

Supply Hub of the West:

DEFENSE DEPOT OGDEN, 1941-1964

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It is difficult to overestimate the importance to the Utah economy of the federal defense installations constructed in the Beehive State during World War II. In the Ogden area alone the Army, Navy, and Air Force poured almost \$100 million into permanent facilities, and the number of employees at these installations during the war was almost 52,000 persons — easily as many as in all of Utah's agriculture — 50 per cent more than in all of Utah's manufacturing at the time. The investment in such facilities in the Ogden area was more than twice the assessed valuation of Ogden for 1942 and more than one-half times the assessed valuation of Weber County.

PEAK WARTIME EMPLOYMENT IN FEDERAL INSTALLATIONS IN THE OGDEN AREA

(SOURCE: Historical records at each of the four installations.)

<i>Installation</i>	<i>Number Employed</i>
Ogden Arsenal	6,000
Defense Depot Ogden (Utah General Depot)	12,000
Hill Air Force Base	21,780
Clearfield Naval Supply Depot	12,000
Total	51,780

Dr. Arrington is directing a project for Utah State University involving the writing of the histories and economics of the federal defense installations in Utah. Articles in this series are found in previous issues of the *Utah Historical Quarterly*. An associate in the project, Thomas Alexander, is a candidate for the doctorate in history at the University of California, Berkeley. All photographs in the article are courtesy Defense Depot Ogden, United States Army.

In the process of converting the area into a major supply base for the Army (Ogden Arsenal and Defense Depot Ogden), Air Force (Hill Field), and Navy (Clearfield Naval Supply Depot), the population doubled, service establishments were overwhelmed, and housing facilities were strained to the limit.¹ Largest of these facilities in terms of immediate investment and employment was the Utah General Depot, now known as the Defense Depot Ogden.²

The 23-year old military installation on Ogden's West Second Street received its eighth name, Defense Depot Ogden, on January 1, 1964. Colonel Omer S. Dews, USA, was appointed commander. Under the new Defense Supply Agency policy, the installation will be staffed by representatives from all military services — the Army, Marine Corps, Navy, and Air Force — and will stock Defense Supply Agency materiel for military services in the western part of the world.

Prior to January 1, 1964, the Depot operated under Army command and was known as the Utah Army Depot, but has been phasing into the Defense Supply Agency mission for the past two years. Before 1962 the Depot was known as the Utah General Depot.

THE FOUNDING OF THE UTAH GENERAL DEPOT

Even though the appropriations to the United States Army were cut to the barest minimum in the early 1930's, its need for supply storage continued. In search of a location to build a general warehousing depot, the Quartermaster Corps sent General Edmund B. Gregory, quartermaster construction chief, to inspect personally a site at Ogden. In 1935 the chief of Field Service and Procurement designated Ogden as a city of strategic importance; and Major Ora Bundy, a former mayor of Ogden, was as-

¹ O. N. Malmquist, "Major Military Construction Adds Importance to Ogden Area," *Salt Lake Tribune*, Sunday Magazine, July 4, 1943.

² The basic source for the history of Defense Depot Ogden is the "Utah General Depot Diary: 1930 to July 1, 1960," which is a day-by-day typewritten listing of events and activities of importance kept by the public information officer. This headline-type summary is supplemented by the "History of the Signal Supply Section, September 30, 1941–November 1, 1945"; and Aaron W. Tracy, "History of the Utah Army Service Forces Depot, Ogden, Utah." Other sources include: "Brochure of the Engineer Supply Section," prepared under the direction of Lieutenant Colonel A. G. Angus (ca. 1952); "Summaries of Major Events and Problems," 1953–1962; "History of the Utah General Depot June 25, 1950 to December 31, 1952"; and various brochures published by the Depot and issues of *The Minuteman*, which is the UGD newspaper. All of these are in the Depot Public Information Office, as are a number of histories of individual sections, units, and divisions of the Depot.

The authors are grateful for interviews with Miss Geraldine A. Utsman of the Public Information Office; Colonel Lyman P. Marden, post operations officer; and Mr. Ralph P. Richardson, deputy comptroller, all of Utah General Depot. All information in the article is from these sources unless otherwise noted.

The writers are also grateful to Mr. M. F. Burson, public affairs officer, for assisting with the up-dating of materials collected in 1962.



Aerial view of Defense Depot Ogden, two miles northwest of Ogden. The Depot comprises 1,681 acres of land and has an estimated replacement value of over \$100 million.

signed to survey a possible site two miles west of Ogden, in the small farming community of Marriott.

On May 28, 1940, the House Military Affairs Committee approved the purchase of 3,000 acres of land "near Great Salt Lake" for the storage of general supplies and equipment for 500,000 men. After appropriate reviews and appraisals by Army representatives, the War Department arranged in August 1940, for the purchase of approximately 1,600 acres. The land was part of the original right-of-way of the Central Pacific Railroad, which joined the Union Pacific Railroad in 1869 to form the first transcontinental railroad.

There were several reasons for the Army choice of Ogden as the site for a general depot. Near the meeting point of the first transcontinental railway, Ogden was "The Junction City." Utah's second largest city, it sat astride both east-west and north-south railroad lines and was almost equidistant from the three major Pacific ports of embarkation, Seattle, San Francisco, and Los Angeles. Ogden was also served by four major transcontinental highways. Even more important than the geography,

however, were the human resources. Ogden and surrounding communities provided an excellent supply of skilled and semi-skilled labor.

Although the land was priced at \$409,632, Congress appropriated only \$310,000. Recognizing that they must act quickly to obtain the base, the Ogden Chamber of Commerce and local citizens groups strove to obtain locally the \$99,632 which the Army needed to complete the purchase. Within 48 hours, Ogden's leading citizens, "sparked" by Frank M. Browning, deposited \$100,000 with Federal District Judge Tillman D. Johnson. The final purchase was not completed until 1943, because the farmers who lived on the land decided to contest the purchase.³ In the latter year a clear title to 1,679 acres of land was turned over to the secretary of war.

