

DOODLEBUGS AND ROCKETS (V-1 AND V-2)

Hitler's two, "vengeance weapons," were his last serious threat to wipe out London. The V-1, commonly referred to as "buzz bombs" or doodlebugs," could be described as, "A 2000 # bomb with wings." They were launched from ramps located along the Belgium coast and Pas De Calais, France. All launch sites were aimed at London. They could fly at speeds estimated between 300 to 450 miles per hour at an altitude of about 2000 feet, and it would take them about twenty five minutes to reach London. They were programmed to suddenly dive to the ground after a specific number of revolutions of a small propeller that was attached to the nose had been reached. (As a bombardier, I compare this to the small vanes located at the front and rear fuses of our own bombs. As our bomb would drop toward the target, the small vane would unwind and eventually fall off -- and thus, "arm" the bomb.) The engine, housed in an assembly resembling a stove pipe, was located at the rear of the buzz bomb. The accuracy of the V-1 was affected by head and tail winds, as well as the data in-put to the mechanism controlling the revolutions of the small propeller, and to the pre-set gyroscopes used to control their course. But accuracy had a low priority. The psychological damage to British morale was more important to them. The British civilians, after coping with the "Blitz," now had to live through the nightmare of these flying bombs.

The first buzz bomb hit London on June 13,1944 (a week after D-Day). By the end of the month they averaged around fifty a day. Allied intelligence, aware of their existence, as well as knowledge of the general location of the launching pads, flew many bombing missions against the launch sites before June 13, but with little success. Anti-aircraft fire proved less effective against the buzz bombs than against the German bombers. Their speed and low altitude made them much more difficult targets to hit. And for Londoners, the added danger of being struck by shrapnel from bursting anti-aircraft shells, added to the problem. Orders were given that flak guns no longer would fire at them -- allowing the buzz bombs to fly onward and hopefully crash in the open countryside, instead. They soon learned that the only defense against them was our fighters and the cables hanging from the line of barrage balloons, quickly relocated Southeast of London. The Germans soon countered this tactic by attaching steel cable-cutting wing edges to them. Flying at their high speed, they would cut through the cables of the barrage balloons, causing them to drift. Not only were our fighters successful in shooting them down, but they also learned to get close enough to the bomb to tip it out of its trajectory, by flipping it with the wing tip of their plane. Both sides continued to devise new counter-measures as they gained experience. It could almost be compared to a game of chess -- but with much more at stake.

The odd "Putt Putt" sound of approaching buzz bombs, as well as following their flight overhead, immediately drew attention to them. The Londoners learned to almost ignore their presence -- until the sudden absence of that sound. Knowing that as long as they could hear that distinctive sound -- they were safe. Once it ceased, they had about fifteen seconds to find safety before the explosion. The 486th was located in what was referred to as, "Buzz bomb alley" and we had an occasional "alert." Fortunately for us they just continued on their way and none exploded close to our base. I will admit that it was a bit exciting, as well as scary, to watch them fly over.

Shortly after the Normandy invasion our bombing attacks were stepped up again. The 486th flew its first "No Ball" mission on June 20th. (The source of this code name for these missions has always been a mystery to me.) In the short period of three weeks we flew a total of nine "No Ball's." On three of these missions we did not drop our bombs because of poor visibility over the target area. It would be inaccurate to state that the 8th Air Force's effort was a success --- but our tactics of bombing from a high altitude while trying to hit such a small target, did not accomplish the hoped-for results. The 9th, with their Medium Bombers, did a better job. But not good enough to destroy them. The ingenious German engineers were soon able to re-assemble whole new sites in a matter of hours. It took the ground troops to eliminate them.

In early September, after our troops over-ran the launching sites, the Germans tried a new tactic. The flying bomb was slung under the wing of German Heinkel HE 111 bombers. Their strategy was to approach England from the North Sea and fly toward London; release their load and then turn back for home. Our fighters soon learned to patrol the area and attack them before the release. Carrying their cumbersome load affected their maneuverability and made them easy pickings for our fighters. The German pilots, in self defense, soon changed their tactics by dropping their load as soon as our fighters attacked and then try to protect themselves as they streaked for home. The fighters would then go after the buzz bombs en route to England. They did succeed in destroying some but too many of them still managed to reach England.

