

Thoughts on last week's B-24 Flight Experience

4 OCT 2004

At the suggestion of my brother Jim, I took a flight on a B24J Liberator bomber last Monday (27 SEP 2004). After the passing of my uncle Al in March of this year, my siblings and my cousins became interested in Al's wartime experience. In going through his personal possessions we found lots of souvenirs and memorabilia from his time in the service including his uniform, military scrip, photos, a hand grenade (inert) and, several gunner's training manuals.

Near the end of World War II, Al was a ball turret (belly) gunner on a B-24J in the Pacific and when Jim found the Collings Foundation and their flight worthy B-24, he did not have to ask twice if I wanted to go for a ride. In fact, this was true of all Al's nephews...the response to the question of a ride on a B-24 was never "maybe" or "I'll have to check my schedule". The answer to the question was always "when?" The plan was hatched standing over Al's casket at the cemetery service on March the 6th and it was executed one week ago today...

The Consolidated Aircraft Company built B-24J #44-44052 in their Fort Worth TX plant in August of 1944. It was lend/leased to the RAF and saw action in the Pacific Theatre before being abandoned in India. It was restored to flying condition by the Collings Foundation and named the "All-American" after the original plane of the same name (#42-78444) which set a record for enemy aircraft shot down in a single mission (14) over Germany in 1944. In 1998 it was repainted to match the original Dragon and His Tail (#44-40973), which was the last B-24 to be scrapped in the Arizona desert. The current FAA registration for B-24J #44-44052 is NX224J.

As I attempt to document my thoughts and feelings about this flight I have to say that it has taken awhile for the experience to really "sink in", and it will probably continue to "sink in" for some time to come. Prior to the flight I was excited, curious and a little apprehensive...

- Excited because I have always enjoyed non-commercial flying the few times that I've done it and I expected to enjoy this flight as well...the feeling of freedom that comes with flying...
- Curious because I was very interested to see what the inside of a B-24 was like and how it was equipped (mostly to satisfy the engineer in me who always wants to know things work).
- Apprehensive about what feelings were going to come from this experience...what would it be like to more-or-less step back into history and see things that Al saw, do things that Al did, and feel and hear the sounds that he heard.

Mostly I saw this flight as a way to honor Al's memory specifically, but also to honor the many young men who put themselves in harm's way by climbing into machines like this every day to protect the freedom of the folks they'd left at home.

We met the folks from the Collings Foundation at Boire Field in Nashua NH. Jim had arranged for a flight at 9AM and Al must have been watching out for us because we

could not have asked for a better day to fly. All of Al's nephews were able to arrange their schedules and with the addition of Jim's brother-in-law, Larry (who also had an uncle, Ken, who flew B-24s during the war) we had a full crew (Collings won't go unless they get at least 6 riders). Beside me, our full "crew" consisted of my brother's Jim. and John, my cousin Chip, my cousin Alfred, Jim's brother-in-law, Larry, and a pilot, a co-pilot, and a flight engineer from the Collings Foundation.

Since Al's passing, Jim has been in contact with "Kelly's Cobras" which is the nickname of the 494th Bombardment Group Association (which Al belonged to). Jim has also been in contact with Randy F. who is the son of the co-pilot on Al's crew. Apparently Randy and Al had spoken on several occasions as Randy tried to fill in some of the blanks that he had regarding his father's military service. Between the 494th and Randy, we have collected tons of information about Al's experiences during the war, and learned a lot about the other guys in his crew. As a tribute to Al and his crew, we decided to take a "crew" photo that imitated the photo taken of Al's crew on the Island of Angaur on 22 APR 1945 (minus the two members of that crew who had passed away this year - Harris H., the navigator, and Al). We talked two of the Collings' crew into filling in for the Pilot and Co-Pilot and took a "missing man" picture. Our intention is to send it, along with the original from Angaur, to the 494th for their newsletter as a way to contribute to their efforts in honoring the memories of Kelly's Cobras. One note in the subject of tributes to Al and his crew: Jim wore Al's uniform, my brother John wore Al's flight suit, and I wore Al's shirt from his most recent Kelly's Cobra's reunion. I also had in my pocket the crew photo taken on Angaur in 1945, and a crew photo that we assume was taken at "graduation" at Muroc Field (now Edwards AFB) in December of 1944.