As later events showed, it was fortunate that the clearing of the title did not stand in the way of the government, which, after condemning the land, began construction on December 16, 1940. The Army designated Colonel E. G. Thomas, already serving as area engineer, to command the Depot during construction; but after the War Department's building program in the Ogden-Salt Lake area became too great for Thomas to handle, Colonel William L. Mays, a former construction quartermaster from Fort Douglas, replaced him. Al Johnson and Leck Company, of Minneapolis, Minnesota, won the first contract of \$1,705,000 to construct eight warehouses. Unlike the later Tooele Ordnance Depot, Utah General Depot was originally meant to be a permanent installation, and the warehouses, completed by September 20, 1941, were made with six-inch reinforced concrete floors, eight-inch brick walls, and steel-truss-constructed roofs.

Among the construction problems was the encounter with surface water. In the north part of the reservation, a creek caused a permanent swampy area, and the water table was so high that the concrete floors became not only a sign of permanence, but an absolute necessity to keep the materials dry. Fortunately, a gravel bed on the western side of the reservation helped fill in many of the puddles, and subsequent drainage projects largely eliminated the water.

In addition to the original cost of construction, the War Department permitted the Depot to rent a 1911-vintage locomotive which had been used in Bingham Canyon by the Utah Copper Company, freight cars owned by the Salt Lake and Garfield Railway, and seven passenger cars which had seen 40 years of service in New York's famous elevated railway.⁴

³ Many farmers whose land was condemned felt that they were dealt an injustice because of the low appraisal price of the land, and because Army officials insisted on locating the base on some of the choicest farming land in Weber County instead of on wasteland west of Ogden. As a result of this there were numerous lawsuits contesting the condemnation.

⁴ *Tribune*, March 28, September 5, 1943.

Electricity was purchased from Utah Power and Light Company, natural gas from the Mountain Fuel Supply Company, and water from Ogden City. Utah State University (then Utah State Agricultural College) furnished 15,000 trees to help beautify the area.

At the time of completion during World War II, it was the largest quartermaster depot in the United States, and contained 45 miles of railroad, 57 miles of roadways, possessed more than 5 million square feet of warehouse space, and almost 13 million square feet of open storage space.

ORGANIZATION OF UTAH GENERAL DEPOT

As a general depot, Utah General Depot had representatives from many technical services, with a technical service commander in charge of each and the Depot commander serving as "landlord" of the entire project.⁵ As O. N. Malmquist described it at the time, "What the old-fashioned general store was to a civilian population which might suddenly call for anything from a needle to a threshing machine, the . . . [UGD] is to the army."⁶

The Depot's first mission, as received on September 15, 1941, was to receive, store, maintain, and ship Quartermaster, Chemical, Signal, Medical, and Engineer corps supplies within the Western States and to prepare these supplies for shipment overseas through the West Coast ports of embarkation (principally Seattle and San Francisco). The Chemical Supply Section handled training ammunition, gas masks, and toxic chemicals; the Engineer Supply Section stored spare parts, heavy equipment, tools, and engineer supplies; the Quartermaster Supply Section had the responsibility for all clothing, bedding, and household goods, as well as special purpose machinery such as loading equipment; and the Medical Supply Section stored drugs and other medical supplies. With the addition of the Ordnance and Transportation Supply sections, UGD housed representatives of each of the Army's seven technical services.

Even before the Japanese dropped the first bomb on Pearl Harbor, "Second Street," as the Depot was affectionately called, was ready to function. Having been already established, the Utah General Depot was directed to expand to meet the challenges of the war. While the expansion of the Depot's physical plant produced no great problems, there was a strain on the local labor market because of the establishment and expan-

⁵ U.S., Department of the Army, John D. Millett, *United States Army in World War II: The Army Service Forces: The Organization and Role of the Army Service Forces* (Washington, D.C., 1954), 302.

⁶ "Army Has Record Stocks at Ogden," *Tribune*, June 30, 1943.

sion of other bases and industries nearby. From 18 civilians on August 15, 1941, the labor force grew to over 6,000 by September of 1942.

Each division originally recruited its own personnel, but in 1943 a Civilian Personnel Division was established for the entire Depot. In several cases, the Depot used U.S. Army labor battalions, and during 1941 and 1942, high school and college students helped fill the labor gap. Some of the students traveled as far as 160 miles on Saturday and Sunday to unload incoming cars which had accumulated during the week. During the summer of 1942, high school and college students worked full-time to replace the agricultural workers who left for their usual employment during the summer. When the Depot once again faced a labor shortage with the opening of school, a work battalion was imported from San Luis Obispo, California, until the local harvest was completed. In February 1943, the Depot reached its all-time peak civilian employment of 7,672 persons.

A large share of these employees were women. While some found their niche in the usual female jobs of typist and receptionist, others were assigned such "masculine" employment as guarding warehouses. After intensive training in self-defense and in the use of the .45 calibre pistol, they performed yeoman service with German and Belgian shepherd dogs of the Army's K-9 Corps. That "the weaker sex" made excellent guards was confirmed by one arrogant male who, upon refusing to halt for identification, was forced to leap to the top of his car when the lady guard released her barking four-footed aide.⁷

One of the most successful of the worker recruitment programs was the Cache Valley "special labor project," in which over 600 high school and college students and teachers commuted on week ends to work at "Second Street." Headed first by Dean of Students Jack Croft, and later by Professors H. B. Hunsaker and Evan B. Murray, all of Utah State University, the project ran during the winters of 1942-43 and 1944-45 as an organized undertaking and during the winter of 1943-44 on an unorganized basis, as well as on a full-time basis each summer. Traveling at first by Oregon Short Line, and later in 16 Cache County school buses rented for the purpose, the workers, including an average of 20 coeds, commuted from Logan to Ogden each Saturday and Sunday. In January 1943 the project branched out into Box Elder County and southern Idaho.