The last air-launched buzz bomb was released on January 14, 1945. The strategy, even though it was not as successful as hoped for, did accomplish Hitler's goal. In December 1944 the Germans decided to build new ramps in central Holland and return to their ground-launched tactics, picking up where they left off a few months earlier. Soon, a new and more accurate version , was launched. England, primarily London, continued to be attacked by both the V-1 and V-2's until the end of March 1945. No set of figures could possibly tally the total destruction and damage they incurred. The explosive power of the V-1 resulted in lateral damage. While the V-2's ex explosion created a deep crater, as well as lateral damage.

As for the V-2's Germany began working on the use of rockets as a weapon, in the early 1930's -- to get around the Versailles Treaty rules. "Rockets" were not mentioned in the Treaty. The new program was called, "Aggregate," meaning, "prototype," or A-1(for first). The engineer in charge of the program was Walter Dornberger. While working on A-1, he hired Wernher von Braun as his new assistant. Years later, von Braun was to head up our own rocket program here in the United States -- but that's a different story.

At first, Hitler wasn't too enthusiastic about rockets and gave the program little support. His military advisers just considered it a new toy. And an expensive one at that. After losing the, "Battle Of Britain," it became obvious that his plans to cross the Channel and invade England would never take place. He decided to give the rocket program a higher priority and progress continued until "A-4" was developed. (Later re-named, "V-2," the second, "Vengeance weapon.")

In October 1942, the A-4 version was the first rocket to be successfully launched, but many obstacles still had to be overcome. The program was cut back as the V-1 continued to make successful flights. One convincing argument in favor of the V-1 program was that it was much simpler to build and operate. The V-2 was more costly to produce; \$ 25,000 each, as compared to the simpler V-1 with a \$ 500 price tag. Both carried the about same explosive power.

The Allies were unaware of this new threat until someone closely studied some photos taken in the Peenemünde area revealing that "something unusual" was going on. Stories generated by the Polish workers at Peenemünde soon made their way to British Intelligence. They began to check on the accuracy of the many stories. In August 1943, almost 600 RAF bombers flew a night mission against the rocket center, at a cost of forty aircraft. The bombing results looked excellent and they were satisfied that Peenemünde was destroyed. The raid caused a lot of damage -- mostly to the technicians' housing area, consisting of Polish laborers and Russian POW's. The Germans decided to allow the obvious rubble and bomb damage to remain untouched, hoping the British would assume the site was destroyed. The ruse worked because it was nine months before they returned. The Germans simply moved the operation to tunnels underneath the Harz mountains, in central Germany, and continued with their rocket program. In the meantime, the success of the V-1 received top priority with Hitler. He felt that the rockets were a possibility , while the flying bombs were already paying off. Dornberger and von Braun were forced to make do with the meager support they received.

Not long after D-Day it became evident that the V-1 could no longer do the job alone. Work was rushed to make the V-2 ready to hit London, "ASAP." That day finally arrived on September 8, 1944 when the first rocket hit London. The flight from the Hague to London, just under 200 miles, took about four minutes as it traveled through the atmosphere with the speed of a rifle bullet. The British were finally getting some relief from the constant bombardment by the flying bombs when this new threat appeared. There was no defense against it. This missile had the ability to climb into the atmosphere and then dive to the ground from sixty miles up. There was no warning -- just a sudden explosion as it hit the ground, leaving a huge crater as well as destroying everything in the vicinity.

The RAF and the Eighth gave the destruction of the launching sites in Belgium and Holland a high priority. It was a frustrating and continuing process. Unknown to us at the time, the Germans were able to move the portable launching vehicles at a moment's notice. The 8th AF didn't give up on trying to locate and bomb the production and research facilities for the missiles. On August 25th, the target for the 486th was a plant north of Berlin, at Reichlin. For me, it was one to remember. The flak and rockets they fired up at us was both accurate and deadly. Our radioman and ball gunner were both wounded by a burst just after "bombs away." Immediate first aid saved their lives. We were forced to leave the formation and proceeded home alone, escorted by our, "Little Friends," two P-47's. As reported in the record of our Group's Missions, the bombing results for the mission was, "Excellent." But it did little to stop them.

