"Who shall have this?" Sergeant John W. Fuller asked in a voice loud enough for all the assembled troops to hear. He stood beside two ordinary army blankets laden with precious contents. One contained forty-five carefully divided mounds of ground coffee, the other an equal number of piles of sugar. Together, they represented a four-day ration of coffee and sugar for Company C of the 100th Regiment of the Indiana Volunteer Infantry.

Sergeant Fuller was pointing to one of the heaps of coffee. No matter how carefully they tried, it was impossible to divide the coffee equally; the company had no scales. As a result, each mound was always a bit larger or smaller than the others. In order to distribute the ration, First Sergeant Sanford W. Meyers, facing away from the coffee and the company, read from the muster roll and called out a name at random. Private Theodore F. Upson stepped forward to claim this most important part of a soldier's ration, then, its sweetener.

Salt pork and hardtack, the rest of the marching ration were to be weighed and issued later by the regimental commissary but that wasn't important now. The company focused its attention on the blankets. The weather in this third week of June, 1864 was wet and unseasonably cool, as it had been for the four previous weeks of the campaign to Atlanta. The source of that next, all sustaining cup of hot coffee, now ranked in importance with the Confederate enemy entrenched less than a mile away - Private Upson returned to the ranks with his fair, if not quite equal share of coffee, and the issue continued, by random name, till each pile of coffee and sugar had been claimed.

Scenes like this were enacted countless times in hundreds of Union Army infantry and cavalry regiments as well as batteries of artillery throughout the course of the Civil War. From day to day, very little was as important to Billy Yank as his ration.

The common soldier was the last stop in a long and complex process of ration procurement and distribution. The Commissary General for most of the war, Colonel Joseph P. Taylor (later Brigadier-General), headed the Subsistence Department and advertised specifications for the various components that made up the Union ration. Given those specifications, private contractors placed bids. The Commissary General, or an authorized officer of that department chose the lowest bid from a responsible bidder. That contractor then prepared the foodstuffs, and delivered them, packed in boxes and barrels to a designated place. There they were inspected and received. These transactions were confined to a handful of cities: Boston, New York, Philadelphia, Cincinnati, and St. Louis.

At this point the rations became the responsibility of the Quartermaster's Department, which was in charge of transportation and storage for the Army. In sailing vessels, steamships, barges and railroad cars, the food traveled south to the base of operations of a field army. Here, Quartermasters stored it temporarily in warehouses, sheds, or out in the open until it was shipped, usually by rail, to the army's advance depots. From there, army supply wagons carried the rations through temporary depots and finally to the corps, division, and brigade levels. At the brigade, a regimental officer heading a special detail received the food and delivered it to the regimental commissary, who in turn distributed it to the separate companies for issue to each soldier.

Rations are the issue of a fixed amount of foodstuffs for a given period of time. Billy Yank drew two types of rations. When his army was in camp or garrison, he typically received the full ration according to Army Regulations; while on campaign he was issued the much abbreviated marching ration. (See Table 1.)

Table 1 -- DAILY UNION ARMY RATION
3 August 1861 – 20 June 1864

CAMP AND GARRISON RATION:

Meat: 12 ounces of pork or bacon, or
       1 pound and 4 ounces of salt or fresh beef

Bread: 1 pound and 6 ounces of soft bread or flour, or
       1 pound of hard bread [hardtack] or
       1 pound and 4 ounces of corn meal

To every 100 rations:
   15 pounds of beans or peas, and
   10 pounds of rice or hominy
   10 pounds of green coffee, or
   8 pounds of roasted (or roasted and ground) coffee, or
   1 pound and 8 ounces of tea
   15 pounds of sugar
   4 quarts of vinegar
   1 pound and 4 ounces of adamantine, or star candles
   4 pounds of soap
   3 pounds and 12 ounces of salt
   4 ounces of pepper
   30 pounds of potatoes, when practicable, and
   1 quart of molasses

Paragraph 1191: "Desiccated [dehydration] compressed potatoes, or desiccated compressed mixed vegetables, at the rate of 1 ounce and ½ of the former, and 1 ounce of the latter, to the ration, may be substituted for beans, peas, rice, hominy, or fresh potatoes.

MARCHING RATION:

Meat and Bread; same as above
Coffee, Sugar, and Salt; same as above

Only when a march took them beyond the range of army wagons, as happened from time to time with the fast-moving cavalry, or when a battle separated them from their primary depots did Union soldiers go without food. The most famous example of the latter was the aftermath of the 1863 battle of Chickamauga, Georgia. There, by luck and a Union command error, the Confederates routed the Federals from the field and chased the Northerners into Chattanooga, where a siege followed. For about a month, Union soldiers in Chattanooga went on half rations and even ate feed grain meant for the Army's starving animals. When the siege lifted in October, 10,000 horses and mules had died. Still, the Federal ration was more than ample in terms of quantity and calories. It was larger than that of the British, French, Prussian, Austrian, and Russian armies of the same period.