As organized crews, the students and teachers worked at such duties as loading and unloading box cars, making up shipments, and cleaning up for inspection, at a beginning wage of \$.65 per hour, on a 10-hour shift.

⁷ *Ibid.*, Sunday Magazine, February 6, 1944, June 6, 30, 1943.



Main entrance to the Utah General Depot, now called Defense Depot Ogden. Since classified materials are stored and repaired here, limited entrance is gained through permits issued at this gate.

Though most of the workers went home overnight, some stayed an extra shift and several groups traveled to Ogden for night shifts during the week. Barracks were provided for summer crews and for those remaining overnight. Not only did this work aid America's war effort, but many students and teachers found this a means of paying for further education.⁸

SECTION ACTIVITIES DURING WORLD WAR II

Quartermaster Section. Records indicate that the most important function of the Depot has been the receipt, storage, and shipping of quartermaster supplies. Early in the war, the Quartermaster Corps designated the Depot as the base for all items of clothing and general supplies for Utah, Nevada, and California. By July 1942 the Depot supplied all quartermaster items to the Army installations in Idaho, and the supply area was expanded shortly afterward to include Montana. In 1944 Washington and Oregon were added to the list. By October 15, 1944, Utah General Depot supplied all nonperishable subsistence items for all posts in Washington, Oregon, Utah, Idaho, Montana, northern California, and northern Nevada.

To this ever expanding area, UGD supplied a varied assortment of goods. Steel helmets, rations, protective clothing, and animal transportation vehicles were sent to San Francisco port of embarkation for shipment overseas. Band instruments, winter clothing, utensils, field ranges, razor blades, tabulating machine forms, packing and crating materials, laundry

⁸ William Johnston, "Cache Valley Youths Help Keep Army Freight Rolling; Students Volunteer for Hard Work," *ibid.*, Sunday Magazine, January 24, 1943; also *ibid.*, December 25, 1942, January 11, 1944, February 4, 1945. The writers also profited from an interview with Professor Evan B. Murray, head of the Department of Economics, Utah State University.

and dry cleaning equipment, cabinets, storage cases, desks, and coffee were among the thousands of articles which left UGD for posts in the western United States. Even the relocated Japanese-Americans at Heart Mountain (near Cody), Wyoming; Topaz (near Delta), Utah; Hunt (near Rupert), Idaho; and Tule Lake and Manzanar, California, had UGD to thank for their supplies. Utah General Depot also stored and shipped lend-lease material for the Quartermaster Corps' International Division. So vast were the Quartermaster Section activities that in fiscal 1945, 32,407 freight cars were required to ship the 1,137,670 tons of supplies which it sent to the war front.⁹

The function of Quartermaster Supply was so important to the Depot that while UGD retained its mission as a general depot, its name was changed to Utah Quartermaster Depot in July of 1942. This designation lasted until May 1943, when the Depot was renamed Utah Army Service Forces Depot — the name by which it was known until after the end of World War II. As the war neared its close, the Quartermaster Supply Section supplied honorable discharge emblems, flags, and grave decorations to units overseas. In cooperation with the Medical Supply Section, Quartermaster Supply also sent several carloads of medical supplies to Japan to be used by the Red Cross in caring for American prisoners of war.

Signal Supply Section. Early in the war, when there was general fear of Japanese bombing, the Signal Corps ordered 50 per cent of all signal supplies moved from San Francisco General Depot to the Signal Supply Section at Utah General Depot. The Signal Supply Section then became known as the "Ogden Signal Depot." At the time, UGD's warehouse and closed shed space was hopelessly inadequate, and no additional shelter was available. Thus, an estimated 1 million pounds of cable on reels "lay out in the open; crating materials piled up in the yard."¹⁰

Between the fall of 1942 and October 1943, the Signal Supply Section also maintained a back-up repair shop for radio and electrical equipment. As the danger of an attack on the West Coast subsided, however, this mission was moved to Sacramento Signal Depot. Some of the items which the Signal Depot repaired included radio sets, telephone equipment, radio tubes, coils, electrical assemblies, fuses, switches, insulating material, wire communications apparatus, cypher devices, tools, and tool equipment. At the peak of the wartime activity, the Signal Section repaired between 6,000 and 10,000 items daily on six production lines.

⁹ *Tribune*, June 29, 1945.

¹⁰ U.S., Department of the Army, George Raynor Thompson, *et al.*, *United States Army in World War II: The Technical Services, The Signal Corps: The Test, December 1941 to July 1943* (Washington, D.C., 1957), 179, 515.

Even after UGD lost the back-up maintenance activity, the Ogden Signal Supply Section remained an important military activity. In the spring of 1944, the Army assigned UGD the responsibility of storing heavy power plant equipment and connected it by teletype with Philadelphia and Dayton to expedite the movement of Signal Supply materiel between the three important depots and overseas.

As the war moved on toward a successful conclusion, and especially after VE Day in the summer of 1945, the Signal Supply Section became more active. A mission called the "Utah Project" began as the war shifted to the Pacific Theater. Utah General Depot was ordered to ship Signal Corps supplies on 24-hour notice. To prepare for this task, the section had to separate and crate over 30,000 items in sets designed for a specific number of men, and have them ready for overseas shipment. Late in 1945, the section sent more than 1,500 tons of materiel in less than two weeks in coded shipments to the ports of embarkation.

