier. And it was oh I would say about 10 of us night fighters had the same orders and we went together.

Interviewer: Great

Borland: It took four days I think at least on the ship to get to Pearl. Then we went from there over to Barbers Point which is on the Southwest corner of the Island of Oahu which is a big naval aviation field. Well they broke up the BFN fighter squadron and put us in what a night fighter units and so these are some of the guys they added more later.

Interviewer: And how many pilots were in a night fighter unit? Four of you is a team right?

Borland: Yes they once you board ship you only fly two at nighttime off of your particular carrier. I've got the picture here of the night fighter someplace.

Interviewer: I can probably shoot that later if you want me to.

Borland: This shows the Hell Cat coming aboard in daytime this is just a day fighter coming aboard.

Interviewer: Hold that up boy that's a great picture (holding the picture in front of the camera).

Borland: I wonder if the picture of all of us is in here. Excuse me a minute for taking up time.

Interviewer: Sure

Borland: Here they are there's one, two, three, four, five, six, seven no one, two, three, four, five, six, seven, eight.

Interviewer: Eight great

Borland: And here's a picture of us all together. I don't think you can get this on your

Interviewer: Probably not I might can zerox this.

Borland: this guy named Tyree he was from Louisville his name is Gus I forgot his name he was that's the guy that was a night fighter I talked to he was from Washington. Jake Trask was a Lieutenant who was our fighter director he trains with you and he talks to you down in CICS Combat Information Center giving you directions how to intercept this particular plane and he was he was had a member of the stock exchange very nice guy. Williams he was my buddy that's Jessie I told you about him that's me Shorty he was the guy from MIT who knew all about radar and ours were all he was a Lieutenant JG Junior Gray graduated from MIT and he knew how to put those radars together for us and he was the head of the shop on the radars his nick name was Shorty. This guy Shaw he add to out there in Hawaii to our group.

Interviewer: Okay

Borland: And Pat who is another guy who was added and that is the picture of all of us right there.

Interviewer: Oh that is great.

Borland: So we were put into a night fighter unit and your not attached to anybody your just unit training care qualifications, gunnery, night flying, night navigation, rocketry until some squadron comes by that doesn't have a night fighter squadron or day fighter squadron they can fly instrument but not qualified as a night fighter. Which is really unique at the time they come by it's our turn we're attached to them that's BF85 and this is the book the BF85. We board ship we're headed for the forward area there was bad relationship between air group personnel and ships company its called there was the reason is they had a crappy executive officer of the ship. As soon as the air group got aboard which was before we did he called them all together and read them rocks and shovels that's Navy regulations. And it's against Navy regs to have alcoholic beverage aboard a Naval vessel but everybody slips a bottle in you know just take a nip ever now and then or maybe more but not very much because there was no way you could hide it. But then once your out in your stateroom you could put in your drawer stuff like that like that no ones going to bother it maybe you want a nip and your not going to be able to buy it any place else when your aboard ship. Well the executive officer who was the second in command of the ship ships company not air group personnel called and told the air group commander to call of us men onboard out on the flight deck to read them rocks and shovels which was about no naval no naval vessel officer or personnel can have alcoholic beverages. Bring then all and we will give them to the

ships medical officer for safe keeping. This is before I got on there this is the story I hear well they brought it and then they put it on what they call the deck edge elevator are you familiar with the flight deck of a carrier?

Interviewer: I'm not.

Borland: You're not?

Interviewer: No

Borland: Well on the porch side that's left porch star on the porch side there's an elevator that takes down to the hanger deck that's the deck underneath the flight deck where they store aircraft and work on aircraft.

Interviewer: Okay

Borland: And that elevator goes up and down on the side of the carrier. There's one forward in the middle of the ship that's forward elevator its right on the flight deck flush with and half elevator. But most of the traffic is on the deck edge elevator because there are things in the way down below sometimes from the forward and half elevator. So all the booze that was turned in by the air group personnel is sitting on the deck edge elevator and the commanders up there on the island, that's the supper structure reading rocks and shovels. And no navy officer or naval personnel will have medical or liquor or alcoholic beverages aboard my ship. Over the side and here's stacks of guys Seven Crown and Vio and whatever pushed off the side the word is pissed off. They wouldn't speak to each other this all happened before I got aboard.

