

B-36: Six Churning and Four Burning Part I

In the Spring 1995 edition of KLAXON, there was a letter to the editor and an editorial response bemoaning the fact that we hear almost nothing about the B-36s any more, with the comment, "I guess all those guys must be dead by now". I wrote a letter to the editor to remind him that a few of us old B-36 guys were still around and would he like to hear from one of them? He very kindly asked me to recall what I could about this big, wonderful, old bird, the unusual capabilities it had, the singular contribution it made to the Cold War and some of the people who gave so much of themselves to the B-36 program.

It's a real pleasure to accept this invitation. Three of the most challenging and rewarding years of my life were spent with these ten engine monsters. They were never a lot of fun to fly. It was, as they said, like sitting on your front porch and flying your house around, but there was a satisfaction in flying these birds and realizing that with it, you had the capability of performing a mission that was vital to our nation and that could not be accomplished by any other existing aircraft. But the B-36 was more than an airplane, it was a way of life.

There is one caveat with which I tell my story. My B-36 years were a long time ago. I'm now 80 years old, I have little in the way of records to refer to and my memory is not as sharp as it should be for such a job. So, if I slip up on a detail or two, blame it on an old man's lack of total recall. On the whole, my story tells it pretty much the way it was.

Maybe some of the KLAXON readers will remember me. I kicked

Lt. Gen. James V. Edmundson around SAC during most of it's golden years, when General LeMay was whipping us into shape as a credible deterrent force, to meet the requirements of President Eisenhower's state policy of "Massive Retaliation". Most of my time was spent in the 15th Air Force, but I did pull a tour in Omaha in the operations business. Mostly, I commanded units at the group, wing and air division level in B-29s, B-47s and of course, in B-36's.

Let's talk about the big bird for a minute. It was first on the drawing board early in World War II. It was designed for a specific purpose. In those days, there was a distinct possibility that the Battle of the Atlantic might be lost and that German submarines could cut off all surface contact between North America and Europe. Under these conditions, the United Kingdom would be denied to us as a viable bomber base and we would have to conduct the air war against Germany from bases in the continental United States. This was to be the B-36 mission. As it turned out, we won the Battle of the Atlantic, the air war would be carried on from England with smaller birds, Convair was up to their ears building B-24s and the B-36 was put on the back burner.

When the war was over, we hardly had time to get home, unpack and say hello to our wives, before the Russian bear was snarling at us and embarked on a massive program of world conquest. Here we were, up to our eyebrows in the Cold War. In those days, viable air-to-air refueling was just a gleam in General LeMay's eye. There were some rather primi-

tive probe and drogue experiments going on, with B-50s refueling from KB-29s, but the KC-97 was not yet in the picture and the KC-135s were even farther away. During several critical years, there was only one way to hit targets deep inside the Soviet Union and that was with a bird that had extremely long, unrefueled legs. The B-36 was such a bird. It became clear that the key to providing a real deterrent force was to bring on the B-36s and make them operational in a hurry.

In all, there were 325 B-36s built. The latest was the B-36H. Few of us remember the several variant of the B-36 that made their appearance. The YB-36C, which never got past the mock-up stage, had six tractor propellers, driven by six variable discharge turbine engines. The YB-60, of which only one was built, was designed in competition with the B-52. It was a swept wing B-36 with eight jet engines in four pods hanging beneath the wings. There was even a cargo version, the C-99, of which only one was ever built. My B-36 experience was in the B-36D and the RB-36F and they are the models I will deal with.

They had six Pratt & Whitney R-4360 engines, known as "corn cob" engines, because they were four bank radials and looked pretty much like a big ear of corn. They drove six pusher props out behind the trailing edge of the wings. They had greenhouse cockpits which gave the pilots excellent visibility, sometimes too excellent. It tended to be unnerving in rough weather to be able to look back down the spine of the fuselage and see your airplane wagging it's tail like a happy puppy. In addition, there were four jet engines hung in twin

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Pods out near the wingtips. These were J-47 engines, the same with which B-47s were equipped, but they had been modified to run on aviation gasoline instead of jet fuel, to keep the fuel system as simple as possible. With ten engines, B-36s were in a class by themselves. When giving an in-flight status report and everything was going well, the standard report was, "Six churning and four burning". Nobody but a B-36 pilot could make such a claim.

During the early days, the bugs were worked out of the B-36s by the 7th and 11th Wings of the 19th Air Division at Carswell AFB, Ft. Worth, Texas. These were tough and trying days and even with the Convair plant just across the runway, it was a struggle for these outfits to become operational and stay that way. At the peak of the B-36 years, the 7th and the 11th were joined by the 6th Reconnaissance Wing at Travis AFB in California. The 28th Bomb Wing at Ellsworth AFB at Rapid City, South Dakota the 42nd Bomb Wing at Loring AFB, Maine, the 72nd Bomb

Wing at Ramey AFB in Puerto Rico and the 92nd Bomb Wing, together with the 99th Reconnaissance Wing at Fairchild AFB, near Spokane, Washington. The last B-36 was retired early in 1958.

The B-36 was a strange airplane. It was a very large airplane on the outside, but on the inside, it was very small. The wings were full of engines and fuel cells. The fuselage was pretty well taken up by four big bomb bays. There wasn't much space left over and what there was had been grudgingly allotted to the crew. It was a tight fit. It was possible to crawl out through the wing structure to do very minor maintenance on the inboard engines, numbers 3 and 4. The other four engines were out of reach. If they sprung an oil leak, they had to be shut down to save the remaining oil for the critical part of the mission.

The sizes of crews varied from time to time. To my best recollection the average size of the bomber crew was 14. In the RB-36s, the forward bomb bay had been pressurized and converted into a compartment for

photographers and ECM ferrets. A reconnaissance crew could run as high as 20 men.

From the ground, the B-36 had a distinctive sound, because it was impossible to synchronize all six propellers with precision. You may remember that in the B-17 and the B-29, you could look out the window and sight through the propellers to synchronize the two engines on each side by sight and then synchronize the left hand and right hand pairs by ear. This couldn't be done in a B-36 and as a result, a B-36 always sounded like a hive of bees as it passed overhead. A formation of B-36s sounded like nothing else on earth.

This is about enough general background on the Ten Engine Monster. In the next two episodes of my story, perhaps there will be room to squeeze in some of the other features of flying the B-36 that made it a singular experience. Once having been in the air with "six churning and four burning", there was nothing else in the realm of military aviation that could match it.