Also with the end of the European war, airplanes had to be flown back from Europe for use in the United States and other theaters of operation. To expedite the return of these planes, the Army inaugurated "Operation Green Plan" under which the Signal Corps ordered UGD to assemble radio towers and plant equipment for shipment to North Atlantic posts so the planes could fly back on radio beams. With the help of German prisoners of war and Italian Service Units, personnel of the Depot worked day and night and shipped 140,000 pounds of radio towers and equipment in three days.

Chemical Supply Section. This section was responsible for renovating protective clothing until May 1942, when it received orders to ship the renovated equipment overseas. After the section lost this mission, its main function was shipping Chemical Corps supplies to the West Coast ports of embarkation. The Chemical Supply Section was "well supplied" with toxic gas, stored flamethrowers, and other chemical weapons.¹¹

Ordnance Supply Section. After August 1942 the Army transferred motor transportation repair functions from Quartermaster Corps to Ordnance Supply. One of the major problems the Ordnance Supply Section encountered was in the manufacture of boxes. After working on the problem for a long time the Ordnance Section developed an assembly-line technique so that it could produce as many as 576 boxes per day with a total weight of 136,434 pounds. In December 1944, the Army deactivated the section and transferred its functions to other depots.

¹¹ *Tribune*, November 28, 1943.

Ordnance Supply Section was not the only section which had problems with its boxes. By February of 1944 the volume of business done by the Signal Supply Section necessitated the use of an average of 21,000 boxes every three months. The volume of business became so great that Signal Supply Section contracted with Wickes Engineering and Construction Agency of Camden, New Jersey, to set up a plant in Logan where its supplies could be packed. The Utah State University Field House was the focus of this activity, which involved the employment of several dozen persons, primarily women. This arrangement worked well as long as the materiel did not have to be shipped overseas; but as soon as overseas shipment was ordered, the system proved inadequate. This packing, not designed for rigorous conditions and delicate electrical items, deteriorated through the growth of fungus, corrosion of parts, and breaking of subassemblies. After a few such experiences, UGD sent its own employees to the Forest Products Laboratory in Madison, Wisconsin, to take courses in packing.

Transportation Supply Section. Because the Depot had to ship this materiel all over the West and to the ports of embarkation, rolling stock had to be kept in good order. This function was assigned to the Transportation Supply Section, activated in June 1942. Besides a locomotive repair shop with trained mechanics, the section assembled tanks, artillery pieces, and other vehicles for long-term storage. Almost \$16 million in tools were received by the Depot at the time of the activation of the section — enough to supply two armies. These were segregated into sets and shipped overseas.

Machine Records and Training. Until 1942 the programming of supply and shipping orders and the maintenance of stock records were done by hand — a slow and often inaccurate method. Later, the Depot sent personnel to an International Business Machines school in Salt Lake City, and inaugurated mechanical accounting and posting techniques.



Using this mechanical process, the Machine Records Division was eventually able to process as many as 300,000 detail cards per month.

Utah General Depot also served as the site for several training schools held by the Army during the war. In 1942 and 1943, for instance, the Depot hosted an institute for troops already in the service who received advance training in warehousing, shipping, packing, and loading of supplies. The base organized the "Advanced School for Storage Officers," to train qualified officers for such key positions as quartermaster storage officer and director of storage. Several of the conferences and post-graduate schools were attended by general officers of the Army.¹²

OTHER WORLD WAR II ACTIVITIES

Like the Colossus of Rhodes, Utah General Depot lay astride the major transcontinental transportation routes, and just as the Rhodians formed an important link in the supply activities of the ancient world, Utah General Depot formed a link in the chain of supply which eventually won the second World War for the United States. As early as December 1941, the Engineer Supply Section alone handled 4,848 tons of materiel. In May 1945 the Depot as a whole received 37,749 tons of supplies and shipped 20,169 tons. This volume of business represented more than the combined activity of Ogden Arsenal, Hill Field, and the Naval Supply Depot at Clearfield. Throughout July 1943, for example, the Depot handled about 200 carloads of materiel per day. In August 1945 the Less-than-carload-lots Branch alone handled 1 million pounds of materiel per day.

The Depot did not, of course, confine itself to supply services for the Armed Forces, other government agencies, and foreign governments. It also rendered a valuable service by maintaining facilities for the internment of prisoners of war. In October 1942 the Army authorized UGD to

¹² *Ibid.*, October 2, 4, 1942, March 6, December 16, 19, 1943, February 15, March 26, 1944; and U.S., Department of the Army, Erna Risch and Chester L. Kieffer, *United States Army in World War II: The Technical Services, The Quartermaster Corps: Organization, Supply, and Services* (Washington, D.C., 1955), II, 276.

Concrete storage warehouse at Defense Depot. The Depot has 6,189,000 square feet of covered storage space, consisting of 69 storage buildings. Largest of these warehouses, constructed of concrete, is 280,000 square feet, or six and one-half acres of storage space under one roof.



build a POW camp. The facility, built by James J. Barnes Construction Company, accommodated eight companies of 250 men each. After being deloused, disinfected, fumigated, bathed, registered, clothed, quartered, and given a physical examination, the first group of 1,030 Italian prisoners entered the compound on April 9, 1943. A subsequent contingent arrived on May 10, 1943.¹³

These prisoners were used at the Depot for various jobs until April 1944 when Italy surrendered and their status as POWs changed. The United States Army, in conjunction with Italian officers, formed an Italian Service Unit (ISU) to perform the tasks formerly performed by the POWs and, in association with German POWs who came in 1944, to perform other tasks which needed to be done. When the Italian officers came to UGD to recruit for the ISU, many of the soldiers were hostile. Some of them threw rocks at the officers, considering them traitors to their country. Whether they were angry at the officers for having conducted the unpopular and unsuccessful campaign in North Africa, or for present support of the Allies, is not clear. One of the Italian colonels was hit behind the ear, and several of the others suffered minor damage to their persons and pride. Of the 4,000 Italian prisoners at UGD, 2,700 or about two-thirds signed up for the Service Unit.