We got a short "pre-departure" briefing before being told to get aboard. I ended up at the front of the line and was the first one to climb in. I entered the aircraft through the bomb bay and went aft into the rear crew compartment. The first thing I noticed was a sign on the door to the crew compartment behind the bomb bay that said "Warning - No Smoking In Bomb Bay". It is funny, the thought of smoking within a mile of 3 tons of high explosives, 5000+ rounds of 50-caliber ammunition, and 3000 gallons of aviation fuel never even crossed my mind until I saw the sign, and then I couldn't imagine how anyone would even consider smoking under those conditions. The sign certainly seemed redundant and I started wondering if it was maybe the expression of some aircraft builder's sarcastic sense of humor... The ironic part is that as dangerous as smoking in the bomb bay might have been - I have to believe that it was among the least of the crew's worries...

Once through the door of the crew compartment, I immediately had to climb over the retracted ball turret to get to the area where we would sit for take-off and landing. As I climbed over I marveled at the size or rather the lack of size of this turret. Ball turret duty was not for someone with claustrophobia, someone with any physical size, or someone with a fear of heights. The ball couldn't have been much over 3ft in diameter and once the gunner was in it and the door closed, the ball itself was lowered so that it was completely below the level of the fuselage. In this position, the gunner was completely dependent on other members of the crew to get out. The ball turret is almost

completely glass and afforded the gunner a view that was not available anywhere else on the aircraft. It would have given the feeling of being suspended in space, which in fact was exactly the case. Al was always sort of easygoing kind of guy and I rarely saw him get upset or flustered. This personality trait was confirmed when I saw that turret and thought about him willingly climbing in there. In fact, he used to tell the story about flying in the turret and once it was lowered, pulling the pins on the gimbals so that the turret would “float” rather than remain locked to the hydraulics. While his crew mates made the best of the “spartan accommodations” on what could be as long as a four or five-hour trip to the target, Al was being gently rocked to sleep by the motion of the airplane. Al said that the crew frequently had to wake him up over the intercom when it was time for him to “go to work”.

Once we all got aboard we “strapped in” for taxi and take-off. When I say “strapped in”, I do mean it literally. Three of us sat on the floor with our backs to the frame around the ball turret and two of us sat on the small deck above the door to the bomb bay with our backs to the bomb bay bulkhead. Larry got the “comfy” seat on the floor next to the engineer’s station up front with his back to the bulkhead behind the pilot’s feet. We all had a 4” wide heavy canvas belt with a heavy buckle on it to secure ourselves to the plane. The belt reminded me of the heavy web straps that truckers use to secure a load to a flatbed 18-wheeler. I guess in a way I felt a little like cargo...since the crew is there only to serve the needs of the machine.

We all strapped in and waited... As I sat there I marveled at how this machine was put together. Everything was designed with the needs of the machine first – either its function of carrying three tons of high explosives 1500 miles, or the protection of that function from those that might wish to cut that 1500 mile trip (or the return) short. There is little or no accommodation for the humans that operated this machine beyond what is necessary for them to actually operate it. This was most evident in our pre-take off seating arrangements, but also in the un-protected control cables that ran through the space, the piping and tubing for oxygen masks, the wiring for the intercom and heated flight suits, and the mechanisms for feeding ammunition to the guns...all of which was exposed. We were warned before boarding to be very careful about what we grabbed and how we grabbed it. As I could see from my seat on the floor, there was good reason for the warning.

The other thing that I noticed while we were sitting there waiting was the smell. It was distinctive and Jim described it as a combination of AV-gas, hydraulic fluid, and burnt rubber. He, John, and I have all been on WWII vintage warships and they had a similar smell (stale air, bunker oil, and lead paint). In both cases the smell seems to have permeated the metal itself and become part of the vessel or in this case the aircraft. It gave a sense that the machine wasn’t simply a collection of metal parts, but rather had a soul or spirit of its own. The smell really brings home the point that this is not some replica or model of a WWII fighting machine but the real deal...a machine that logged real hours in the defense of freedom...a piece of history that we could communicate with rather than just one we could look at.

When the pilots started the four 1200HP Pratt & Whitney engines you could tell that this wasn't going to be just any ordinary plane ride. A radial aircraft engine makes a sound like no other engine in the world...it is a combination of a very deep, "throaty" roar and an only slightly higher pitched "hollow" hammering sound. The engine block of a radial is smaller than that of an inline piston engine of relatively the same horsepower and being air-cooled a radial has no water jacket around the cylinders. Without the mass of metal and water, the internal sounds of the engine are not dampened or "smoothed out" as they are in an inline engine. So, when the ignition fires and the detonation within the cylinder makes a distinctive "pop" (a loud, low-pitched, hollow sound like opening the world's largest bottle of champagne); this lack of engine mass maintains the individual characteristic of each cylinder firing, even as these pops blend into a sustained roar at high RPM. These pops also resonate in the convoluted shape of the exhaust system of a radial engine, and this supplies a tonal quality to the roar that transcends mere noise. With no muffler on the exhaust, the volume of that roar is deafening (we all had hearing protection); so loud that you could literally feel the noise in your chest. The B-24 has a stout/menacing look about it and the "harshness" in the sound of its engines reinforces the impression that this aircraft doesn't "fly" as much as it "intimidates the air into submission".

