



B-17s are in a hangar at Tinker AFB ready for repair during WWII.

U.S. Air Force Photo

WWII logistics warriors included thousands of women

(Editor's note: The information in this article was extracted from Chapter Two, "The War Years," in "Logistics: An Illustrated History of AFLC and Its Antecedents 1921-1981." Author of the chapter is Dr. H.P. Carlin, deputy director of the History Office at the Air Force Logistics Command headquarters, Wright-Patterson AFB, Ohio.)

At the peak of World War II in 1943, almost half a million military members and civilians worked under the vast umbrella of the Air Service Command, predecessor of today's Air Force Logistics Command.

They performed herculean logistic feats to help the combat forces win the war. For instance, between 1943 and 1945, ASC depot maintenance shops serviced 230,000 engines and 36,000 aircraft.

Logistics backbone

As AFLC historian Dr. H.P. Carlin has put it, "Without the mechanics and logisticians, the depot and supply centers, the distribution and transportation systems, the build up of the air fleet would have counted for nothing.

He says that, though it was an achievement of the utmost importance, the production of vast quantities of aircraft was not by itself enough to turn the U.S. Army's air arm into the powerful force that it came to be.

The first thing the Air Corps needed, of course, was trained pilots. But it was no less urgent to develop a complex logistics network to support the rapidly expanding force.

Maintenance shops, for example, faced an arduous job, technically complicated and filled with a variety of challenges that, at the beginning, must have seemed insurmountable.

When war broke out in 1941, U.S. military authorities faced the gargantuan task of building up a complete logistics system almost from scratch. With only a small inheritance from its predecessors, the overriding concern of the newly established Air Service Command from the outset was to expand its physical holdings and its work force as rapidly as possible.

Increasing the size of the work force was a severe problem, not only because the command had to recruit and train large numbers of people, but because the specialties required by ASC were many and highly technical.

And as the command opened up more and more subdepots around the country, ASC found it almost impossible to recruit civilians to work at installations in such isolated places as Muro Lake, Calif., or Tonopah, Wash.

Need for civilians

For a while, command officials considered the possibility of using military personnel instead of civilians at all subdepots. But this solution, though adopted in a few instances, was otherwise never carried out because the military were needed elsewhere.

The command was rapidly organizing and expanding its network of depots and subdepots. During the war the number of depots increased to 11, while the number of subdepots rose from 47 at the time of Pearl Harbor to 130 by September 1942 and ultimately reached a peak of 238 in early 1944.

As the depots and subdepots proliferated across the country, ASC quickly discovered that it did not have enough experienced personnel to go around. Whenever a new installation opened, experienced personnel were drained from the older facilities. Soon the ranks of the veterans were spread thin.

At the same time, the logistics command had to throw its gates open to thousands of new personnel, all of whom were inexperienced and many of whom were barely qualified for the complex clerical procedures of the supply world.

They were also in competition with private industry, which could pay higher salaries than those set by the U.S. Civil Service Commission. It was even more difficult to attract civilians to subdepots located in remote outposts in the Pacific Northwest or the Southwest. Until ASC sent military personnel to those areas, many supply jobs went begging.

What finally saved the day for ASC — and for much of American industry as well — was the employment of women.

Women hired

Hired in large numbers, women constituted 50 percent of the work force in the depots and from 40 to 80 percent in the subdepots. At both echelons their proportion was far larger in the supply fields than in maintenance.

Women performed not only most of the clerical work, but also much of the physical labor of loading and unloading freight cars and trucks, stacking materials in the warehouses, and driving forklift trucks.

Though skeptical at first, supervisors soon learned to value their new work force, agreeing almost universally that the women had mastered their jobs faster than their bosses had thought possible.

The lives of World War II combat pilots depended on maintenance more than any other support function. This

function, of course, determined the safety and efficiency of their aircraft.

Throughout the war, maintenance was a responsibility that claimed most of the manpower and the lion's share of management attention in the Air Service Command.

In the stateside depots and subdepots, ASC was the workhorse of the Army Air Forces, inspecting, overhauling, repairing and modifying thousands of aircraft of all types and models. Here again the most serious problem was the lack of trained personnel.

Repair was just one of the maintenance functions, although a crucial one, and in the long run overhaul and modification were just as important. All of these were highly technical, complicated tasks demanding years of training and experience to produce an acceptable level of competence.

The solution to this problem was simple, ingenious and effective. Borrowing techniques from the American automobile industry, Air Service Command broke the work down to its smallest components, quickly trained each new employee in a narrow specialty, then assigned him — or her — to one or two repetitive tasks on an assembly line.

ASC also introduced a program of specialized repair that became the forerunner of the Technology Repair Center concept adopted 30 years later. Under this program, each air depot was made responsible for repair and overhaul of a particular type of airframe or engine.

For example, ASC assigned all B-17s to the Fairfield (Ohio), Oklahoma City, and Warner Robins depots; all B-24s to the Middletown (Pennsylvania), Ogden and Spokane (Washington) depots; and all B-25s to the San Antonio and San Bernardino depots. The systems of specialized maintenance

was also applied to repair of such aircraft accessories as propeller blades, generators, tires, and bombsights.

Maintenance shops

In addition to inspection, repair, and overhaul, the maintenance shops were called upon to perform one other consequential task, the modification of aircraft to keep pace with rapid advances in technology. Early in 1942 the Army Air Forces began to establish almost 20 modification centers throughout the country. These centers got a great deal of help from maintenance experts in the depots and subdepots.

By regulation every depot was required to share the burden. They responded magnificently, taking in nearly twice as many aircraft for modification than for inspection and repair. And they devoted from 30 percent to 45 percent of their resources to this undertaking.

The work was as varied as it was voluminous. For example, at the Fairfield depot, which is now part of Wright-Patterson, maintenance crews installed torpedo racks on the B-26, supplemental armor on the B-25, and photographic equipment on the B-17. Many of the depots carried out the important task of installing radar on aircraft.

As the depots attained greater efficiency in the later stages of the war, the number of aircraft grounded for maintenance began to plummet.

The "Illustrated History of Air Force Logistics Command" contains a photograph of an airplane flying low over an outdoor gathering of the Sacramento work force assembled on the flight line. The plane is dropping colored cards bearing these words: "Without you there below, our planes would not fly. We, the soldiers of the sky, thank you ... the soldiers of production." (AFLCNS)



U.S. Air Force Photo

Women were an important part of the logistics work force at Tinker during the war.