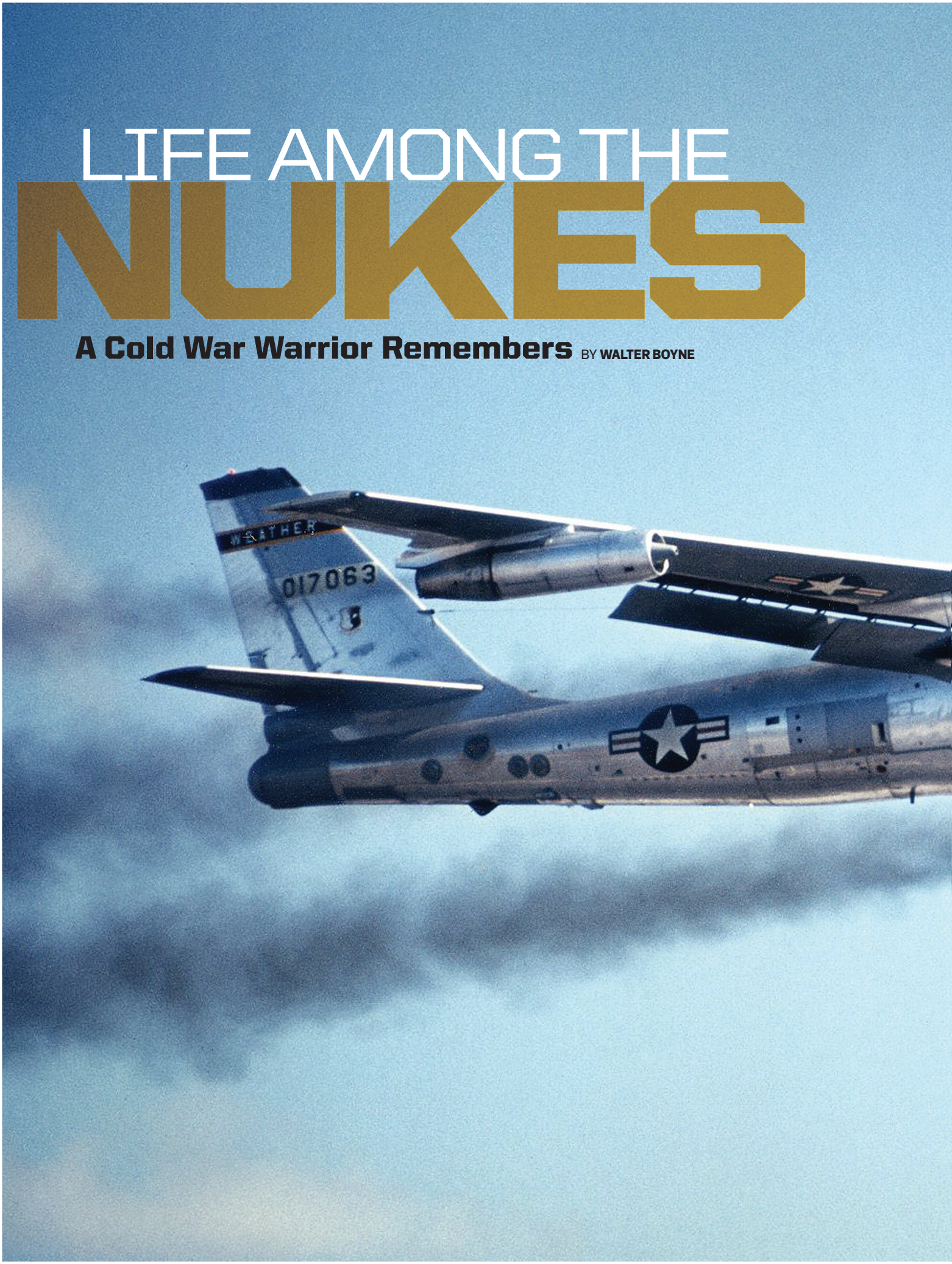
LIFE AMONG THE NUKES

A Cold War Warrior Remembers

BY WALTER BOYNE



By sheer coincidence, I am, at 86, one of relatively few ex-SAC members who can recall both how it was in the Strategic Air Command before General Curtis LeMay's influence, and afterwards. It was a unique time in my life. In those days, the Strategic Air Command was a cocked fist carrying a knockout blow. The bellies of our fleet of 1,300 Boeing B-47s were filled with powerful nuclear weapons, and we knew our leaders had the guts to use them. The best thing was that we knew deploying the weapons was never going to be necessary because no nation dared to face the might of the United States Air Force.

When I say "we" I mean the men and women of the Strategic Air Command, then led by the greatest air combat leader of all time, General Curtis E. LeMay. It was LeMay who fashioned SAC into the perfect instrument of war.

LeMay had many irons in the fire, but two stand out. The first is the transition of the Strategic Air Command from a troubled, confused beginning to becoming the premier force in the world. The second was his mustering of support so that the American aviation industry could meet his demands.

When LeMay took over SAC in 1948, he commanded some 52,000 people, 21 bases, and 837 aircraft, including 35 each of the new Boeing B-50 and Consolidated B-36. Only seven years later, he commanded 196,000 people, 3,068 aircraft, and 51 bases, 14 of them in four overseas locations. More importantly, the aircraft LeMay possessed included 338 B-36s and 1,320 B-47s for bombing and reconnaissance, which were supported by 760 refueling aircraft, KC-97s and KB-29s. (The magnificent Boeing KC-135 would not arrive for another two years.)

Both sides perceived the threat the other represented to their national well-being, but the real threat to everyone—the entire world—came from the unprecedented and certifiably insane policies of the United States and the Soviet Union to build a vast, overwhelming number of nuclear weapons.

In some respects, the United States and its allies had no choice but to depend upon the nuclear weapon. There was no way they could match the massive Soviet Army, with its tens

