THE MIGHTY EIGHTH
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Of all the stories that have been written, and movies that have been shown, about the 8th Air Force, very little attention has been given to what was involved in assembling 1200 B-17's and B-24's each day, to get them in formation to carry out a strike against Germany. Certainly showing bombers under attack by fighters, or encountering heavy flak, was a reality, and are interesting to watch. Also, stories about some of the rougher missions make interesting reading. But what was going on over England, each morning, could get just as scary to the crews as the time spent over some of the targets. The planning, and coordination, that had to be accomplished during the night, by the operations planners of each Group, so that the crews could be briefed, was unbelievable.
If the planners had failed to do their jobs properly, there would have been a free for all among Bomb Groups, in the skies over England. The rendezvous points, altitude, and times had to be precise, and known by all of the crews, before the Eighth Air Force could get information. The success of the planners, in accomplishing their mission, enabled the Eighth Air Force to become the most powerful air armada ever assembled. In my view, how this was accomplished is one of the major untold stories of the war. I was a pilot in the 95th Bomb Group, in late 1944 and early 1945, and what follows is a typical mission, as I remember it, from a crew member's perspective.
Early in the evening, our Squadron Operations would post the names of the crews that were scheduled to fly the following day. There were two ways we could be notified if the Group had been alerted to fly. One was by means of lights on the front of the orderly room, and the other with raising of colored flags. If a green light was on, the Group was alerted, if a red light was on we would fly, and if a white light was on, the Group would stand down. The light was monitored frequently throughout the evening to learn our status and, normally, we would know before going to bed if we would be flying the next day.
On the morning of a mission, the CQ (charge of quarters) would awaken the crews about four or five o'clock, depending on takeoff time. The questions we always asked were, "What is the fuel load?" and, "What is the bomb load?" If his answer was, " full Tokyo tanks," we knew we would be going deep into Germany. Shortly after being awakened, "6-by" trucks would start shuttling us to the mess hall. We always had all the fresh eggs we could eat, when flying a mission. After breakfast, the trucks carried us to the briefing room. All of the crew members attended the main briefing, and then the Navigators, Bombardiers and Radio operators went to a specialized briefing. At the main briefing, in addition to the target information--anti-aircraft guns, fighter escort and route in--we received a sheet showing our location in the formation, the call signs for
the day and all the information we would need to assemble our Group and get into the bomber stream.

After briefing, we got into our flight gear, drew our parachutes and loaded onto the trucks for a ride to our plane. We were now guided by the time on our daily briefing sheet. We started engines at a given time and watched for the airplane we would be flying in formation with to taxi past, then we would taxi behind him. We were following strict radio silence.

We were now parked, nose to tail around the perimeter, on both sides of the active runway, and extremely vulnerable to a fighter strafing attack. At the designated takeoff time, a green flare would be fired and takeoff would begin. Every thirty seconds an airplane started takeoff roll. We were lined up on the perimeter so that the 12 airplanes of the high squadron would take off first, followed by the lead and then the low squadron.

Each Group had a pattern for the airplanes to fly during climb to assembly altitude. Some would fly a triangle, some a rectangle and our Group flew a circle, using a "Buncher" (a low frequency radio station) which was located on our station. The patterns for each Group fit together like a jig saw puzzle. Unfortunately, strong winds aloft would destroy the integrity of the patterns, and there would be considerable over running of each other's patterns.

Many of our takeoffs were made before daylight, during the winter of '44 and '45, when I was there, so it was not uncommon to climb through several thousand feet of cloud overcast. Also it was not uncommon to experience one or two near misses while climbing through the clouds, although you would never see the other airplane. You knew you had just had a near miss, when suddenly the airplane would shake violently as it hit the prop wash of another plane. It was a wonderful feeling to break out on top, so you could watch for other planes, to keep from running into each other.

To add to the congestion we were creating, the Royal Air Force Lancasters, Halifaxes, and Wimpys would be returning from their night missions, and flying through our formations. Needless to say, pilots had to keep their heads on a swivel and their eyes out of the cockpit.