Interviewer: But it's a tradition by the time you get there.

Borland: Yes they call it the shitty shang the carrier I was on was the Shangri-La they called it the Shang the Show Boat never Shangri-La. And the hell with them and there was bad relations between the ships company and the air group personnel. We came on later and we were sent out there to fly aboard the ship as to qualify on it night fighter not even knowing what had taken place the air group personnel was taking off because of the problems with it. Well I'm out there we're out there six of use are out there qualifying and what can we do and you guy get these quarters and they were happy with us because we were the first pilots being friendly with an attitude you know. So we found out later why these others so the navy says well there not going to tell us how to run the navy the air group goes aboard the ship the ship will have to lump it or like it and the air group personnel will have to take what they've got. We're assigned super staterooms as night fighters there three was guys who had what do they call them skunk hall or boys town that's where junior officers sleep which is usually about 10 and 12 officers with their bunks and their drawers chester drawers down there a matter of speaking. And I'm staying in a stateroom that's probably equivalent to a commander and I'm just a Inson. But we had also because we was night fighters we got up at like 4 o'clock in the afternoon and was up all night long and went to bed maybe 6, 7 o'clock the next morning. Because our time was all night long so anyway we had there was Creasman and Cherry and Williams and I were in the same stateroom real nice stateroom. We were

right next to the linen closet. Now between our stateroom and the linen closet was a space about two feet for air space so we had linens all the time we wanted. We'd just reach over and change our beds whenever we wanted new linens and put them over in the dirty linen supply. So we had a good stateroom and there was a telephone book on this aircraft carrier because there are so many staterooms of air group personnel there's commanding officers your squadron commander other guys that you flew with had a stateroom and you could pick up and call them on the telephone you know it was a dial phone. That's quite different you wouldn't think that aboard during WWII and we had a fan in there it wasn't air conditioned the stateroom had air condition up in the pilot ready room. Now we would get up like 4 o'clock in the afternoon as the day pilots were getting landing and as soon as the day pilots landing that's called a ready deck in other words their landing. They'd switch them around and have what you call launching deck and there putting the night fighters up in the area for launching. So were eating for breakfast what these guys are going to have for supper. So we go up in the ready room and of course they're not up there it's just us night fighters and maybe some personnel who might be getting some information of what we're going to do tonight information target area as well as a big screen up there that will show what we are going to do. And there's all eight night fighters two of them is going to fly at say 6 o'clock and two more are going to fly at 10 o'clock because those come back and then at two, two mores going to fly at 2 o'clock. Now each of the six carriers task group are going to put up night fighters so there's not just us two taking the whole fleet. The other carriers are putting up their night fighters and doing their rotation as we are. As you are a junior officer which I was an Inson and this Lieutenant JG, Lieutenant, Lieutenant Commander and Commanders and I finally made Commander. But anyway that was during the Korean War but being a junior officer who's going to fly from 10 o'clock to 2 o'clock because the ones that fly first get to take off at day light but they had to come back in the dark. The ones that fly at 10 o'clock they are going to take off in the dark and come back and land in the dark. And the ones who get the last flight take off at 2 o'clock and come back four hours later and it is going to be getting day light. That is the best one of the night fighter.

Interviewer: You bet.

Borland: So being a junior officer I flew usually from 10 to 2. So now a ready room here we're sitting in a ready room we've got our own seats you put up your light gear and your may west and your oxygen mask and you helmet and stuff and your 38 and what have you. So you know what your mission is that's when you're going to take off at 2 o'clock we know what we're going to do so what else you going to do? We would play cards but the ready room is red like a dark room for a photo.

Interviewer: Yea

Borland: You know why?

Interviewer: No

Borland: Because your eye liquid in your eye is called visual purple and there's a chemical change it takes about 30 minutes for it change so that you have night vision. Red does not do red lights does not bother the visual purple so we have whenever we get in there off goes all the lights and all the red lights come on. You can see but everything looks pinky or reddish the instrument panel on night fighters don't

have any white lights that show the reflector they have automatic false instrument panel over that with red lights behind that show your instruments glow red.