The last Stratojets to serve the USAF were WB–47Es. They flew routes over the Pacific and Atlantic and across the Arctic to observe weather conditions, as well as collect atmospheric samples of nuclear testing. One of 34 B–47s modified by Lockheed Marietta, this WB–47E taking off illustrates the black smoke typically produced by water–injected B–47 departures. (Photo by Nick Williams courtesy of Habermehl Collection)

Only with an aerial view of the massive B–36 Peacemaker can the viewer appreciate the size and complexity of Consolidated's magnesium overcast that was politically chosen over the Flying Wing for mass production in the post–war period. (Photo courtesy of Stan Piet)

of thousands of tanks, with conventional weapons. It was estimated that a full-fledged Soviet attack in Europe could reach the English Channel in a matter of weeks, and then take Great Britain thereafter. Finland, Sweden and Norway would also have been overrun.

Thus began the race for nuclear armament by both sides. It reached an absurd peak when the U.S. stockpile reached 31,175 nuclear warheads in 1966, while the Soviets didn't say "when" until 1986, with 55,000 similar weapons.

Fortunately, none of this madness was unleashed, for all the world's living things might well have been destroyed.

The New Guy Arrives

As luck would have it, I reported into the 93rd Bomb Wing at Castle Air Force Base, California, early in January 1953. It was my first assignment out of flying school, and I was assigned to be a copilot in a Boeing B-50D bomber for the 330th Bomb Squadron. My first day I was completely ignored, for a B-50 from the sister 328th Bomb Squadron had just crashed, and the base was in an uproar trying to find out why.

It was my good fortune to be assigned to a great crew captained by a man who became my lifelong friend, the late Colonel Chester Schmidt. Chet was a fine pilot who had flown in combat in B-24s with the 15th Air Force, and he was considerate about treating a new copilot well in terms of sharing landings, in-flight refueling and so on. He was also generous in tolerating some shortcomings in the crew: we had a navigator/bombardier, a true gentleman who was worse than useless and whom we ignored, relying instead on the efforts of a capable radar observer, Captain Chuck Waple. Our crew chief Master Sgt. Spilecki was a very rough-hewn gem and our gunners were as good as any other crew possessed.