After takeoff, the squadron lead would fire a flare every 30 seconds, so that we could keep him located and enable us to get into formation quicker. The color of our Group flare was red- green. The first thing you would see, when breaking out of the clouds, was a sky filled with pyrotechnics, so you had to search the sky for the Group flare, which would identify the lead airplane of your Squadron. Once you had it located, you could adjust your pattern to climb more quickly into formation with him. As each airplane pulled into formation, they would also fire a flare, with the lead plane, making it
much easier for the following aircraft to keep him in sight. I think most crew members would probably agree that the pyrotechnic show, in the skies over England, in the morning when the Eighth was assembling, was a rare sight to behold. The order of progression for assembling the Eighth Air Force was to first assemble the Flight elements, the Squadrons, the Groups ,the Combat wings, the Divisions and, finally, the Air Force. As soon as the four Squadron elements were formed, the high, low and second elements would take up their positions on the lead element, to form a Squadron. When the three Squadrons had completed assembly, it was necessary to get into Group formation. This was accomplished by having the three Squadrons arrive over a pre-selected fix at a precise time and heading. The high and low Squadrons were separated from the lead Squadron by 1000 feet and, after getting into Group formation, they would maintain their positions by following the lead Squadron. Then it was necessary to get into the Combat Wing formation. We were in the 13th Combat Wing, which consisted of three Bomb Groups: the 95th, the 100th and the 390th. Whichever Group was leading the Wing that day, would arrive over a pre-selected point, at a precise time and heading. Thirty seconds later, the second Group would pass that fix, followed by the third Group, thirty seconds later. We were then in Combat Wing formation. The navigators in the lead airplanes had a tremendous responsibility, to ensure that the rendezvous times were strictly adhered to. There were three Divisions in the Eighth, the 1st, 2nd and 3rd. The 1st and 3rd Divisions consisted of B-17s only, and the 2nd Division was B-24s. The B-24s were faster than the B-17s, but the B-17s could fly higher, therefore, the two were not compatible in formation. As a result the 1st and 3rd Divisions would fly together and the 2nd Division would fly separately. Now that the Groups were flying in Combat Wing formation, it was necessary to assemble the Divisions. This was usually accomplished at the "coast out"--a city on the coast, selected as the departure point "fix." The Group leader in each Combat Wing knew his assigned position in the Division, and the precise time that he should arrive at the coast out departure point, to assume that position in the Division formation. The lead Group in the Division, which had been selected to lead the Eighth on the mission, would be first over the departure fix. Thirty seconds after the last Group in the first Wing passed that point, the second Wing would fall in trail, and so on, until all Combat Wings were flying in trail and the Division would be formed. One minute later, the lead Group in the other Division would fly over that point, and the Combat Wings in that Division would follow the same procedure to get into formation. When all of its Combat
Wings were in trail, the Eighth Air Force B-17 strike force was formed and on its way to the target. At the same time the 2nd Division B-24s were assembling in a similar manner and also departing to their target.

Meanwhile, as the bombers were assembling for their mission, pilots from the Fighter Groups were being briefed on their day's mission. Normally, 600 to 800 P-38's, P-47's, and P-51's would accompany the bombers to provide protection against enemy fighter attacks. Fighter cover was not needed by the bombers until they were penetrating enemy territory, therefore to help conserve fuel, fighter takeoffs were planned to give them enough time to quickly assemble after takeoff, and climb on course up the bomber stream to the groups they would be covering. The combined strength of the fighters and bombers brought the total number of aircraft participating in a mission to approximately two thousand.

A major problem that presented itself, on each mission, was that the bomber stream was getting too stretched out. It was not uncommon for the headlines in stateside newspapers--in trying to show the strength of our Air Force--to state that the first Group of bombers was bombing Berlin, while the last Group was still over the English Channel. It made great headlines but was a very undesirable situation. It meant that the Groups were out of position, and not keeping the proper separation. Furthermore, it was almost impossible for them to catch up and get back into the desired formation. This made the entire bomber stream more vulnerable to fighter attacks.

Finally, our planners figured out what we were doing wrong. When the first Group departed the coast out fix, it started its climb to what would be the bombing altitude. Then, as each succeeding Group departed that fix, it, too, would start climbing. The problem with this procedure was that, as soon as the first Group started its climb, its true airspeed would start to increase, and it would encounter different wind velocities. Now it would start to pull away from the Group in back of it, and the "stretchout" of the bomber stream would begin. By the time the last Group had reached the coast out, to start its climb, the first Group would be leveled off, with a true airspeed approaching 250 miles per hour, and the bomber stream would be really stretching out.

The solution to this problem that had been frustrating the Bomber crews for so long was pretty simple. We would no longer start climbing at the coast out, but instead, at a designated time, all Groups would start climbing, irrespective of position. This meant that we all would have similar true airspeeds and would be influenced by the same winds aloft. That took care of the problem. It was still possible for a Group to be out of position, because of poor timing, but the entire bomber stream wouldn't get all stretched out.

When you consider the way our Air Traffic Control system operates today, and all the
facilities at their disposal to guide each individual airplane through the sky to ensure its safety, it's almost unbelievable that we were able to do what we did. To think of launching hundreds of airplanes, in a small airspace, many times in total darkness, loaded with bombs, with complete radio silence, and no control from the ground, and do it successfully day after day, with young air crews, with minimum experience, is absolutely mind boggling.

The accomplishments of the Eighth Air Force have been and will be reviewed by historians from World War II on. There never will be another air armada to compare to it. I feel confident that they will never cease to be amazed by our ability to assemble hundreds of heavy Bombers, under the conditions we were confronting, into the devastating strike force we now fondly refer to as, "The Mighty Eighth."