FOOD SANITATION AT THE 1957 NATIONAL BOY SCOUT JAMBOREE

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“The Big Cook-Out”, the largest out-door cooking operation in the history of scouting, took place at Valley Forge Park, Pennsylvania, July 12-18, 1957, at the Fourth National Boy Scout Jamboree. Fifty three thousand Boy Scouts and Scout Leaders representing every State and Territory of the United States, together with Boy Scout Contingents from several foreign countries, participated in this great 7-day encampment.

JAMBOREE PLANNING

Planning was started by the headquarters staff of the Boy Scouts of America more than two years in advance of the arrival of scouts at Valley Forge. The task of providing all necessary utilities, including electric lights, communications, housing, water supply, sewage disposal facilities, food service facilities, refuse collection and disposal, and health protection services for a community of over 53,000 scouts and leaders, plus thousands of daily visitors was a major undertaking and required careful and detailed planning by all departments of the Boy Scouts of America, working in close cooperation with Federal, State, and local agencies. For example, a water distribution system had to be designed and constructed which would provide an average of 1,000,000 gallons of safe water daily; electric and communication systems installed throughout the 2,000 acre camp-site; an amphitheater seating 55,000 persons constructed; adequate toilet facilities provided for both campers and visitors; enormous volumes of food and beverages of safe, wholesome quality obtained; food preparation facilities installed; and medical and sanitation services organized to handle all medical care and sanitation problems from the time the scouts left their homes until they returned.

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As in each of the previous National Jamborees, the Boy Scouts of America requested the Public Health Service to assist with the planning and organizing for the medical and sanitation phases of the Jamboree. This activity included the sanitary supervision of all public conveyances, trains, planes, and buses used in transporting scouts to and from the Jamboree and on sight-seeing tours; inspection and laboratory control of all perishable food supplies, such as milk, milk products, frozen desserts, fresh meats and poultry, bakery products, fresh vegetables, and box lunches; assisting in determining the number and types of

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toilet facilities needed and properly locating these facilities; checking plans for the water and waste disposal systems; chlorine disinfection of the water distribution systems and maintaining a chlorine residual during the Jamboree; and planning for a complete environmental sanitation program for the Jamboree and fringe areas.

The basic plan as developed by the Engineering Service of the Boy Scouts of America included a General Headquarters area containing the various administrative offices, a field hospital, five Trading Posts, and 38 Section camps. Each Section was planned to accommodate 35 Boy Scout Troops, with 40 scouts and leaders in each Troop. The plan also provided for each Section to have administrative, commissary, and equipment supply tents, and a health lodge.

The responsibility for the planning and operation of food service facilities on the grounds was divided between the Commissary and Supply Service Departments of the Boy Scouts of America. The Commissary Department was responsible for: (a) obtaining all foods and beverages supplied scout units; (b) supervising the distribution of foods; (c) preparing menus and supervising food preparation by scout units; (d) contracting for the General Headquarters food service facility; (e) planning and supplying food service facilities for the 38 Section Administrative Staffs; (f) obtaining and distributing all single-service paper goods and cooking fuel; and (g) supplying box lunches to scouts taking the Philadelphia excursion trip. The Supply Service Department had the responsibility for planning, installation and operation of the five Trading Posts and the five Trading Posts’ Staff Messes, including the purchase of all foods and beverages used or sold at these establishments. There were about 350 scout personnel on duty at the five Trading Posts.

During the early sanitation planning conferences, it was agreed that the Chief Commissary Officer and
Trading Posts officials would prepare lists of proposed food and beverage sources, such as milk, milk products, frozen desserts, fresh meats and poultry, etc. for use by the Public Health Service in arranging for sanitary inspections of these sources. All perishable food and drink sources would be screened for reasonable compliance with sanitation requirements before contracts were signed and a routine program of sanitary inspection and laboratory control provided for the sources awarded contracts. It was also agreed that the bids would specify that the facilities and methods used in processing food and drink, including the handling and storage of these products, must comply with the sanitation requirements established by the Public Health Service prior to the delivery of such products.