After they signed with the ISU, the POWs believed their status would change. The action of the War Department in authorizing the formation of such units was interpreted as a sign that the recruits would receive concessions which ordinary prisoners could not expect. When they found that they would not be allowed to go to town on leaves, they called a strike. When the colonel in command of the compound unsuccessfully tried to get them to return to work, he was relieved of his command. Finally, the new commanding officer made the concession of allowing a company of ISU to go to the canyon each week end for a picnic and instituted a heavy athletic program to burn off some of the excess energy.

The POWs and ISUs at the Depot formed an indispensable adjunct to the civilian and military labor force. In May 1945, for example, there were approximately 5,000 POWs and ISUs employed at Utah General Depot, as against 4,000 American civilians. Many were engaged in clerical and office work; others were trained to work as messengers, draftsmen, and in other skilled positions. Groups of POWs broke down and assembled shipments, loaded and unloaded freight cars, and cleaned up around

¹³ O. N. Malmquist, "Italian Prisoners Fare Well at Camp Near Ogden," *Tribune*, July 17, 1943. Malmquist wrote: "The Utah depot is the only one in the country which has a prison camp attached. Officers there regard it as an experiment in easing the manpower shortage through utilization of war prisoners."

the installation. They repaired and rehabilitated shoes, dishes, canteens, and field stoves, and salvaged scrap metal and lumber. In the first six months of 1945, 90 POWs under the supervision of five civilians salvaged enough scrap lumber and metal to save the government \$56,000. In addition to their work for the Depot, members of the ISU worked as field hands for private citizens. In resorting to this procedure to meet the shortage of labor, the government required local farmers to pay a daily wage to the U.S. Treasury for each worker employed.¹⁴

POWs were distinguished from United States servicemen by their clothing, which was dyed blue in a special plant established by the Depot. The same plant dyed all POW clothing for the camps in Texas, Oklahoma, Arizona, California, Oregon, Utah, and Idaho. The ISU were returned to Italy in January 1946; all German POWs had been returned by June 1946. A few of these later returned to Utah as immigrants determined to spend their life in America.

Unlike prisoners of war and the work battalions, civilian employees could not be forced to work. To help provide incentives for the employees, the Depot instituted an employee suggestion program. This system served the dual purpose of raising morale and saving the government thousands of dollars for a small investment in prize money. One employee in the Ordnance Supply Section saved the government a great amount of time and money by suggesting a jig which the section used as a guide for dunnage in loading vehicles on railway cars. The Depot also carried on an extensive sports program and sponsored concerts by a Depot band.

As the number of employees grew, the number of letters and checks flooded the downtown banks and post offices to such an extent that the employees created traffic jams on payday. After operating a check cashing concern in conjunction with the Commercial Security Bank on the tenth and twenty-fifth days of each month, the First Security Corporation opened a branch bank at the base in March 1943, and about the same time the post office opened a unit at the base. The Depot also provided emergency medical and dental service by establishing a dispensary.

The Depot with its large labor force required safety and security precautions. The Intelligence Section conducted personnel investigations on every employee and investigated pilfering and subversive activities. With all the materiel in storage, the Depot had to establish its own fire department with three stations and six mobile pieces of equipment. This proved to be a wise precaution when in August 1943 one of the employees, "appar-

¹⁴ *Tribune*, May 13, August 5, 1945.

ently out of curiosity," struck a military lighter from a shipment of lighters he was handling and a spark fell in a pile of oakum. Even with the available foamite fire extinguishers, the employees could not put out the fire, and the damage to the supplies and warehouse amounted to about \$1.5 million.

With the expansion of missions, the facilities were also expanded. Where there had been originally only eight warehouses and seven sheds, by the end of the war there were 28 large warehouses and 19 sheds. UGD possessed one of the two large, heavy equipment overhaul shops in the nation and repaired all Army lifts, cranes, and other heavy equipment west of the Mississippi River. The adjutant general's depot for all states west of the Mississippi was located at Second Street, and the Depot handled the printing and distribution of all Army publications for the Western States, Pacific bases, and Far East — roughly one-half the globe.¹⁵ The largest supply house installation in Utah, UGD had grown into an indispensable and permanent link in the Army's supply system.

AFTER WORLD WAR II

After the surrender of Germany in May 1945, the activities of UGD increased rapidly. Records which had heretofore been considered phenomenal were shattered and still greater goals were set. And while Japan accepted the Allied surrender terms on August 14, UGD's task was far from ended.

Beginning immediately after the war, great amounts of tanks, guns, clothing, and other materiel poured back through the ports of embarkation; and shipments designated for overseas use were rerouted for storage or salvage. Signal Supply Section, for instance, had just over \$4 million in surplus materiel on July 31, 1945, but by September 30, it had accumulated almost \$14 million worth. The volume of this returned materiel became so great that the Depot was forced to build emergency storage areas using huge mats which had formerly served as emergency landing strips for U.S. fighter planes. Indeed, it was necessary to activate a Disposal Branch to dispose of as much surplus materiel as possible on the civilian market. This task was assigned, in March 1946, to the George A. Fuller Company, with offices in the Utah Ordnance Plant (Remington Arms) in Salt Lake City.

Utah General Depot received the additional mission of returning the bodies of dead servicemen to relatives for burial in the states. In 1946 the

¹⁵ *Deseret News* (Salt Lake City), December 14, 1946.