I was delighted to find the 93rd Bomb Wing was run like a wonderful flying club. You flew as much as 80 hours a month, but the flights were conducted "sensibly," i.e., with regard to strain on the still new Pratt & Whitney R-4360 radials of the B-50, and in general—taking it easy, helping each other out. Thus it was that our radar bombardier would guide our nav/bombardier on bomb runs for scoring, and occasionally, they would reverse rolls when the nav/bombardier had a clear sight on the target. SAC set up radar sites in various large cities, and the accuracy of the bombing could be estimated by the course and the time of bomb release when a tone was set off. If it happened that a rival crew from another unit overheard the tone going off, it was custom

to mash down on the rival's tone button for quite a while, to ensure that the dropped bomb was scored as missing the target badly.

It is pertinent to remember that most SAC crews were made up of World War II combat veterans, many of those reserve officers recalled with the advent of the Korean War in 1950. To say that they were not too happy about having their new civilian careers interrupted (one of the chaps was a veterinarian, as I recall) is no exaggeration, and they expressed it in their general contempt for their work. There was also a feeling of discontent that SAC retained most regular (i.e. career) officers for its own use and sent recalled reservists to fly B-29s in Korea. When they returned to regular SAC duty in the U.S., they were not the most dedicated of personnel. Adding to this rough and relatively temperamental mixture was the fact that we (and everybody else in the Air Force) were *profoundly* politically incorrect, especially among ourselves. Pilots were dismissive of and insulting to radar observers and navigator bombardiers, copilots were treated as "gofers" for the most part, until you proved yourself, and no one had much good to say about Army, Navy, Marine, and civil rivals, or the quality of drinks at the Officers' Club.

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All of this came to a shattering halt when Gen. LeMay's team arrived at the 93rd Bomb Wing. By July 1953, a new commander was appointed, a combat leader, a gentleman, and later a mean hand-ball opponent, Major General William E. Eubank, who distinguished himself in combat in the South Pacific. The SAC team systematically replaced lax squadron commanders and operations officers, installed the SAC system of training and evaluation, and turned the 93rd into an effective combat unit, newly blessed with the arrival of the sensational Boeing B-47.

Enter the B–47: a Demanding Beauty

When the first one landed at Castle Air Force Base, California, I was stunned by its beauty. It arrived just as I had passed a flight check for

The roll–out of the XB–47 on December 17th, 1947 was an amazing day, but not even Boeing would predict that more than 2,000 of the aircraft would be built. A Boeing engineer who was deeply involved in the design of the aircraft told the author that the aircraft was so radical that even he, a principal designer, had doubts as to whether it would fly or not. (Photo courtesy of USAF)

As the aircraft was modified, it just grew more beautiful. The lines of the RB–47 aircraft were more carefully streamlined. The view from the teardrop canopy was marvelous, especially when compared to refueling in the B–50 for example. (Photo courtesy of USAF)

upgrade to aircraft commander in the B-50, ironically on a flight in which I delivered the 330th's last B-50D to Davis-Monthan Air Force base for storage. I didn't have enough time to qualify as copilot in the B-47, and it looked like I was slated to continue flying at "Base Operations," where I was checked out in the C-45, C-47, B-25, and T-33. (Multiple qualifications were standard—if you fought to get them. As a result, Base Operations would call at night and on weekends, begging you to take an airplane. Often you could go anywhere you wished, just as long as you were back by Sunday night. The reason: they had to burn off their fuel allotment so that the next quarter's quota would not be cut.)

Overwhelmed by the B-47's beauty and powerful potential, I was also wracked with envy, for at that moment, there was little prospect of me flying it because of my low flying time total. Fortunately, the Squadron Adjutant was a friend. He allowed me to persuade him to send me to McConnell AFB, Wichita for B-47 crew training, without regard to my lacking about 200 hours flying time.