**Inspection and Laboratory Control of Food Sources**

The program of screening the proposed food and drink suppliers for compliance with sanitation requirements and conducting routine sanitary inspections of those suppliers awarded contracts was carried out in accordance with the agreements made during the planning conferences. This program was carried on as a joint activity with State and local health agencies.

The contracts for foods and beverages were completed early in May, which provided about two months for plant operators to make such sanitary improvements as were found necessary. All plant operators were furnished inspection reports listing items of sanitation requiring correction. For example, extensive sanitary improvements were necessary at vegetable packing plants, including the installation of spray washers to insure that the fresh vegetables would be washed in clean water and prepared so as to be safe for consumption by scouts without further cleaning at camp.

All milk and frozen desserts plant operators cooperated fully in bringing their plants up to the required sanitation standard. The milk companies also did a highly satisfactory job in delivering milk, milk products, frozen desserts, and fresh fruit juice properly refrigerated and in good condition during
the entire period of the encampment. This is indicated by the fact that not a single complaint was received concerning the quality or condition of these products. The results of bacteriological analyses of these products daily by the Philadelphia City Health Department also showed that they were of safe sanitary quality. There were 27 composite raw-milk-for-pasteurization samples, 28 pasteurized milk samples, 29 frozen desserts sample, and 18 samples of fresh fruit juice collected and analyzed specifically for the Jamboree.

Excellent cooperation was likewise obtained from the management of other food suppliers, including the box lunch company which provided all necessary facilities and equipment to effectively safeguard the box lunches from the time they were prepared until distributed to scouts while on special tours. The ice supplier purchased new crushing and packaging equipment so that ice used in contact with food and
drink would be handled in a sanitary manner. Ice was packaged in single-service containers and distributed from special ice refrigerators located in each of the five Trading Posts.

**Food Service Facilities**

Each of the 38 Section Commissaries was provided with facilities for storing and distributing all food items, including three walk-in type electric refrigerators for the storage of perishable foods. One refrigerator was designated for milk and milk products, one for meats, fish and poultry, and one for fresh vegetables. Similar refrigeration facilities were also provided for the General Headquarters Mess, the Field Hospital Mess, the five Trading Posts and the five Trading Posts' Staff Messes.

All foods were delivered to the Section Commissaries and other food service operations at specified times daily, either from 12:00 Midnight to 2:00 a.m. or from 5:00 a.m. to 7:00 a.m. Perishable food items were delivered in refrigerated trucks and placed directly into the camp refrigerators. These perishable foods such as milk, butter, fresh meats, and fresh vegetables were distributed to the Scout Troops just before each meal, while other food items like canned foods, bread, and cereals were distributed once each day.

The scouts prepared their food on charcoal stoves on a patrol basis, 10 scouts to a patrol and four patrols to a Troop. The commissary supplied charcoal packaged in 10-lb. bags for cooking operations. It was learned during the 1953 National Jamboree that one 10-lb. bag of charcoal per patrol per day was more than adequate for the preparation of three meals. There were over 5,000 separate patrol cooking operations going on simultaneously using the same food items and menu. One can readily imagine what a tempting aroma arose over the 2,000 acre camp-site the night 53,000 charcoal steaks were cooked.

The General Headquarters Food Service was operated by a caterer on a cafeteria style. This establishment was well equipped with all new food preparation equipment, including gas range, hot water system, and complete dishwashing facilities.

As in the case of scout food service operations, single-service plates, cups, etc. were used. Therefore, dishwashing was limited to eating utensils and food preparation utensils and equipment. The methods of food preparation and the quality of foods served were exceptionally good for this type of out-door operation.

Food service operations at the five Trading Posts consisted of the preparation and serving of hamburgers, franks, and coffee. Milk and chocolate drink were served from approved refrigerated bulk milk dispensers, and only packaged ice cream novelties were sold. Each Trading Post was provided with three fountain-type soft drink stands. Carbonated and non-carbonated beverages were served at these stands in paper cups, which eliminated the glass bottle hazard of previous Jamborees.