Soon it was, "decision making time" for the Allied high command. General Eisenhower , knowing how important it was to eliminate the V-2 rocket menace, finally gave in to Field Marshal Montgomery's , "single thrust plan," that he kept proposing more than once. It consisted of a powerful drive across the Rhine River, and then straight to Berlin -- thus ending the war in 1944. Ike disliked the plan from the beginning , but as the V-2 rockets continued to fall on London, causing havoc, he decided to give in to Montgomery's plan when it was argued that the thrust inland would also over-run the launching sites and eliminate them. The maneuver would be called, "Operation Market Garden" and was scheduled for September 17, 1944. The book by Cornelius Ryan, and popular movie, "A Bridge Too Far," covered the operation in great detail. Remember? The surprise element consisted of thousands of Allied airborne troops to be dropped near the bridges spanning the rivers and canals --- plus the use of gliders loaded with soldiers and released over the target area.

The airborne force of 35,000 soldiers, the largest ever launched, consisted of 24,000 parachutists, and 11,000 more by gliders. It took 2000 troop-carrying planes to deliver them to their targets. The task was monumental and there were few guidelines. The planners had only days, and not months , to put it all together. One of the major decisions was whether to launch it by moonlight or in broad daylight. As luck would have it --- the week scheduled for the operation was during a non-moon period, and therefore, it was decided that it would be a daylight attack. The phrase, "The best laid plans, etc." was apropos. Nothing seemed to work as briefed, and unfortunately, the end results were far from Montgomery's dream plan. As for the elimination of the dreaded launch sites --- the Allies soon learned that the Germans simply packed up the equipment and moved it elsewhere. Heavy fighting would continue for another eight months.

As part of the 8th AF support, the 486th put up a record fifty six planes on that mission. To improve accuracy, we flew at the low altitude of 17,000 ft. and bombed in six-plane formations. Each aircraft carried thirty, 260-pound fragmentation bombs, dropped on the flak batteries at a bridge south of Rotterdam, Holland. I'll never forget the sight of a sky full of planes flying in our direction as we turned off the target and headed back for home. C-46's and C-47's in formation --- some towing gliders, and escorted by a countless number of fighters. I couldn't help thinking to myself, as I watched them heading for the flak we just left, that I wouldn't trade places with them for anything. It must have been a helpless feeling for the men as they just sat there in those gliders, after being released from the tow plane. Many of them didn't even get to fire a shot -- because their gliders crashed on landing. What a horrible way to go.

During the next six months the Londoners had to continue re-living the horrors of aerial bombardment. The last V-2 struck England on March 27, 1945 , less than two months before Germany capitulated. Records indicate that an estimated 1100 rockets were successfully exploded in England during their brief period of use. Figures quoting casualties and the damage caused by them vary. Suffice to say, mere numbers cannot describe what the people had to endure.

In passing, it should be noted that German civilians were also devastated by the constant day and night bombing of their cities. Between the nightly RAF raids and the 8th and 9th Air Forces' day missions, they had little respite. The tactics used by both sides was a portend of future conflicts between nations.

A footnote to the above narration will be my own, "one and only," experience with a V-2

I flew my last mission on October 25, 1944. Target -- Hamburg. Fred Towne, my pilot, and I decided to visit London one more time before going back home. That first night, while asleep in our hotel room, we were suddenly awakened by a distant explosion, and with no prior warning. We soon learned that a V-2 rocket had exploded a couple of miles away. It didn't take us long to change our original plans. The first thing we did early the next morning was to take a cab to the train station. And after a quick consultation chose Cambridge as the place to spend the remainder of our 3-day leave. It turned out to be a wise decision. In contrast to the war-time hustle and bustle of London, and all it could offer to an eager visitor --- Cambridge was more peaceful and serene. We took advantage of the opportunity to visit some of their world-famous colleges and museums. We even took a trip out to the Cambridge University Botanic Gardens. All in all, it was a great experience and a lasting memory of our final days in England.

A fascinating book titled, "V-I, V-2, HITLER'S VENGEANCE ON LONDON" , by David Johnson, was a lot of help in filling me in on some of the facts about these weapons. For those interested in the subject it is well worth reading.

- John Albanese, Bombardier, 833rd.