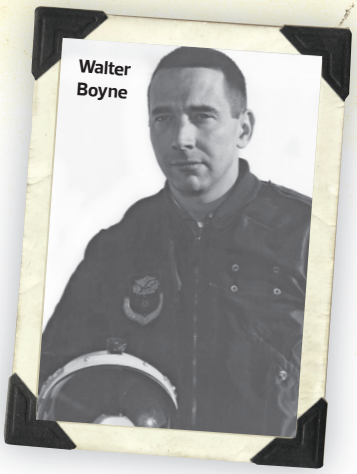
The schooling was hot (flying was cancelled if cockpit temperatures reached 145 degrees—this is no joke!), demanding, and well done. I was fortunate enough to be crewed up with Major Harold McCarty as aircraft commander and Captain John Rosene as radar observer. I often wonder what they thought of their low-time green-bean copilot, but they always treated me well. I am especially indebted to McCarty, who was good about letting me do refueling and make landings. It turned out that we were a good team, rapidly becoming a "Lead" crew in the 330th and on our way to becoming a "Select" crew (from which spot-promotions were made) when the B-52 appeared on the scene.

We started flying the B-47 from Castle in 1954,

The tail gun was remotely controlled, and the Tech Order said that the Type A–5 fire control system would automatically pick up pursuing aircraft on radar and warn the copilot. The copilot turned the seat around, selected the most important target and fired the two 20mm cannon. In practice, the system rarely worked. (Photo courtesy of USAF)

Inglorious Deeds In The B-47 By Walter Boyne

As much as I enjoy writing about the B-47, there always lurks in the back of my mind two incidents in which I hardly distinguished myself, and for both of which I was called into the office of the Deputy Wing Commander, Colonel Patrick Fleming, previously a 19 victory Navy ace. Perhaps a short recounting of them will purge my guilty memories.



The first occurred on the start of a Unit Simulated Combat Mission, during which our first refueling was to occur at an extreme distance, where we would be down to "fumes," in the vernacular of the time.

We took off early in the morning in our beautiful B-47, but on climbout, my aircraft commander, Major Harold McCarty, noticed that the bomb bay doors did not indicate that they were completely closed. He knew at once that the increased drag from even a partially open door would preclude our reaching the tanker. The only "solution" was to descend to 18,000 feet, and have the copilot (me!) use what was called a "walk-around" oxygen bottle to go down into the bomb bay and see if the doors were actually closed or if we had an instrument error. The walk about oxygen bottle was supposed to last 10 minutes, which should have given me plenty of time.

Doing so required me to discard my parachute, climb out of the ejection seat, switch my oxygen mask from the aircraft system and move forward in the cockpit to the entrance hatch. This was a move of roughly five feet forward, an exit through the entrance hatch, down a short ladder to a passageway of about 10 feet that led to the entrance to the bomb bay.

Fortunately, McCarty could peer down to see how I was doing, and saw that I had stopped moving. It turns out that the "10 minute" walk-around bottle was actually good for about six minutes of genuine activity. He immediately began a descent, and I came to at about 12,000 feet. Then we stooged around until we were light enough to land.

I was sent immediately to Col. Fleming's office, expecting a rocket for having blown a USCM. Instead, he treated me like a fellow pilot, took notes on the story, and actually complimented me on making the effort.

Within about six months I was back in Fleming's office, and fortunately again received the same kind of friendly treatment for a clear mistake on my part.

This time we were heading back from a mission, short on fuel, as always, and when McCarty put the "drag gear" (rear mains and tip protection gear) down to increase drag for the descent, it didn't go down.

