THE GROUND CREWS
Written by Whit Hill

I'm not really qualified to speak for the Aircraft Ground Crew Maintenance people. The following are based on my observations while working as an Aircraft Sheetmetal Crew Chief, repairing battle damaged airframes on B-17 of the 323rd Bomb Squadron, 91st Bomb Group, Station 121, Bassingbourn, England from 1942 to 1945. To begin with, all the ground crews I have I known during and after the war, were men fully devoted to supporting the aircrews that flew the bombing missions. They quietly persevered whenever an aircraft of their responsibility was lost with friends and acquaintances by ensuring "their" next aircraft was in top condition to fly any mission. If I have missed a thing, I hope I will be forgiven.

What did they do? Consider the aircraft Ground Crews assigned to an aircraft. They were always there before the flight crews arrived, way before sun up on the morning of mission days to insure their aircraft was in top condition. It made no difference that they may have worked half the night correcting discrepancies noted by the last pilot who flew the plane, or fixing up the last mission battle damage such as the electrician repairing severed electrical wires, etc. When Ground Crews first arrived at their aircraft on mission days, they would make a cursory walk around inspection of their aircraft and grounds to insure nothing had been touched since the last time they were there. Generally the only ones who visited the bombers in the middle of the night were the Bomb Loaders who had to wait until the mission details of the type of bombs load the aircraft would be carrying. After the outside inspections, the Crew Chief with one of his crew would enter the cockpit, and from the Pilots side window we would call out "All Clear" after insuring all starting switches were turned off. After the all clear, signal crews joined together and pushed or pulled the propellers (props) through (rotated them by hand) to ensure that any oil that may have collected in the cylinders overnight was gently extracted, thus eliminating the possibility of blowing out a cylinder when the engine was started. Even though they had checked the engine oil the night before, they climbed upon the wings and reinsured that none of the oil had leaked out. They opened and drained the fuel petcocks located under the wings to drain off any water that may have accumulated in the tanks from the atmosphere, or came in the gasoline when the aircraft was refueled after the previous mission or flight. After pulling the props through, they cleared away from the engines, and one of the crew would move around to the exhaust pipes with a fire extinguisher. The Crew Chief who with one of his crewmembers was again back in the cockpit. They then checked the brakes, moved the yoke back and forth, and the wheel left and right to insure there were no restrictions in the operation of the wing and tail elevators, and tail rudder. Then, after signaling he was going to start the engines he called out "Clear" and not before he received the "All Clear" from the outside crew members on the ground, did he proceeded to energize the Number 2 engine (?) flywheel. It would begin on a low wheeze and raised its voice as it gained momentum. At the proper time the Crew Chief then engaged flywheel to the engine. The prop would start to flop over.

As it the engine began to "catch" it would cough a few times and belched smoke. The man with the fire extinguisher stood at the ready, as the belching smoke was full of gasoline and oil vapors. When the engine eventually "caught on" and the prop began to spin, the engine was put on idle, while the same procedures were applied to the other three engines. All four engines were set at idle speed.

While the engines were idling each engine was separately sped up to a fixed rpm and watching the rpm gages, the engine magneto was turned off and on, to insure there were no big drops in the engine rpm's. A large drop in rpm's indicated a faulty magneto requiring change. With the engines at idle speed, and
the electric generators operating, the flaps were lowered and raised, and the bomb bay doors were opened and closed, and the bailout bell was rung, and the windshield wipers were turned on to ensure they all worked correctly. There may have been other checks, but once all were completed the engines were turned off, there was another general check of the aircraft. Did it have toilet paper aboard?

When the combat crews arrived, they were given a hearty greeting. In no time the combat crew members became busy with their own duties, such as installing the Norton Bomb sight, plotting the routes, inserting the 50 caliber guns, hooking up the ammunition tracks, and checking oxygen lines. The Pilot and the Crew Chief discussed the pervious listed discrepancies and noted what was done to correct them. Once satisfied, the pilot gave his OK, and headed for the cockpit.

At load up time came, the Combat Crews took up their positions in the aircraft. The ground crew cleared the prop area, and one of them again stood by with a fire extinguisher. This time the pilot gave the "CLEAR" call and the engines were started and checked again. On a signal from the pilot, the Crew Chief who was now outside of the aircraft and in full view of the pilot, and gave the order for one of his crew to members to remove the wheel chocks. The pilot increases the engine speed, and the aircraft moved on to its ate.

An eerie pall of silence generally could be felt after the departure of the aircraft. The ground crews who had been watching the departure silently returned to the dispersal area and cleaned up the parking pad. If the mess hall was still open they then went to breakfast. Otherwise they returned to their sack (bed). The day generally drug on, except for those who still repairing damaged aircraft requiring repairs.

Some men played cards, got into a crap game, wrote letters to home, girl friends, buddies, or just "shooting the breeze" with members of other crews. Some ducked off the base through the back for a friendly bike ride to a local village, and perhaps a pint of bitters.

Later in the day the ETA (Estimated Time of Arrival) of the mission would be announced, and proper timing, the ground crews biked or walked out to the Tower area to watch the Group's aircraft return. If the aircraft returned in a ragged formation or with empty spaces, the men knew it had been a rough and tough mission. As each bomber landed it was met by it's ground crew at its dispersal area parking pad. Those bombers that had injured crewed taxied up to the Tower, where medics and ambulances were at the ready. The ground crews involved and medics wasted no time to get inside the aircraft and give assistance to the injured. The medics had the tough job of retrieving and taking the dead corpse to the morgue.

Once the casualties were removed, the Crew Chief and his assistant would taxi the bomber back to the proper dispersal area. In the case of serious injuries, a medical unit came down to the aircraft to clean it up. At the pads, the bombers were inspected for battle damages, and estimates were made as to how long it would take to have the aircraft operational again. If the damages were small, sheet metal crews would work all night if necessary to have them ready for a mission the next morning. In the event an engine change it was necessary, to call a Prop Specialist to remove the prop. The engine was then removed and all the exchangeable parts were removed for transfer to the new engines that came stripped. Although they may not have to work all night, they did work long hours in rebuilding and hanging the new engines and replacing the props. Before the aircraft went on another mission, it had to be flown and the new engine slow timed. This testing completed the aircraft was ready to fly on the next mission.

And then, there were the ground crews whose bombers did not return. They waited and waited hoping for news of their aircraft making an emergency landing at another base. They waited with their bicycles out near the Tower. Some sitting on their seats with one leg on the ground. Others standing there with
the bicycle between their legs, and others standing with the bicycle leaning against their back, not saying much, but hoping for the best.

As the darkness fell so did he hopes of their aircraft and crew returning. The fuel supply only lasted so long. Slowly rode off to their quarters in a subdued silence. While they may not have showed emotions, they were indeed grieved over the loss of the young men they had shaken hands with earlier that day, and would probably never see them again. The day closed in gloom.

Those bombers that did return were inspected for battle damage. The Crew Chief went through the flight discrepancies logged by the pilot, and the flight engineer. Work began in earnest and action was begun to immediately correct noted problems. Meanwhile the sheet metal crews had assessed the airframe damaged and had begun to repair those aircraft with the least amount of damages that could be repaired in time to fly again in the morning if necessary. Members of the Ground Crews would stand by to await the arrival of the refueling and oxygen trucks, just in case another mission was ordered for the next day.

And the next day, the pattern started all over again for another mission. For the ground crews, we were there for the duration of the war.

If I have missed a thing or two, I offer my apologies.