Al told the story one time of going to see an air show in Beverly MA where this B-24 and the Collings B-17 were flying in. He went with a bunch of his VFW buddies to watch the planes arrive as many of them had also flown bombers during the war. Al said that when the planes got close to the field but before they were visible, the first thing they all noticed was the sound...not in their ears but in their chests. Al said that the sound of the Pratt & Whitney's went right through him and he talked about instantly being transported back in time to a very different place. Now that I've heard that same sound I can understand why, and I only had to listen to it for half an hour...he heard it for many hours at a time!

The pilot spent a few minutes doing his engine run-up and then taxied to the active runway... I had the video camera as far out the starboard side waist gun port as I could to see the take off, but because of where I was seated, I couldn't see much more than the outboard engine and the ground. When the pilot hit the throttles and the engines wound up to full power it was almost surreal – like it was happening but not really happening. I never did feel the plane lift off the ground even though I could see the ground starting to get further away in the viewfinder of the camera. The surreal feeling didn't last long though... As soon as we were a few hundred feet up the engineer rang the "bailout" bell, which was our signal that we were "free to move about the cabin", so to speak. The first thing I noticed as I got up off the floor was the amount of air that was flowing through the aircraft. Much of it was coming in the open waist gun ports, but a lot was coming through the gaps in the bomb bay doors as well. On a colder day, or at a higher altitude, this airflow would have quickly gotten very uncomfortable. As it was on this comfortable fall day, we were all a little chilled by the end of the flight...

After getting my balance, I picked my way past the waist gun mounts and to the rear turret. Another place on the aircraft that was not designed for someone of large stature, it

was less of an issue for someone with claustrophobia. I was able to climb into the turret but I would not have been able to close the doors behind me. (Reggie P., who was the smallest guy on Al's crew, was apparently the only member of the crew who could fit.) The view was magnificent which is why someone afraid of small spaces might not have had trouble. However, after spending a few minutes marveling at the broad expanse of the view, I started to image how narrow that view would have gotten if someone were shooting at me. My cousin Chip summed it up by saying "This is really cool when no one's shooting at you!" There was an incredible feeling of being "exposed" without the opaque aluminum of the aircraft skin around me. Not that the thin aluminum would have protected me any more than the Plexiglas shell of the turret...but the aluminum at least provided a psychological barrier to what was outside the plane. The other sensation about being inside this turret was the feeling of hanging off the back of the aircraft. The rear gunner's position was even further aft than the huge twin tails of the plane, and in fact the only point further aft were the barrels of the 50-caliber machine guns that were controlled from this turret. Jim likened it to sitting on the transom of a rowboat and dangling your feet in the water...if one discounts the fact that my feet were several thousand feet above any water, I'd say that it was an accurate description.

After leaving the rear turret, I made my way back toward the front of the aircraft. I bypassed the waist gunners positions, crawled over the ball turret and entered the bomb bay. An 8-inch wide catwalk runs down the center of the bomb bay and provides the only connection between the front crew area and the rear crew area. "V" shaped struts suspend the catwalk from the top of the fuselage in 4 or 5 places. These suspension points provide the only hand holds on the 15-foot (or so) trip through bomb bay. Although the bomb bay doors were closed, we were told in our pre-departure briefing that they were designed so that the bombs could/would fall through them if for some reason the doors jammed in the closed position. Here again, a thin piece of aluminum provided only a psychological barrier between me and the 2000ft of air below me. However, if the doors had been open and that psychological barrier was removed, you would have been hard pressed to get me to cross that catwalk. As it was, I could do it without thinking about it and I'm sure the crew did also. Someone would have made this trip through the bomb bay prior to reaching the target in order to install the arming wires and remove the safety pins from the bombs. The engineer and the radio operator would also have made this trip to get to the waist gun positions.