That was another task for the copilot (me). The B-47's emergency gear extension system consisted of a rack of six huge levers placed to the right and rear of the copilot. We leveled off at a reasonable, non-hypoxic altitude at 200 knots. I expected this to be relatively quick and easy and kept my parachute on after I got out of the ejection seat, turned left, sort of squatted before the gear extension levers, and began pulling on the appropriate one. It was like pulling on a mule, the damn thing resisted my effort, pumping the gear lever back and forth. It was like some manic muscle building system, with every stroke getting harder and harder and, according to the tech order, ranging from 25 to 75 pounds of effort. Finally, however, it free fell, and after considerably more pumping, I got the green light that the gear was down and locked and could return exhausted to my seat.

I steadied myself by the seat and started to climb in when there was a sudden whoosh of air, and I realized that my parachute rigging had somehow actuated the left lever of the ejection seat. At that moment I was leaning forward over the seat, staring down at it, only too aware that if the ejection seat was malfunctioning and fired, it would carry at least the upper half of me through the canopy, leaving my legs far behind.

Fortunately, the second part of the system did not operate. I put the safety pins that disarmed the seat in place, climbed gingerly in, and we came back to land—and for another meeting with Fleming. Once again, as noted, he was completely patient and understanding, and I was among the many who deeply regretted that he lost his life in the first crash of a B-52 on February 16th, 1956.

Fleming was riding voluntarily as an observer on the night before he was supposed to depart the station for Omaha. An explosion when a high speed electrical component let go and pierced a fuel tank (a chronic flaw in the early B-52 which was subsequently corrected) sent flaming fuel into the cockpit. Fleming went out through one of the open hatches from which the pilots had ejected, but his parachute was on fire, and he was killed on impact with the ground.

The pilot is to the upper left in this shot of the B–47 cockpit. The copilot is behind him, and below his elbow are the handles for the ELGE (Emergency Landing Gear Extention) system. (Photo courtesy of Boeing/Habermehl Collection)

and by then all three of us knew that this magnificent aircraft was also magnificently dangerous. The B-47's cutting-edge design pushed the boundaries of both aerodynamics and pilot experience. Not surprisingly, this added to the pleasure of flying it for young pilots eager to enter the jet age. I, for one, felt like something I never really was: a "hot pilot." It was intoxicating to be at the controls of a B-47 at 35,000 feet, looking out over a blue sky in which nothing else was there to compete with you—except perhaps another B-47. Add a hell-for-leather 6,000 foot per minute descent and, if you were lucky, a "greaser" landing, and it made your day.

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In retrospect, flying the B-47 could be enjoyed only by disregarding the accident statistics of the time. I never felt apprehensive about any mission, whether it was to be a heavily loaded takeoff, night in-flight refueling, low level drops or anything else. There was an infectious, primal joy in flying the airplane, first as a copilot, and later as an aircraft commander, that was unlike the experience flying any other aircraft. I doubt if the fighter pilots, who at the time were being coerced into flying the B-47 felt the same, but for me, and certainly for other veterans of the B-50 and similar aircraft, it was a brave new world.

First, as a copilot, then as a pilot, you got fairly intimate with both the capabilities and the limitations of the aircraft, for you computed the weight and balance, determined the fuel load and distribution, and did the intensive pre-flight inspection. There were other tasks, more mundane, but still interesting, that included supervision of the single-point refueling system, filling the liquid oxygen reservoirs, and of course, getting the in-flight lunches. (On ultra-long missions, you sometimes got two sets of these. In-flight lunches had plenty of calories, but varied widely in quality, with the standard offering being two ham and cheese sandwiches, a carton of milk, an apple and some sort of commercial cupcake for dessert.)

As a pilot, you got to fly when the aircraft commander said you could, and this varied widely among crews. Some aircraft commanders were

The General Electric J47 engines, with their rated 5.970 lb. of thrust at 100% were regarded as wonderfully modern. They were slow to accelerate and had to be treated with care, which included using a drogue chute to allow the desired rpm to be sustained. Some B–47s had internal 18–bottle Assisted Take Off (ATO) systems, while later models had a belt–on external 33–unit ATO system for added thrust on heavy–weight takeoffs. (Photo courtesy of USAF)

extremely selfish and made all of the takeoffs and landings as well as every in-flight refueling. Others understood that the poor guy in the back seat needed training too, and shared as many as possible of these duties. I was grateful and fortunate to have one of the latter type who really tried to share the duties with me. In more difficult situations—bad weather, poor communications, etc.,—Major McCarty would do the flying, but under ordinary circumstances, he saw to it that I had a chance to try everything.

