

THE 324th PATHFINDER FORCE IN THE 91ST BOMB GROUP

How it came to be Written by John Howland

The Pathfinder Force was originated on March 9, 1944. Jim Tyson and I were called to the office Col. Leber, CO of the 381st BG and offered a transfer (on detached service) to the Pathfinder Force then stationed with the 305th Bomb Group at Chelveston. We had both been chewed out by Col. Leber for breaking radio silence over enemy territory on March 6th (requesting a return to flight plan after the lead ship led us off course over Osnabruck and a ship was knocked down by flak) and on March 9th (when we asked for a coded position report from the Pathfinder ship after flying over clouds since assembly over England- request denied). Apparently we looked skeptical so Col. Leber handed us a copy of his orders. As I recall they said, "Group commanders shall select two crews showing competence and leadership qualities."

It also said something to the effect that "some might consider this an opportunity to get rid of unwanted personnel. Group commanders are reminded that performance of the crews selected will be reflected on the CO making the selection."

My crew (Jim Tyson pilot) together with Carl Clark, pilot and Clem abler, Navigator were chosen by Col. Leber to represent the 381st bomb group at Ridgewell.

More than forty years after the war, I received a letter from Roy Halsey, Squadron commander of the 535th Squadron of the 381st Bomb Group. He was our Squadron Commander and the one who proposed Jim Tyson's crew for PFF duty. We met in Seattle, Washington at the 50th Anniversary celebration of the first flight of the Boeing B-17.

In his letter, Lt. Col. (Ret.) Halsey stated, "I hope I may be able to shed a little light on the reasons why some things happened." I considered Jim Tyson the best pilot in my squadron with one of the best trained crews. I flew with him whenever I had the chance. It was a sad day for the squadron when the decision had to be made to let Jim and his crew be considered for PFF duty. The benefit to the B-17 force of the 8th Air Force was greater than that of being a squadron or a group leader. I don't know how you feel about the experience, but your crew and all the other PFF crews did a magnificent job. A job you should all be proud of."

After training. many practice flights and flying a few missions out of the 305th Bomb Group, the entire Pathfinder Force for the 1st Bomb Division was transferred to the 324th Sq of the 91st Bomb Group on May 1, 1944.

Unlike normal bomber crews, our day started about 1900 hours the day before the mission. We were given a preliminary briefing by our Squadron CO, Lt. Col Weitzenfeld. Planes were normally loaded with unfused bombs but lacked a full load of gasoline. Normally, we were dispatched to fly lead or deputy lead for the 381st BG. However, on rare occasions we were dispatched to any group in the 1st Bomb Division such as Deenthorpe (401st BG) and Nutthamsted (398th BG). We usually arrived at our destination about midnight and were able to catch an hour or two of shut-eye before the final briefing. The group we were leading furnished the Acting Wing Commander who usually he flew in the Co-

pilots seat and the co-pilot flew tail gun to report condition of the formation to the AWC. The group we were leading also supplied the bombardier for the mission.

After the mission our trailing planes were peeled off over their home base; but we flew on to Bassingbourn for interrogation and debriefing. The AWC and bombardier had to find their way home by Jeep.

Although the Pilot and DR navigator were a team and usually flew each lead mission together, the Mickey Operators were not fixed. Mickey operator John Spierling usually flew with our crew but others, including Mike Rheam also flew with us. Living quarters were separate. Pilots and co-pilots roomed in one building. Navigators had their own barracks.

As far as training was concerned. we didn't have any instructors nor any books to guide us. We just took to the air and worked out our problems in our own way. The two toughest problems I had to solve were:

1. Leading a formation of 54 bombers over a check point on time, on course and at altitude.
2. Obtaining a wind at altitude without making excessive formation turns.

I have talked to many navigators on the first problem, but always receive the same answer. "Just allow plenty of time and jog left or right to kill time while you are heading for the check point." Such a procedure is fine if you are flying a single plane or in a small flight of planes. But jogging, and turning, or slowing down and speeding up is bad news for the 54 ship Combat Box formations we were leading. Turns had to be slow and very gentle. Turn the formation too fast and those on the outside couldn't fly fast enough to keep up. Those on the inside were slowing down to the point where they were ready to stall out and screaming into their mikes, "Speed it up, we are about to stall out with a full load of bombs.". No! Jogging and unnecessary turns wasn't the answer.

I pondered this problem many hours making sketches and dozens of calculations. Nothing seemed to fit until one evening while I was sitting on my bed. Like the answer to many perplexing problems, the answer was instantaneous, clear, and oh-so-obvious. If you want to fly over a checkpoint at a certain time, you shouldn't fly toward the checkpoint. You should flyaway from it. I explained the theory to Jim Tyson. He agreed it was a workable approach toward resolving our problem.

Jim and I worked out the details of the departure procedure during practice flights in the air. It took about four minutes and a circle 8 miles in diameter to turn a Combat Box formation 180 degrees. This is a turn of 1/4 needle width on Jim's turn and bank indicator. If we wanted to fly over a checkpoint on a course of 90 degrees at exactly 0920 hours in the morning, I flew a reciprocal heading of 270 degrees. Then, made certain I passed 8 miles right or left of the checkpoint at least 4 minutes prior to the scheduled departure time.

To illustrate, let's say we flew 8 miles abreast of the checkpoint on a heading of 270 degrees (west) at 0900 hours, twenty minutes before departure time. Since 4 minutes would be used for turning, we had 16 minutes to divide between flying west (270 deg) and east (90 deg). Under no wind conditions we would fly 8 minutes west, make the turn (4 minutes), and fly another 8 minutes east. With practice, and making time allowances for wind, we got so we could hit our departure time within a few seconds.

To find the answer to the second major problem, I relied upon my wonderful GEE box. Jim and I developed what we called the "Six Minute Wind procedure". When I was ready, I made a GEE fix and informed Jim we were starting our Six Minute Wind. Jim flew his course straight and steady for six minutes while I maintained an air plot (no wind position) on my Gee chart. At the end of six minutes I took another GEE fix. Then by plotting wind direction from the final "no wind" position to the final GEE fix and multiplying the distance by 10, I had a reasonable wind at altitude figure. I could usually get GEE fixes all the way to the coast of Holland, so I had a pretty good idea of our wind at altitude over the continent.

I don't say my procedures were used by all PFF navigators. There wasn't any "standard operating procedure". We just did things our own individual way. But it seemed to work okay for our crew, because I always got back to the base for supper.

John W. Howland

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