Army Graves Registration Division (AGRD) chose UGD as a distribution center for southern Idaho, Montana, Wyoming, Utah, and Colorado. Housed in remodeled barracks, AGRD personnel had the task of instructing local funeral directors in proper procedures for the final burial of the servicemen's remains.

In keeping with the postwar retrenchment program, the Army required UGD to cutback its personnel strength. This began in the fall of 1945, and was required in every section and division. As personnel quotas were cut, UGD's regional mission was trimmed to include Utah, Idaho, Montana, northern Nevada, northern California, and some posts in Washington and Oregon. At the same time UGD was ordered to store non-perishable subsistence items, clothing, packing and crating materials, petroleum handling equipment, laundry and dry cleaning supplies, materials handling equipment, memorial supplies, shoe repair supplies, canvas, IBM forms, and enemy equipment. In addition to these supply functions, UGD was instructed to perform back-up maintenance on general supply items and special purpose vehicles; to repair engineer supplies, especially construction machines; and the Signal Supply Section was ordered to receive and store telephones, plant equipment, and other small items. In June 1946 UGD was designated as a satellite depot of Stockton General Depot in California.

In May 1947 the Depot was renamed Utah General Depot, and its functions were expanded to include the duties formerly performed by the Quartermaster Supply Section at Stockton General Depot. Thus, UGD was assigned control over all the stocks in the entire Sixth Army area, plus Colorado and Wyoming, as well as the supply of items requested by San Francisco and Seattle ports of embarkation. Nevertheless, during the entire year of 1949, UGD handled about 32,041 tons of quartermaster supplies, which was only an average month's business in the summer of 1945.

THE KOREAN WAR

With the outbreak of the Korean War, the activities at UGD increased rapidly. In 1950 the Quartermaster Supply Section, for example, handled 125,093 tons of material — almost a three-fold increase over the previous year. Receipts and shipments of other sections jumped proportionately. Peak shipping activity came in 1953 when the Depot shipped 37,000 tons per month, an amount greater than the heaviest shipping done in World War II. Employment increased from 2,774 civilians, in June 1950, to 3,919 by September of the same year. There were 4,282 civilian employees in February 1951.

This expansion was undoubtedly a result of UGD's location in the western part of the country. The general flow of supplies during the Korean War was, of necessity, from east to west. Thus, the normal expenditures, together with the expanded payroll and new construction, increased the impact of UGD upon the economy of Utah. In fiscal 1952 UGD spent \$9,225,853 on Depot operations, equipment, transportation, and contracts, most of it in Utah. Additional sums were expended on new facilities and the renovating of old ones. Korean War construction included a new engineer maintenance shed, 53-unit Harrisville Heights housing project costing \$1.5 million, four warehouses and one shed constructed at a cost of \$6,395,700, and \$381,970 for a warehouse to store flammable materiel.

The growth in employment permitted a mounting volume of production. In 1951 the Engineer, Signal, and Quartermaster maintenance divisions repaired a total of \$23,882,673 worth of materiel at a cost of \$5,843,507. This included repair of heavy construction equipment, generating units, fire trucks, and refrigeration equipment in the Engineer Section; cranes, forklifts, towing motors, and kitchen equipment in the Quartermaster Section; and power units and field radios in the Signal Section.

One of the jobs given to the Quartermaster Supply Section was the modification of 223,000 parkas in July 1950. When the newly arrived parkas proved to be different from the samples previously furnished, Depot officials requested the assistance of employees of the local Welfare Program of the Church of Jesus Christ of Latter-day Saints. Depot officials were pleased when the church unit finished a ripping contract in less than five days which was expected to require at least 15 days.

Although the Depot's mission remained essentially one of receiving, storing, and shipping supplies and equipment in the Sixth Army area, UGD was assigned the responsibility, in 1952, of controlling the stocks at Auburn (Washington) and Sharpe (California) General depots and Mira Loma (California) Quartermaster Depot. The Depot now concentrated on shipping supplies to the forces in Korea. An additional new activity was made possible in 1950 when a Defense Printing Plant was opened to print material for the Army, Navy, and Air Force of the area. By 1952 the dollar value of the printing for these units totaled \$336,000.

As during World War II, the Depot also assisted in training military personnel for the Korean campaign. Particularly important was the "Refresher Training Program" for reserve officers recalled to active duty. Officers heard lectures on stock control, civilian personnel management prin-

ciples, cost accounting, safety, security, work measurement, and storage techniques, and also received field and on-the-job training. The 58th Quartermaster Depot Unit, which was assigned to UGD from 1950 to 1954 to supervise the training of military and civilian personnel, received an additional assignment when, in January 1953, a plane loaded with 40 servicemen returning from Korea crashed about seven miles from Fish Haven, Idaho. With the aid of a snowmobile developed at Utah State University and supplies obtained from UGD, the 58th moved into the area, established a base on the mountainside, and guarded the wreckage until the snow melted five months later.

In an attempt to reduce the paperwork required in stock status reporting, UGD was chosen, in the spring of 1951, as the test site to establish a new method of commercial procurement for low-unit-value items. The test program, which was an adaptation of the merchandising concepts used in private industry, consisted of three phases. The first substituted "flexible line item documents" prepared by a photographic process for the regular shipping documents. Using this method, the Supply Section reported the stock status after shipment was completed, rather than during shipping as had been the case before. The second phase of the test consisted of instituting a simplified manual record-keeping procedure.

Early construction at Defense Depot Ogden. In addition to covered storage space the Depot has 563,500 square feet of shop facilities, 28,000 square feet for care and preservation operations, and open storage areas totaling 19,131,000 square feet.



In the third phase the quartermaster supply officer began to function as sort of a company president with the responsibility for all supply actions including maintaining supply levels and replacing depleted stocks. When the Depot completed the test in June 1953, the entire Army depot system adopted the new procedure.