The SAC Attitude

It is reasonable to state that "bitching" reached an apogee among SAC crew members, for the rigid requirements imposed by General LeMay's standards meant almost constant vigilance. If you were fortunate enough to be granted leave for a vacation, birth of a child, movement to a new house, etc., it was almost certain to be cancelled for some "emergency." The emergency usually turned out to be a requirement for the navigator to make another run, or the bombardier to do another series of bomb drops to bring up his average.

But the bitching was largely pro-forma, for the crews were dedicated to their mission, which was preserving the peace with the Soviet Union by intimidating it. We tend to forget just how overwhelming the strength of the Soviet Union was in those early days. It was the intent of the Soviet Union to confer its gift of communism upon the entire world, and it refrained from doing so only because the United States possessed the nuclear power to stop it. Further, they knew we were governed by leaders who would not have hesitated to use that power.

So we in SAC crews knew that we were the first line of defense, and that our ability in executing the massive, integrated war plan of the United States was critical. For our crew in the 93rd, the war plan was strikingly similar to the one that had been created for the B-50 era. We were to take off, refuel at designated areas, and then continue into the Soviet Union to bomb Tula, then a city of about 200,000. It was important to the Soviet steel industry, as I recall. After dropping The Bomb, in the B-50 we were to do a 180-degree turn, fly until our fuel ran out, then bail out and seek out a "friendly native." The B-47 also made a 180-degree turn, but had the range to reach Stockholm where we were to land and refuel. This was a much better option, to say the least.

The training regime for a B-47 squadron was rigorous. A mission would typically include a celestial navigation leg, two or three refueling rendezvous, and practice bomb runs at Radar Bomb

This view of of the B–47 cockpit is facing forward from the aisle beside the copilot seat. The navigator's seat is barely visible in the center right, and the rudder pedal in the upper right is at the pilot's position. The white object (right center) is the toilet. (Photo courtesy of Habermehl collection)

Scoring sites in one or more cities. In rare instances, gunnery practice for the copilot was included, and if things went well, a return to shoot a few touch and go landings. Missions ran from four to as many as 24 hours, but averaged from six to eight. The radar observer conducted ECM training at various intervals, and on occasion we served as targets for interceptors. The F-86 rarely made the intercept, but the F-100 could do a roll around us when it arrived.

The Nuclear Threat In Action

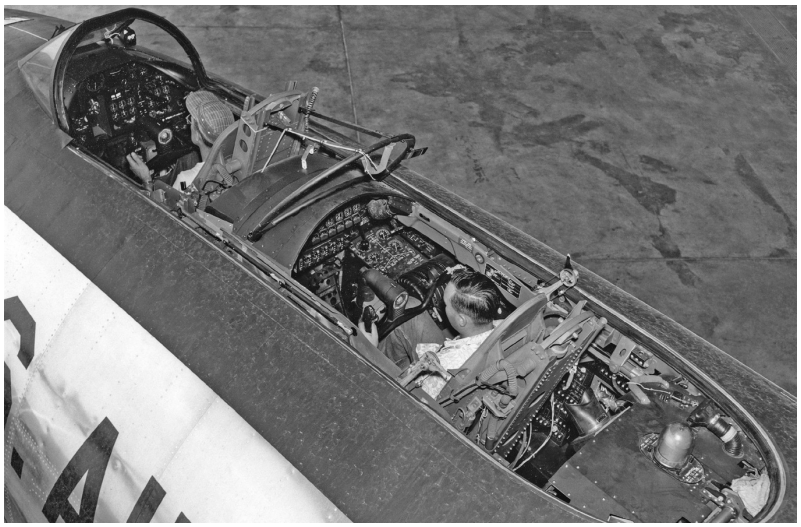
On most missions, the B-47 did not carry nuclear missiles, but there were certain dedicated missions including "Unit Simulated Combat Missions" (USCM) on which bombs were carried. We believed that they were "simulated" missions, but we also knew that that mission might be changed to a real combat strike en route, and that the bomb we were carrying would be made live. In the very early days it was "made live" when the copilot inserted a large, threaded capsule into the bomb itself, changing it from a mass of TNT and other explosives into a nuclear weapon. Later this was done electronically. The copilot was not usually informed of everything prior to a mission, this being left naturally enough to the aircraft commander and the radar observer. The copilot would have enough to do with the flight planning, which would include the all important descents to the KC-97 refueler's location and the subsequent climb back to cruise altitude. This was really annoying, for the net gain in fuel after the refueling was often relatively small. The KC-135s would eliminate this problem.

