

Aviation Ordnance WW2

Ordnance Section—550th Bomb Squadron
385th Bomb Group—Station 155
Great Ashfield, Suffolk, England

There are many types of Ordnance in the Army (the Air Force was part of the Army in WW 2—USAAF), and Navy of the United States. The infantry would have among other things, the half tracks, tanks, Jeeps, trucks, personnel carriers and hundreds of other items including tents of all sizes. The 385th Bomb Group (H) would also have transportation Ordnance, including Fire Trucks, and Ordnance Trucks, but by and large, this version of Aviation Ordnance only pertains to arming our B-17s. This would be the Bombs, from 100 pounders to 2000 pound bombs, the 50 Caliber Machine Guns, 20mm Cannons, Fuses, Bomb Sights, and hand and shoulder weapons. The Crews were issued 45 Cal Colt Pistols, but an order came down from Col. Vandeventer that no weapons could be carried on a mission, as the Germans were shooting downed Airmen on the spot if they were armed.

So, the Ordnance Department of the 385th and all other Bomb Groups in the ETO, took care of the Ordnance assigned to them, and used this Ordnance to Arm their B-17s, B-24s, or whatever Armament was used on their particular planes. Of course **different** planes were used in the different theaters of war, as their requirements and terrain were different.

To begin with, when the 385th BG was put on alert, the four Ordnance Departments would be called out to the line (perimeter), probably about 2 to 3 AM, to await the Bomb Load from Wing. Of course the mission including the armament was carefully thought out at 8th AF in London, before being sent down to 3rd Air Division, Wing, and then to the Bomb Groups over East Anglia.

Sometimes the wait is long and a lot of strong coffee is consumed, but it finally comes—*Twelve 500 # bombs with contact fuses per plane*, and given the time of take-off.

An Ordnance crew of four would be assigned a bomb truck and bomb trailer, drive to the revetment and load enough bombs for their first plane. Two ordnance men would work on the ground putting on tail fins, shackles with the arming wires, and slings around the bombs, preparing them for hoisting. When the bombs had been cranked to the proper height by the Armament crew, the other two ordnance men who were positioned in the bombay, would attach the shackle to the Bomb Rack, starting at the top. This is repeated until all bombs are loaded in both sides of the bombay. When loading was finished, another crew would later return to the planes and screw in the nose and tail fuses, making sure the arming wire was through each fuse. This was very important, so that the arming vane would not unscrew rendering the bomb armed while in flight. When they had finished their first plane, the loading crews would return to the Ordnance Tent and be assigned another B-17—two planes was about par for a crew.

Now for the Cotter pin thing. When the fuses were manufactured at a munitions plant, a vane—a small fan—was at one end of the fuse and it was secured by a cotter pin. That made it safe, as it kept the little vane from unscrewing in transit and during the fusing phase. After the plane was airborne, the Bombardier, or a knowledgeable Gunner, would remove the cotter pins and the Pilot would announce: “the bombs are armed.” (Actually they are only armed after the bombs are dropped and the little vane spins off.) When any plane brings back it’s bombs, then the Cotter pins would have to be reinstalled. (Removing cotter pins was a very difficult job for the bombardier, as he was working with gloves and at 25 or more below zero !!) Later in the war, they used an enlisted man to be a togglier who dropped the bombs where the Lead Plane dropped them.

When a crew brings back it’s bombs for any reason, then the Ordnance crews goes back to the flight line, unloads the bombs, and returns them to the revetment. I hated to hear it, but sometimes the bombs were dropped in the Channel; however it did make it easier on Ordnance and Armament men.

The Shackle is the link between the bomb and the bomb rack, and when over the target, the bombardier would activate an electrical system that would cause the shackle to drop the bombs from bottom to top. He could either drop them armed, or when necessary could drop them safe. To drop them safe, the shackle would release the arming wire with the bomb, and in that way the arming vein, the small fan, would not screw off of either of the two fuses. Releasing bombs *safe* happens on very, very few occasions, so most

of the time the Shackle ***holds*** the arming wires, and the bombs explode on contact.

Even though each Squadron had 3 or 4 Ordnance men that were specialists in the 50Cal Machine Gun, the 20 mm Cannon, and the 37mm Cannon, very little work on them was done by Ordnance. The Armorers did that work. I can only think of one time that I was called to the Flight Line to repair a 20 mm Cannon, and that was when they were demonstrating it for some Generals. I never knew for sure why they didn't install them on our B- 17s but maybe the recoil was too great.

George Menkoff, 550th Ordnance

Arming Vein—2 Flights when the Arming vein unscrewed while in Flight

When a Arming vein unscrews while the plane is in flight, it is very serious, and may cause the airmen to abandon the aircraft, as it is then ready to explode with a large jar. Following is a description of two 385th Flights where this very thing happened. The first by the Ball Turret Gunner, Frank Mays, and the Other by the Pilot, Truman Smith of Ponca City, OK.

Frank Mays own words:

We delivered 12 – 500 pound General Demo bombs that day to a target near Munich, Germany. In the morning briefing we were told that the bombs had a 15 Second delay impact fuse that would allow the weight of the bombs to penetrate reinforced concrete bunker roofing before exploding.

The bombs were released one at a time – rather than Salvo – starting with the last loaded bombs first. One of my jobs as a Ball Turret Gunner was to count the bombs as they fell from the bomb bay. I reached the count of 11 then came a jarring bump felt throughout the bomber. I notified the bombardier of the short count and the Top Gunner quickly opened the forward bomb bay door and reported to the Pilot the position of the bomb. He said it was crosswise and said: “The little propeller is spinning, and hey, it jut fell off.”

The whole crew knew they were in very serious trouble. Still in the Flak area, the Pilot, Lt Lamping, pushed the button to prepare to bail out. “Skeet” Wolverton, the crew armorer, checked out the bomb and reported to the pilot over the intercom: “Lt. Lamping, I think we can dettison the bomb but it might hit the center rail and explode. It is worth considering.” The group commander ordered them to leave formation and go out about half a mile and decide what their course of action would be. The crew took a vote and all decided to get rid of the bomb.

Skeet selected Maxwell and I to assist him in dislodging the bomb. The bomb had the nose lodged on the center framework with the tail fin against the outside fuselage. Skeet or Maxwell did not have room for their chutes and I stradeled the bomb bay holding the harlness of the two men with the orders that if one slipped, I was to follow him down and they would both use his chute. Maxwell was able to dislodge the nose and the bomb fell free and they watch as the bomb exploded on the ground. The War Horse rejoined the formation.