At the far end of the catwalk were the cockpit, the radio station, the engineer's station, the top turret (Martin turret), and the walkway (or rather "crawl way") to the nose of the aircraft. The space that I was in after leaving the bomb bay would have been occupied by the feet of the gunner operating the Martin turret on the top of the aircraft. As it was, the mechanism for this turret was retracted up into the Plexiglas dome so that crewmembers could get to their stations (and for our purposes so we could get through to all parts of the plane). On the flight deck, the pilots sat almost shoulder to shoulder and were surrounded by gauges and levers of all types. The view from the cockpit didn't have as much of the "exposed" feeling that the rear turret did even though there was at least as much area of glass. My guess is that the fact that the aluminum came up a little higher on the side and front contributed to the feeling of "security". However, with enemy planes

bearing down and bullets flying I would guess that the pilot and co-pilot also felt a might “exposed”. The engineer had a small seat just behind and below the pilot and the radio operator had a small seat and a table just behind and below the co-pilot. As I mentioned above, both of these guys would have made the trip through the bomb bay to man the waist gunner’s positions but I haven’t totally figured out how they would have done this if the Martin gunner was already in position, since his feet would have blocked the exit from that part of the aircraft.

Below the radio operator’s position was what amounted to a tunnel along the starboard side of the well for the nose wheel. I had to crawl on my hands and knees to get to the area forward of the nose wheel that was the duty station of the navigator, the bombardier, and the forward gunner. The first thing I noticed as I crawled through is that the nose wheel was still spinning (and pretty fast too!). We had been off the ground for between 5 and 10 minutes I’d guess and this wheel was spinning fast enough that you wouldn’t want to touch it. The other thing I noticed on the way through is that the inside of the nose wheel doors are painted bright red and had large letters that said DO NOT STEP. We were told during the pre-departure briefing not to step on the nose wheel doors because they were spring loaded and would open if any weight was applied to them. They served as the bailout exit for the crew in the front of the aircraft. All they had to do was to jump into the wheel well and out they’d go. Here again is an example of aluminum providing a psychological barrier only...

This front section of the plane was actually quite “cozy” for lack of another word... There wasn’t much wind and there was a lot of light from above, below, in front, and from the sides. The domed window above used by the navigator was like a little skylight. There were also two small windows, one on either side, that I assume were also used by the navigator. The whole front of the aircraft had light coming in through the front turret and through the glass on the deck on either side of the bombsite. I’m sure that the “cozy” feeling wore off fast on a long flight but for me I felt like a kid in a tree fort.

The turret for the front gunner was a little larger than the rear turret and had even more glass surface to it. It also projected in front of the fuselage so that it could rotate very far to the left and right (maybe as much as 130 degrees to each side of center?). While sitting in this turret you could see no part of the aircraft without turning almost all the way around. So as you might guess the feeling of being exposed was even more pronounced here than in the rear turret, and as you might also guess the view was spectacular. Leaning forward against the controls there was virtually nothing opaque in my field of vision and I had the feeling of floating in air. I say floating rather than flying because one thing I did not have is the 200-knot wind in my face. There was almost a feeling of peace as I looked out and the sun shined in on me. I’m sure this feeling would not have lasted had someone been shooting at us, nor would it have been as comfortable at night. Actually, at night the same experience would have been a bit unnerving. I think I would have had to hold a firm grip on the controls of the turret to keep from feeling vertigo since in the dark there would have been virtually no visual cues to tell you that you were inside at all.

The bombardier's station was immediately below the front turret. Even though the bombardier got to lie down he was far from comfortable. He only had a small pad on the deck to rest his chest on as he peered through the bombsite. He had large glass areas on either side of the bombsite and had an excellent view of what ever was below the aircraft. (This was a good thing since seeing what was on the ground was a major requirement of his job description!) He had a panel with indicator lights and controls for the bomb load and a complete set of gauges showing airspeed, heading, altitude, etc. I'd assume that this information was "dialed" into the bombsite to calibrate it just prior to use. Jim was able angle himself so he could see a little through the bombsite, but suspects that it may need to be powered up for the optics to really work. I took a quick look but couldn't figure out how to see anything. Then I spent some time just looking at the ground through the glass beside the bombsite. I thought about the fact that the bombardier, the navigator, and the pilot, were the key players on this team. The pilot delivered the bombardier to the correct spot and the navigator told the pilot how to get him there. They were really the ones entrusted with the mission and everyone else was there, basically, to support and protect those three guys.