Interviewer: Okay

Borland: So it didn't destroy your night vision so your sitting there and you can see out believe it or not you would be surprised how much you can see because you're not looking with the sensitive part directly behind the pupil. It's mostly the other around that and the chemical reaction that takes place lets you see. So how are you going to play cards? Well you have to take an ink pen and go around the hearts and diamonds so you can see what it is because you cannot tell if that's a heart or a diamond under the red lights.

Interviewer: Right

Borland: You would have never thought of that would you?

Interviewer: Great

Borland: So we'd play cards or AC Due C or something like that maybe an hour before the time and then we'd start getting ready for the briefing on our flight. One night I took off I went up and got you'd get ready maybe 30 minutes before your take off get in the cockpit and you'd do everything except start the engine. And I was turning everything on and my gun sight wouldn't come on but it come on bright. Now as a night fighter pilot with your night vision and everybody uses red wands up on the flight deck none of them white going up there and the only thing you see is red and green lights on the wing lights only at the time on deck operations. You take off your lights go off so your sitting there I'm in there and this was May 11, 1945 about 10 o'clock well I'm checking all the instruments and I'm checking my gun sight and the damn gun sights not working right. It come on real bright and I couldn't see anything but the gun sight is orangey colored and puts lines on there and I turned it back down and said oh hell I haven't used this gun sight in the last two weeks anyway. I said and I'm not going to be one of the guys called chicken because I didn't down the plane because the gun sight wasn't working so we took off on our mission which is catapult by the way all night fighters at that time are catapult no deck launches. We was catapult and as soon as you catapult its like jumping right in you're on an ink well you just continue on an ink well. And you're flying and you're on instruments air speed indicator jumps up turn and bank indicator artificial rise, direct jiral where you're going and you're going out to the target area. Well this was what they call night cap, night combat air patrol, any plane that comes in the area is intercepted. And in the interim B29s are going up towards Tokyo or Japan but they're flying the area they better have on their radar or IFF, Identification Friend or Foe radio thing, which could be intermitting and triggered to say what it is and that changes so that the enemy couldn't get it it changed ever so many hours Identification Friend or Foe. So here comes some guy without his IFF on they want to know who in the hell it is.

Interviewer: You bet

Borland: So the nearest night fighter to it intercepts it and that's the fighter and he can fly pretty damn fast if he has to go wide open he goes and gets it and looks at it first. Our radar had a system that you could shoot down the plane on radar. We couldn't use it because these 29s running in there and if some guy forgot to put his IFF on and you shoot down a plane that you didn't see but you run up on his tail and shoot him and it was a B29 you were in problems. So they made it so the night fighters had to identify it at night time before they could shoot at it. Back in the ready room up on the screen they put flashes of the different types of enemy planes and the friendly planes. Pink off pink and it would tell what it was and you'd identify it and you learned by side view rear view and top view and their silhouettes so that you could normally identify them. Well May 11, 1945 we was completing our turn coming back to the ship and I had rendezvous on this guy names Shaw he happened to be closer and whoever's closer come back and join us and come back to the ship for night landing. Well and we're called bats doing that very thing night fighters called bats the leaders bat one the second ones two the third one and I was bat three and the younger guys Shaw and Patton were bat five and six I think something like that. And they said they said bat five we have a bogie buster very so and so and so he goes full force in the direction they send as the fighter direction. And I said this is bat three I'm flying column on bat five so that means I'm flying right underneath him like this then not leave me alone I'm going to go with him. So we're going as fast as we can towards the target for an intercept not knowing what it is well we make the correct intercept you circle around get in behind it then you come like this in behind it lower usually by 1,000 feet behind it the unidentified aircraft. Well this pilot the other guy he was naturally excited as this is going to be whatever every time you're excited because it could be friendly or enemy. And he is really going like hell and I'm flying underneath him in what they call column well I look over his wing and I see this other plane. So I immediately pull throttle back and put down my wheel put down the flaps put down everything to increase the drag to stay behind because we're really coming up really fast and he didn't he went right underneath him gone right past. He said bat five I lost. Identify the bogie and I pulled the wheels and everything and I said this is bat three I have a visual on the bogie and he said roger bat three identify it. Well I look at it and I move this side and I said it's a Betty it's a Japanese bomber called a Betty it has a twin engine looks like a very similar to a B26. And he said roger bat three shoot him down well the light won't you remember the first time I've ever made an intercept on an enemy plane what's it my gun sights not working but I had shot it many many times and you knew approximately where the things are. So but to profess this I had been in the Philippines and talked to a buddy of mine who was down in Vera Beach with me his name was Luke Calvin and he had just got shot down by a Betty and was picked up by a sub and made it back alright. But as he pulled up behind it the guy like that shot him up he went down in the ocean fortunately he was picked up. Well that's on my mind when I'm going up I'm looking and I see those guns hanging out back like that ole Lou got shot down and he's lucky he didn't get hit in the cockpit. So I turn around and turned all the guns on six guns on and start shooting at it see night fighters don't shoot tracers so you can't tell where they go because they'd light up and give your position away and also destroy your night vision. So you're shooting ball armor piercing ammo no tracers so you don't know where in the hell they are going so as the bullet goes through the skin or the fuselage or the area of the airplane it makes a little white speck and I saw them speckling on the port side of the airplane but he just kept on flying. So I turn around and move over to the starboard side and started shooting at him from this side I could see. And after I can't tell the time element because I just you're kind of nervous but your not nervous that you can't perform