The real trouble began when Billy Yank received the ration. On a march, it usually consisted of four parts: three-fourths pound of salt pork, one pound of hard bread (hardtack), coffee, and sugar. Few soldiers knew much about cooking, and the Army was still about a half century away from training cooks. Further, the soldier's issue of equipment did not include any cooking utensils beyond camp kettles and mess pans, for use by the company in camp or in garrison. Faced with few tools, little culinary skill, a hunk of pickled pork, and around ten thick and large hard cracklers made of flour and water, Federal soldiers began to cook. As time went by, they acquired utensils such as cutlery and a tin plate and cup, fashioned boilers by adding a wire bail to an empty tin can, or rigged a frying pan from discarded canteen halves with a green stick to serve as a handle. They also discovered that by forming a mess of approximately five soldiers, preparing meals became a social occasion. The soldier who demonstrated the greatest culinary talent was often appointed the cook. This duty became the envy of other soldiers, because the cook was excused from all other camp chores. After much experimentation and many digestive complaints as a result, Federal
soldiers settled on a few tried and true methods of food preparation. There was not much that could be done with salted pork beyond frying it, boiling it, or adding it to a stew. If there was no time for these small luxuries, it could be placed between two pieces of hardtack and eaten as a primitive sandwich. Salt beef, derisively labeled "salt horse" by the soldiers, was hardly fit for consumption. It was so heavily impregnated with salt that it had to be soaked overnight in a running stream. Even then, it was still often rusty from improper packing and gave off an incredible stench. Salt horse was so foul that upon occasion angry soldiers used it as ammunition with which to pelt the commissary's tent, or staged a mock burial and laid the putrid stuff to rest, complete with feigned military honors.

Fresh beef provided a welcome relief from salted meats. Special drivers directed by the chief commissary of the army herded beef cows behind the field armies. When the troops stopped for the evening, the cattle were slaughtered and issued that night or early the next morning so that soldiers could prepare the meat for that day's march. One Massachusetts artilleryman remarked that his typical issue of fresh beef reached him so quickly after slaughter that it was still "quivering from the butcher's knife." Most soldiers broiled their fresh beef on sticks over campfires.

Hardtack, another basic part of the Union soldiers ration had a forbidding appearance and a consistency that belied its usefulness. Although it could be eaten as issued, alternative methods for dealing with hardtack were preferred. If broken up and soaked in the water left from boiling meat, then fried in pork grease, it produced a dish Billy Yanks called "skillygalee", a type of tasty crouton. Unfortunately most methods of dealing with hardtack were based on necessity, not on taste. Sometimes, because of improper packing or exposure to the weather, hardtack would get wet. As a result, a fine crop of mold would grow on the hardtack, or it would become host to weevils or, less often, maggots. Spoiled hardtack could be returned to the regimental commissary for fresh crackers, but circumstances didn't always allow this recourse.

Union soldiers tried different means of freeing their occupied hardtack from its unwanted tenants. The most successful method was to drop the crackers teeming with weevils into hot coffee and skim off the drowned wildlife when it floated to the surface. The weevils left no discernible taste in the softened bread now flavored with coffee.

Whenever the army camped in an area for an extended period, bakeries were usually built and soldiers received fresh bread. During most of the ten-month siege of Petersburg, Virginia (June 1864 to April 1865), Federal soldiers were issued bread still warm from the ovens at City Point, their base of supplies some eight miles to the rear on the James River.

As related above, coffee was the most important part of a soldier's ration. Whenever Union armies halted on the march, even if only for an hour or so, rail fences in the area soon became firewood for brewing a large, Stout cup of coffee. Excess coffee was also used as a trade item on those rare occasions when Confederate and Federal soldiers met between the picket lines. Southern tobacco, not on the Union ration, was traded for Northern coffee, an increasing rarity in the Rebel ranks as the war continued. The beverage was in such demand that the Army developed something called "essence of coffee". It came packed in tin cans and looked like axle grease. Apparently, it tasted like the same. Before long it was removed from the ration and replaced by the genuine article.

Few Federals drank their coffee with milk; it was not part of the ration and cost too much to buy from the sutler. (A sutler was an authorized vendor of non-issue supplies, something of a traveling grocer and dry-goods dealer.) They tempered the strength of their beverage with sugar, which most soldiers mixed with their coffee at the time of issue. This ensured a somewhat sweet cup of coffee each time it was made.