UGD also established performance standards, cost accounting, and work measurement programs to establish standards for each operation and a subsequent follow-up to determine the effectiveness of the operations. By using graphs and pictures to explain the progress at the Depot, the various sections developed more efficient methods for performing such operations as loading and unloading trucks, refinishing table tops, and loading refrigerator cars. Through these performance standards and a general cost consciousness program, it is estimated that almost \$2 million were saved between July 1, 1951, and December 31, 1952.

The Depot also instituted a stepped-up accident prevention program. In 1951 the Depot received the Quartermaster Corps Award of Merit for superior accomplishment in safety and accident prevention. By continuing the program the Depot received, in 1957, the Quartermaster General Golden Eagle for working 1 million man-hours without an accident.

SINCE THE KOREAN WAR

The Korean conflict ended in July 1953. The cost of the conflict to the United States had been over 136,000 men killed or wounded and over \$18 billion in supplies, equipment, and labor. The 4,282 employees of UGD in February 1951 dwindled to only 2,362 by 1954, and 2,069 in 1956, as nearly all activities at the Depot underwent a reduction in personnel. Even with the cut in employment, however, the payroll still amounted to almost \$10 million in 1955. By 1958 the Army had frozen employment levels, and any new employment required prior approval from the quartermaster general. During 1959, the average employment stood at about 2,066, and since that time it has varied between 2,000 and 3,000.

Shipments to and from the Depot declined from 37,000 tons per month in 1953, to 22,700 tons in 1954. By June 1959 the total volume had dropped to 12,362 tons, and in May 1961 the Depot handled only 9,946 tons of materiel.

Despite the decrease in personnel, the Depot has found it necessary to award about \$2 million a year in contracts for new construction and for repair of existing facilities. By 1954 the Depot had completed construction of six new warehouses, thus increasing the available storage capacity

by 28 per cent; and awarded over \$250,000 in contracts for modernizing the dispensary, remodeling the railroad yard office and roundhouse, paving streets, repairing the electrical system, painting buildings, insulating and reroofing buildings, and air conditioning Depot buildings. In 1956 it was estimated that the replacement cost of the improvements on the Depot was \$82,272,300. The value of the inventory was placed at \$4,800,486 in supplies. Total operating costs at the Depot are now in excess of \$1 million per year.

EMPLOYMENT AND PAYROLLS OF DEFENSE DEPOT OGDEN, 1942-1963

(SOURCE: Data furnished by comptroller, Defense Depot Ogden. Data for 1961, 1962, and 1963 includes the Army Support Center and Treasury Department, Internal Revenue Service Center, which is located on the base.)

<i>Year</i>	<i>Civilian</i>	<i>Military</i>	<i>Total Employed</i>	<i>Total Payroll</i>
1942	5,500e	n.a.	6,000	n.a.
1943	7,672	n.a.	7,672c	n.a.
1944			12,000e	\$10,248,808e
1945	4,000e	n.a.	n.a.	n.a.
1946 (1)	3,615	305	3,920	8,111,716c
1947	2,955	63	3,018	7,689,751c
1950 (2)	2,794	56	2,850	8,850,068
1951	3,858	137	3,995	13,550,841
1952	3,976	225	4,201	14,238,283
1953	2,362	150e	2,512	13,594,264
1954	2,308	54e	2,362e	9,658,508c
1955	2,218	n.a.	2,218c	9,712,439c
1956	2,069	n.a.	2,069c	9,563,704ce
1957	1,966	n.a.	1,966c	9,566,255c
1958	2,243	n.a.	2,243c	11,434,779c
1959	2,066	n.a.	2,066c	11,482,920c
1960	1,986	n.a.	1,986c	11,304,443c
1961	2,974	59	3,033	16,304,194
1962	2,947	48	2,995	16,300,000e
1963	2,989	50	3,039	16,561,578

n.a. = not available

e = estimate

c = civilian only

(1) Military includes 137 U.S. military personnel and an average of 168 prisoners of war.

(2) Fiscal year 1949-50.

Because Utah General Depot's operations are not "classified," there has never existed a tendency for UGD to separate itself from the community as has been true with the "secret" operations at some other Utah

facilities. The size and nature of its contracts and purchases have been publicized, and UGD has participated in the community chest, bond drives, blood donation programs, and Pioneer Day celebrations. In August 1956, when the Weber County ambulance was out on an accident call, UGD dispatched an ambulance to the Monastery of the Holy Trinity at Huntsville, a small community in Ogden Valley, to transport a seriously ill priest to the hospital. As another public service, the Depot sends some 20 officers each year to the Weber State College High School Debate Tournament to act as judges of the more than 1,100 high school debaters from Utah, Idaho, and Nevada. UGD plays host to numerous business groups, governmental visitors, and private citizens from the United States and foreign countries.

Recent activities at the UGD include the dedication, in February 1957, of the service center of the Internal Revenue Service; printing all the work of the Air Force (decided in 1954) at the UGD Defense Printing Service; and the training of personnel in Depot operations.

The Depot has retained its Quartermaster, Engineer, Signal, Chemical, and Transportation Supply sections, as well as its surplus and salvage activities. During fiscal 1958, Auburn (Washington) General Depot came under command of UGD and was redesignated Auburn Depot Activity. The Auburn Depot was phased-out in 1960, and the Washington and Oregon area was assigned to the Utah General Depot.

A consolidation program, undertaken by the Quartermaster Corps in April 1954, made UGD responsible for all quartermaster depots in the 10 Western States, from Colorado to the West Coast (except New Mexico), and the Alaskan, Pacific, and Far Western commands. In September of 1955 UGD received the mission of storing repair parts for all the area west of the Mississippi River. Three years later UGD was assigned the mission of supplying all clothing and textiles for the entire Armed Forces in the western United States. In 1960 UGD began modification of parachute and air delivery equipment.