your duty you practice and practice and all of a sudden the starboard engine burst on fire and a lot of smoke and sparks came back through like that. So I slowed down a little bit and pulled in right behind him started shooting at him and then he started down to the left port like that as he started down I started shooting at him. Probably in a couple of thousand feet not very long a few I can't time that minute or two went in some clouds. He went in the clouds and I just pulled all of the power off and went straight in in the clouds and but I could see a little glare of the flames from the glow of the engine and it wasn't big fire it was just a glow from the engine start engine. I went in and I saw that and then I came out and I shot at him again but even with the throttle off I'm coasting and to stay up with him going up or down I'm gaining on him he's going slower than I am and I'm gaining on him so I had to pull off to the side of him. I'm sliding up beside and I'm looking over at his engine with sparks and smoke and a glow of red coming out this engine and I could see the cockpit and the heads of people in the cockpit of the glass there just silhouettes. I'm sitting here I could take out my pistol and shot at them and I'm sitting here going as slow as I can go unless I just pull up but I'm staying on there I'm looking at him. And he must have saw me because he immediately did a deep turn more to the left as he did I turned around in behind like this and shot at him some more. I burnt up all six gun barrels when I find out I got back to the ship and I shot up about two thirds of the ammunition because I was spraying it all over the Pacific our there at him. We went down to about 1700 feet and I'm not going any closer to the water than that and I thought maybe I'll see him crash or flare never saw any more. So I come back and I debriefed but you don't get a kill unless there's two things happen on e that the photo that your camera takes a picture of the kill in the daytime or your flight people with you whoever's flying with you see it go down.

Interviewer: Which didn't happen?

Borland: Which you can't have a gun camera at night time and no ones flying with me at the time so that's the way it is. It's not a kill until its verified that way it's a probable that's where you heard this word probable's so I get a probable kill. I but that was the only combat type of shooting at an enemy plane well that a night fighter like that that happened of course I had other missions some intruder missions and night caps. A shooter mission's where you fly low into an area that you just strafe at night time and keep them awake so there's 24 hour problems there. Now

Interviewer: Let's see how we're doing time wise

Borland: Okay you're blinking.

Interviewer: Am I blinking still?

Borland: Yea

Interviewer: Okay we're just low we have a couple of minutes and I have a suggestion for us.

Borland: Okay

Interviewer: I think what I'll do is wrap this up with if you fill like it at some point picking it up from here.

Borland: Yea



Interviewer: Can we do that?

Borland: Sure

Interviewer: Great let's do that

Borland: I was going to tell you how difficult it is and the procedure to get on a carrier at night time.

Interviewer: I want to know this I want to know this.

Borland: Really really tough

Interviewer: We're at the end of the tape and I do want to pick this up from here so this is as good place to stop. I want to thank you for your service your time for doing this and I want to pick it up from here okay.

Borland: Now I'm going to let you.

Interviewer: Let me stop this for a second and then I can take (tape goes off).