Despite the regular issue and ample quantity, Union rations were deficient in nutrition and taste. One of the most persistent dietary problems was Vitamin C deficiency. This often caused scurvy, and could lead not only to the death of individual soldiers but could also impair the army's ability to campaign. The army recognized the problem and attempted to upgrade the nutritional value of the ration by issuing what Army Regulations called "desiccated [dehydrated] compressed potatoes" and "desiccated compressed mixed vegetables." Soldiers were to take the cubes of potatoes or turnips, carrots, and assorted greens and add them to water. In theory, they rehydrated and made a wholesome vegetable or vegetable medley. With few exceptions, Billy Yanks despised desiccated vegetables, which they labeled "desecrated vegetables" or "baled hay." A much better solution to the problem of scurvy and the general lack of vegetables was to issue dry-storable vegetables such as potatoes and onions, or processed foods such as pickles.
and sauerkraut. Unfortunately, those remedies were not always available, and soldiers had to try other ways to improve their ration.

Army Regulations allowed commanders of regiments, corps, or separate detachments on campaign to appoint a sutler to the unit. Sutlers offered the soldiers such delectables as canned fruits, vegetables, meats, and milk, which had become available on the market during the 1850s. They also sold tobacco, pies, cakes, butter, and some army regulation clothing. These foodstuffs and dry goods carried a high price tag. As a result, Federal soldiers often went heavily into debt to sutlers, though Regulations permitted them only to be indebted up to one-half of their meager 14 dollar monthly salary. On occasion soldiers became so disgruntled with the business practices of sutlers that they attacked the sutler's establishment. At night, groups of soldiers would approach the sutler's place of business, level it, and carry way his goods in triumph. Such infractions often went unpunished when sympathetic officers turned their backs on the incident. Still, most sutlers, especially late in the war, were honest traders and provided necessary relief from the monotony and distaste of army fare.

Union soldiers found other ways to augment their ration. They wrote home to relatives and friends asking that a package of food be sent to them. These boxes were delivered to the soldiers by the army, but only if it was in camp, not on the march. Billy Yanks therefore sent their requests home when they knew the army was about to encamp for an extended time, for example, winter, and the boxes usually arrived a few weeks later by the wagon load.

In passing through the various levels of command on their way to the individual Federal soldier, these packages were often opened and searched for illicit alcohol. Occasionally a dishonest inspector would filch an article or two that he fancied, but that occurrence was rare.

When the soldier received the box, even if opened and partly emptied, there was still enough left to fast royally on the cakes, relishes, pickles, meats, cookies, and whatever else relatives and friends had stuffed in it. Soldiers' letters overflowed with thanks for the generosity and thoughtfulness of home folk.

The final means of supplementing the army ration was foraging. Though foraging occupies a prominent place in fictional and cinematic versions of the Civil War (witness Gone With the Wind,) the Union Army seldom resorted to it and then only with great care and planning. The most famous example is Major-General William T. Sherman's infamous March to the Sea and through the Carolinas that lasted from November 1864 till the end of the war. Sherman deliberately cut his army off from the sustenance provided by the railroad running back to Louisville, Kentucky. He set out through one of the breadbasket regions of the South right after fall harvest. He was certain he could live off the land, but just in case that effort proved difficult, he ordered his army's wagons filled with twenty days' rations and had a herd of 3,400. beef cattle driven along behind the troops. Along his way to Savannah, Georgia, and then through the Carolinas, Sherman systematically lived off the country. For the most part, his army's foraging was handled in a fairly orderly fashion under the watchful eye of officers. A major exception was the march through South Carolina. Sherman detested the secessionist movement that had first turned violent in Charleston, and his troops acted on their commander's hatred for disunion by stripping the state of food and destroying whatever might be of use to the dying Confederacy.

Despite Sherman's late-war marches through the Lower South, foraging was not usually an effective means of obtaining food for the Federals. Not all of the South produced edible crops, and usually the Confederate Army was nearby to prevent the Union troops from dispersing enough to glean rations from the countrysides.

Notwithstanding, these efforts at augmenting the Union Army ration, Billy Yanks lived almost exclusively on army fare. While the ration was ample, and its issue regular, it remained deficient in taste and nutrition. The Union Army's experience in feeding its approximately two million troops offers insight for the U.S. Army as it develops and implements the Army Field Feeding System (AFFS), anticipating how and what to feed soldiers on the Airland Battlefield.

In the "come as you are" war envisioned by theoreticians and planners of the Airland Battle, the T-Rations and Meals, Ready to Eat (MREs) of the current AFFS (Army Field Feeding System) cannot fall short in the critical areas of nutrition and taste, as did the Union Army Ration. Tomorrow's war is forecast to be too short to allow for even such
meager corrections and supplements that improved the subsistence of Union Soldiers. Further, during the critical early stages of future wars, U.S. Army troops might well be cut off from any augmentations and have nothing but Army food to eat. At this point Host Nation Support (HNS) and the Logistical Civil Augmentation Program (LOGCAP) aren't likely to do any good. With no time available during a future conflict to determine what a ration will be, how it will be provided, or who will prepare it, the time to resolve the AFFS's difficulties is now.

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