The magnitude of the food service operations is indicated to some degree by the following quantities of foods and beverages consumed:

- 598,000 Quarts of Milk
- 23,000 Quarts of Ice Cream
- 264,000 Ice Cream Novelties
- 42,000 Pounds of Butter
- 47,000 Dozens of Eggs
- 102,000 Quarts of Fresh Fruit Juice
- 107,000 Pounds of Fresh Meats, Hamburger, Steaks, etc.
- 20,000 Pounds of Chicken
- 132,000 Loaves of Bread

![Figure 5. General Headquarters Staff Kitchen](image)

![Figure 5. Serving Milk and Chocolate Drink in Trading Posts](image)
The water supply for all uses, including the cooking and serving of foods and drink and the washing of food utensils and equipment, was obtained from the Philadelphia Suburban Water Company. Sixteen separate water systems were installed in the area, with all new galvanized iron pipe being used. The water company agreed to increase the chlorine dosage at the Water Treatment Plant, located about 3 miles from the camp-site, in order that a chlorine residual of .2 to .3 ppm could be maintained. This provided a factor of safety in transporting water from the water drawing stations to the individual Troop sites. Each Section was provided with two water drawing stations and an 18-head shower building. Each Troop was also furnished two Lister bags and four 5-gallon G.I. water carrying cans. One Lister bag was designated for storage of drinking and cooking water, and the other installed near the Troop latrine for washing purposes.

The water distribution systems were given chlorine disinfection before they were placed in operation. The Lister bags and water carrying cans were also given chlorine bactericidal treatment at the time they were placed in use by the scouts. Chlorine residuals were checked daily by the Jamboree Sanitation Staff at designated sampling points throughout the Jamboree camp-site. Samples for bacteriological analyses were collected daily both from the water distribution systems and from a representative number of Lister bags. The results of the sampling program showed that the water was of safe, sanitary quality at all times.

**Sewage and Waste Water Disposal**

A two-seat pit latrine and urinal was provided each Troop. The pits were constructed by drilling three holes 12 inches in diameter and 6 feet in depth. A fly-tight privy box, with hinged lids, was mounted over two of the drilled holes and a funnel-type metal urinal installed over the third hole. A suitable deodorizer solution for treating the urinal and a bactericidal solution for use on toilet seats was supplied to the scout units.

There were 110 chemical toilets provided to serve the Trading Posts, General Headquarters Area, The Field Hospital, and other designated points for use.

**Figure 7. Water Drawing Station**
by visitors. These chemical toilets were serviced daily by tank truck and maintained in a highly satisfactory sanitary condition. Latrines with long metal trough urinals were also constructed at Trading Posts and at other points where there were large concentrations of scouts and visitors.

**INSECT AND RODENT CONTROL**

One of the outstanding accomplishments of the Sanitation Staff was the effective control of flies, mosquitoes, and rodents. The control of flies is important to the success of any food operation and becomes of major importance in the case of a large outdoor cooking operation, where screening is not available. A Public Health Service Jeep power spray unit was provided for treating all possible breeding places for flies and mosquitoes. This insecticide spray unit, equipped with a 150 foot 1/2 inch rubber hose attached to a spray nozzle gun, proved to be excellent for insect control operations; however, forty hand spray cans were provided for use by Section Inspectors when needed.

Inspection activities during the early part of June showed that the fly population was low and that breeding sources were numerous but small. Likewise, there were no large breeding places discovered in the immediate fringe areas. Due to the excellent sanitation standards maintained, there was no fly breeding discovered in the camp-site during the entire period. However, some flies were drawn into the Jamboree area from the surrounding suburban areas. These flies, which concentrated in and around the Trading Posts, the General Headquarters Mess, and the Army Field Hospital Mess, were readily brought under control by the installation of a commercially produced fly cord in all areas where flies were reported or observed. Excellent fly control was obtained with this red colored, cotton fly cord, which contained 13.79% Parathion and 3.54% Diazinon by weight. Only a very small amount of supplemental spraying with Chlor dane was necessary for fly control, principally around a few concession stands in the immediate fringe area. The refuse storage trucks were sprayed daily with a mixture of two percent Chlordane emulsion and a deodorant. This was a precautionary measure and its effect on the control of flies could not be evaluated. However, a fly problem did not develop around the refuse storage trucks or at the sanitary landfill.