After leaving the nose area, I worked my way back to the engineer/radio stations and then back through the bomb bay. I spent the rest of the flight looking out the waist gun ports...admiring the view and the start of the fall foliage. The pilots, the radio operator, and the navigator had plenty to keep them busy, during a mission, but the boredom for the rest of the crew must have been unbearable on a long mission. With the intercom system that the crew was all plugged into they could have "chatted" but I'm guessing that they didn't. I picture these guys alone with their thoughts for long stretches of time. Being thousands of miles from home, riding in an aluminum can thousands of feet in the air, with the threat of being shot at and killed would not have been the best time to be "alone with your thoughts". Maybe that's part of the reason that Al pulled the pins on the turret and tried to sleep...and it is also probably why he didn't talk much about this part of his life.

We made a low pass over the airfield before the bailout bell rang signaling us to strap in for the landing. I felt sad that our time was up but I was happy too that we would be on the ground again. I was starting to get a little melancholy thinking about Al and the experiences that he had on a machine like this...I was ready move on to happier thoughts. The landing was incredibly smooth and we floated on the main gear for quite a ways before the nose wheel finally touched down. My folks, who had come to see us off, had decided to wait around to watch us land. My dad, who was using Jim's video camera for the first time, announced that he had gotten some excellent video of our low pass before landing only to discover that my Mom had put the lens cap back on while he had gone to use the bathroom. He felt bad about it but we'll manage OK. I guess it just wasn't a good day for video between Dad's lens cap and the poor quality of the in-flight video I managed to take from inside the plane (as my brother noted...I'm no Steven Spielberg). The tons of still photos that got taken will have to suffice...

As my feet hit the tarmac under the bomb bay I got this dazed feeling that I can't explain – my brain felt numb and it was hard to think. It had started near the end of the flight but

it really hit me when I got off the plane. I can't say for sure why I felt this way, but the fact that I had a flood of different thoughts and feelings all at once certainly contributed. Part of it was that I was back to that surreal feeling I had during the take-off, but now it was more "hang-overish" rather than anticipatory. "Had I just experienced what I experienced or was it some kind of a dream?" I know it sounds a little dramatic, but in some ways it almost doesn't seem like it was real. The experience was so unlike anything I'd ever done before it almost couldn't have been real. I feel like I got to reach out and actually touch history. Like entering the bomb bay was the start of some episode of the "Twilight Zone" and I was transported back in time to fly on this aircraft. Then when I climbed out of the bomb bay I was transported forward again. I think we all felt a sense of communion with the past, the difference being that we were pretty much in control of the situation that we were in and the guys who flew these planes for real were flying into imminent danger every time they took off. This lack of imminent danger gave the experience a sort-of "hollow" feeling which, although I could certainly live with, may have contributed to my dazed feeling as I stepped back onto the tarmac. Jim talked about a brief moment as we were landing where the sun came in the port side gunner's station and hit him in the face as he sat with his back to the ball turret. It warmed the chill from the air and left him with an overwhelming sense of peace...like Al was saying thanks for doing this for him...and like he, Harris, Don, Ralph, Marty, Art, Bob, and Chuck (the members of Crew 4B that have passed on) were smiling. I guess I got a similar sensation and for me there was a sensation of confusion as well – I had learned enough about these guys that I felt like I knew them but then when I finally got to meet them, I didn't know what to do next...like I was standing there with my mouth agape. My mom took a picture of me right after I got off the plane and I look a little like I just woke up. It says a lot of what I felt like...

When I tell people about the flight they all ask what it was like...I don't think I will ever be able to accurately describe what the whole experience was like, but I tell them it was exciting, it was interesting, it was fun, it was a little sad, and it was sobering. I tell them that I have always had a healthy appreciation for what the folks who wear our nation's uniform do for us and having had this experience I now have an even better understanding of the sacrifices they made (and continue to make) in the defense of our freedom. Whatever these folks did (or do) after their time in the military, they can always claim that they did at least one significant thing with their lives.

The part that I will never be able to explain clearly is the thing I really took away from all this... It was the sense of what my uncle had experienced during his time in the service and feeling like I had reached out and touched him (or maybe it was he who reached out and touched me). I liken it to the times he used to take us out in his Model-A when we were kids - a noisy ride with the wind blowing in our hair. It was one of his ways to have fun and share a memorable experience with his nephews... Having Al take this flight with us in the flesh would have made this experience complete. It would have been great to hear him share his memories of his time on a B-24 crew in the actual environment where they took place. As it was, I know (I think we all knew) that he was riding along in spirit. I hope he enjoyed the chance to share this experience with his nephews because God knows we sure enjoyed sharing it with him...