A USCM usually called for a long day's briefing with ample time for preparation, getting the right orders for in-flight lunches, visually checking fuel and liquid oxygen loads, etc. But they could also be imposed at night, when a phone call at 2:00 in the morning summoned you back for a dawn takeoff. (One of these occurred immediately after I'd gone to bed after a 24-hour mission. Needless to say there was an immediate and continuous requirement for the Dexedrine pills that were issued.)

The crews took USCMs seriously, and it is doubtful if they would be allowed in today's politically correct climate. It meant that all 45 B-47 bombers in the Bomb Wing would be refueled, loaded with genuine nuclear weapons, and take off within a very short period of time. It also meant that the same deadly serious drill was taking place at perhaps a dozen other SAC bases around the country. A deadly force of perhaps as many as 600 or more B-47s would soon be streaking north or northeast to their refueling points and their subsequent track into the Soviet Union. It also meant that there were occasional crashes on takeoff (none of which to my knowledge resulted in a nuclear explosion) or an emergency landing by a nuclear carrying bomber at a civilian base. You can imagine what the headlines would read today if an Air Force aircraft carrying a nuclear bomb landed near Denver or Chicago. (The truth, however, is that when there were Air Defense Command fighters that carried nuclear missiles operationally, they often landed at civil airports, with no difficulties whatever.)

On a USCM, things usually went quite efficiently from briefing to debriefing, and there were many moments in between when the crews had time to think. I can remember distinctly the sobering thought that while our mission might be successful, we might return to find Castle Air Force Base—and our families—destroyed. We had no idea of Soviet capability, but knew for sure

With the canopy removed, one can see the relationship of the pilot stations. Behind the copilot are the controls for the 20mm tail guns. In addition to other duties, the copilot also served as gunner. To operate the guns he rotated his seat to face the rear. (Photo courtesy of Boeing/Habermehl collection)



that the Tupelov Tu-4s could get through our defenses on one-way missions, if nothing else.

This concern was minor in the early periods, however, compared to the later years when Soviet technology caught up with—and surpassed—our own with ICBMS and other similar weaponry. Then it was no longer a question of whether our home base would be destroyed or not. We knew it would. "They" had the same concerns, of course, and the same certainty. Fortunately, the Mutually Assured Destruction gamble paid off at the time. There is no guarantee that it is working today, with a probably psychopathic President Putin in charge.

But in the B-47 era, there was an élan, a confidence amounting to a surety that the Soviet Union would not dare launch an attack. We knew that we'd penetrate to our targets with minimum losses and leave behind utter destruction. Even if the Soviet Armies moved forward into Europe, our attack would have destroyed their logistics base, and their tanks would have rolled to a stop wherever they were for lack of support.

Sadly, the days of the B-47's potency were numbered as faster fighters, better radars, and more importantly, increasingly sophisticated missiles entered the fray. Then its own dangerous track record was working against it, and General LeMay insisted upon its retirement and replacement by the workhorse Boeing B-52, which still rules the bombing roost today.