The Pennsylvania State Department of Health, which cooperated closely with the Sanitation Staff, reported that mosquitoes were usually found in the Valley Forge Park area during the warm weather months. Therefore, the Jeep spray unit was used early in June to apply a residual of DDT to all potential breeding places, such as quarries with standing water, seepage areas fed by springs, and impoundments on small streams in the area. A residual of emulsifiable chlordane was applied to all seepage pits under showers, at water drawing stations, and other possible breeding places. Mosquito larvae were found only in two seepage areas and three small artificial ponds constructed for soil conservation exhibits. There was no adult mosquito problem during the period of the encampment.

A small amount of rodent control work was con-
ducted against meadow mice and ground hogs in the Jamboree area. Warfarin bait, gas bombs and chlordane were used by the professional insect and rodent control crew. All burrow openings were carefully closed when gas bombs and chlordane were used. These measures were effective in controlling rodents.

**Refuse Collection and Disposal**

A new procedure was used in connection with the storage and collection of garbage and other refuse. Each scout Troop was provided with one metal refuse can and a supply of large wet-strength paper bags and twine. Immediately after each meal or when the bags became full, they were closed tightly with the twine, removed from the metal can and placed directly on the Section refuse truck. Sufficient one and one-half ton stake body Army trucks were provided so that a truck could be stationed continually around the Trading Posts and at each of the 38 Sections. Each time a truck load of refuse was removed, an empty was left by the driver. The bed of each truck was covered with a tarpaulin arranged so that a bulldozer could quickly unload it with a rope at the sanitary landfill. This refuse collection system and the sanitary landfill were operated in a highly satisfactory manner.

**Fringe Area Sanitation**

A program of sanitation within a three mile radius of Valley Forge Park was developed and carried out by the Pennsylvania State Department of Health. This program included the maintenance of strict sanitary control over public eating and drinking establishments, hotels and motels, refuse collection and disposal, and the sampling of water supplies available for public use in the area. Temporary food and drink stands were not allowed to operate until they complied with the State Itinerant Restaurant Regulations. State and local Police Departments cooperated fully with the sanitation inspection staff in controlling the operation of roadside stands.

**Special Scout Tours**

In view of the heavy load on public transportation facilities, the arrival of scouts to the Jamboree was scheduled over a three-day period and the departure, likewise, over a three-day period. Special sight-seeing trips were arranged for the scouts arriving early, and for those whose departure was delayed, to such points as New York City, Atlantic City, and Washington, D.C. The food establishments patronized on these trips were selected prior to the Jamboree and given close sanitary supervision by State and local health agencies during the period of the tours.

Special excursion trips were conducted during the official week of the Jamboree to historical points in the city of Philadelphia. From 7,000 to 10,000 scouts and leaders took this trip each day. They were transported from Valley Forge to Philadelphia by commuter trains and taken on a walking tour to such places as the Betsy Ross House, Old Custom House, Independence Hall, and then given a box lunch at Washington Square. The facilities provided by the city of Philadelphia for this 6-day feeding operation included picnic tables, drinking water, toilet and handwashing facilities, refuse collection and disposal facilities, fly control equipment, and a public address system for use in moving scout groups in and out of the area. Box lunches, including single-service containers of orange drink, were delivered to the scouts from refrigerated trucks operated by the box companies.
Careful planning, coordination of activities, and the excellent working relationships between the Jamboree Health and Safety Staff and other cooperating agencies contributed greatly to what was considered the most successful Jamboree ever held by the Boy Scouts of America. Perhaps the outstanding achievement resulting from the fine work of the Commissary and Supply Service Departments, together with the work of the Jamboree Sanitation Staff, and cooperating agencies, relates to the fact that those attending the Jamboree could be assured that the food and drink they received were not only nutritious and appetizing, but had been given close sanitary supervision from the time they were processed until consumed. Also by maintaining high sanitation standards, there was not a single case of foodborne disease or other disease which could be attributed to faulty environmental sanitation among the total of 995 scouts who received medical treatment at the camp hospital.