At the same time some of UGD's missions were transferred to other depots. In January 1956 the Army transferred the record-keeping function for all quartermaster material to Richmond Quartermaster Depot Inventory Control Center, thus causing a cutback in personnel in the UGD Machine Accounting Division. In February 1958 the regional procurement mission was transferred to Sharpe General Depot. The transfer of these missions has not altered UGD's status as a strategic link in the Armed Forces quartermaster system.



Defense Depot Ogden changed its name for the eighth time January 1, 1964. Prior to this time, the installation operated under Army command and was known as the Utah Army Depot. Before 1962, the Depot operated under the name of Utah General Depot.

Since the Korean War the Engineer Supply Section has continued to receive, repair, and ship all types of engineer equipment, from cranes to bulldozers. It has facilities for taking almost any piece of worn-out machinery, determining what services are required to put it back into first-class shape, perform them, then ship the machinery back into useful service with the Corps of Engineers. In 1953 the Army Industrial Fund was established under which UGD bid on projects like a private corporation — without, of course, expecting to make a profit. For example, the Depot successfully contracted to rebuild a substantial quantity of Westinghouse “Turnadozers,” and performed field maintenance on all vehicles of the U.S. Bureau of Reclamation. In May 1956 the Army assigned the Engineer Section the mission of storing, maintaining, and issuing all fast mov-

ing engineer repair parts for the Far East, Alaskan, and Sixth Army commands.

The Signal Supply Section has continued to repair such items as high compression heads on power units, submarine cable reels, and radios. The Chemical Supply Section, whose primary mission is the storage and supply of toxics, irritants, smoke weapons, and commercial chemicals for troops in the Western States and overseas through San Francisco, has modified and repaired many thousands of portable flamethrowers and other equipment.

On February 1, 1955, with the closing of Ogden Arsenal, the Ogden Transportation Depot Maintenance Shop was transferred to the Transportation Supply Section where, with the help of about 150 employees, the section rebuilds locomotives, locomotive cranes, and all types of rolling stock for the Army and Air Force west of the Mississippi. Between 1955 and 1958, the section carried on a program of long-range storage cocooning of railway rolling stock. When the Air Force decided to begin its railway Minuteman program in 1960, the Transportation Supply Section was designated to build and maintain the test train. In 1961 the Depot built Radar Bomb Scoring (RBS) Trains for the Air Force to be used in training bomber crews to find radar jamming targets and train crews to get away from bombers with radar searching devices. The Depot also accepted a contract with Thiokol Chemical Corporation to design and construct flat cars for the shipment of ammonium perchlorate for missiles.

The yearly proceeds of the Salvage Branch from the sale of surplus and obsolete material have averaged between \$1 and \$1.5 million, in addition to surplus materiel turned over to the U.S. Department of Health, Education and Welfare and the Boy and Girl Scouts. In fiscal 1958, for example, the Depot sold \$10,576,877 worth of surplus stock for \$1,274,224, and donated \$1,481,070 worth to public service agencies.

Other interesting activities include the inspection of meat and other food products consumed by U.S. Army personnel and the maintenance of a game preserve in conjunction with the Utah State Fish and Game Commission. Ring-necked, golden, white, and speckled pheasants, which breed in profusion on the Depot, are trapped and taken to restock natural game areas. UGD has planted six acres of wheat as winter feed and cover for the pheasants.

FUTURE PROSPECTS

Defense Depot Ogden (still called "Second Street" by most Ogden residents) continues to remain one of the largest supply-type depots in the

United States. It has 6,189,000 square feet of covered storage space available in 69 warehouses of various types. The largest of these warehouses constructed of concrete offers 280,000 square feet, or six and one-half acres, of storage space under one roof. There are 610,000 square feet of hardstand for open storage and 8,521,000 square feet of graded and drained area for possible future use. The installation has 563,500 square feet of modern shop facilities and 28,000 square feet for the care and preservation operations. An 800-car rail-marshaling yard ties into a network of 45 miles of railroad which services the various warehouses and is spurred into Ogden's terminal. There are some 46 miles of paved streets which allow motor access to the warehouse area and all parts of the installation. Total replacement value of the installation at the present time is estimated at over \$100 million. It was originally constructed for \$56 million.

Generally stated, the mission of the Defense Depot Ogden is the efficient and economical operation, administration, service, and supply of individuals, units, activities, and missions assigned and attached. Specifically, the Depot is charged with the receipt, storage, and issue of Defense Supply Agency supplies to Army, Marine Corps, Navy, and Air Force posts, camps, and stations in the western part of the United States, Alaska, Hawaii, and overseas in the Pacific and Far East.

The mission includes the training of military units and individuals in the Military Reserve program and the providing of administrative and logistical support to the following attached activities: Defense Logistics Service Center, Regional Office Number 4; Defense Surplus Sales Office; Department of Defense Household Goods Field Office; U.S. Army Support Center; and Chemical, Biological and Radiological Regional Maintenance Office. The Depot also provides support to a tenant activity, the Regional Service Center, Internal Revenue Service.

Since its opening in 1941, the Depot has shipped over 165 million tons of supplies to every part of the world, and this figure is mounting daily. At the present time approximately 50 military personnel and some 3,000 employees (including the IRS and attached activities) are employed at the installation. It is anticipated that when full DSA operations are underway, there will be over 3,500 persons employed at the Defense Depot Ogden.

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The Cover

Capitol Reef National Monument is a part of the long line of Waterpocket Fold that runs some 150 miles from Thousand Lake Mountain to the Colorado River on the south. Given its present name by A. H. Thompson of the Powell survey, Capitol Reef was viewed by the military reconnaissance party of 1866.

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