Population growth between 1950 and 1980 in Underhill was also dramatic, jumping from 698 to 2,172. A 1972 land use map shows residential areas in Underhill concentrated primarily around the Riverside/Underhill Flats area, along the River Road, and in Underhill Center. There are smaller areas along Rt. 15, at the north ends of Pleasant Valley and Irish Settlement Roads, and some on Stevensville and Mountain Roads. The two villages serve as limited service centers for the residential community. Underhill has become "increasingly a town of summer homes and camps and residences for those who work in other communities" (Dwyer 1976:100). Businesses are mainly limited to small grocery stores and gas stations. In 1976 there were only four dairy farms still operating and only one sawmill in Underhill Flats. The Underhill ski operation closed some years ago.

History of the Ethan Allen Firing Range

The Ethan Allen Firing Range was initially associated with the main Army post at Fort Ethan Allen. In the years since the fort was deactivated, the range has been associated with the Vermont National Guard's Camp Johnson. Four military eras are associated with the Ethan Allen Firing Range, beginning with the 20-year period between the World Wars, and including World War II mobilization from 1940-1945, the Cold War from 1946-1989, and the present post-Cold War period (Cannan et al. 1995; Loechl et al. n.d.; U.S. Army Environmental Center n.d.). A brief history of the range emphasizing land use is presented here. This outline is general; additional research might provide more details about specific developments during the four eras. The range has been used for two major activities. Military training exercises have occurred since the 1920s. Since the 1950s, a large section of the range has supported a government-owned, contractor-operated weapons testing facility.

The Inter-war Years (1920s-1940)

Two trends in military activity during this period are associated with the Ethan Allen Firing Range. Training, particularly of civilian components, was a major concern. Nationally, installations expanded in size as training areas increased. The Ethan Allen Firing Range came into existence primarily in response to the need for improved training opportunities. One of the 1930s New Deal programs, the Civilian Conservation Corps, operated from a camp within the range.

The range was first proposed in 1923 to save Fort Ethan Allen in Essex and Colchester from being closed (Ferrell 1997). After World War I, the United States Army was reduced in size and reorganized. A good deal of the Army's real estate was sold. Fort Ethan Allen was one of the threatened bases. Established in 1892, the fort was designed as an 800-acre cavalry training base, but World War I had proven that horse cavalry was obsolete and artillery was vital. A section of the 7th Artillery was assigned to Fort Ethan Allen, but the fort lacked the acreage required to allow soldiers to actually fire their weapons. The Army had to lease farm land to practice. The Vermont National Guard needed practice space, and the Army's First Corps, which included Vermont, also had no adequate artillery range.

Local business and political leaders who did not want to loose the fort or the facilities that benefitted the National Guard rallied support for a proposal to acquire a permanent practice facility. In 1925, the *Burlington Free Press and Times* reported on an important meeting.

Congressmen Visit Artillery Range Members of Vermont Delegation Give Assurances of Their Earnest Support to Move to Make It Permanent Addition to Post Facilities

Burlington and Fort Ethan Allen entertained yesterday Congressman Ernest W. Gibson..., Congressman Elbert S. Brigham...and H.B. Chadwick, secretary to Senator Frank Greene....These members of the Vermont delegation in Washington lunched at the Hotel Vermont yesterday noon as the guests of the Burlington Chamber of Commerce, and officers of the Post, and in the afternoon visited the Underhill artillery range, talked over the possibilities of making it a permanent institution and witnessed a demonstration of how it is operated....

It was the purpose of this visit in the artillery range to acquaint the members of the Vermont delegation in Congress with the location and advantages of the range and to bring forward the possibilities of making it a permanent addition to the facilities connected with Fort Ethan Allen through the passage by Congress of a bill providing an appropriation to finance it. There is some talk, also, of enlarging the range in order to give even greater utility for artillery training....

Vermont's Senator Greene wanted Congress to contribute \$200,000 for 6,700 acres that covered 80 parcels, including the land that had been previously leased. In 1925, supporters described it as "land that would best be abandoned" and used for an artillery range (Ferrell 1997:38). Greene reported, "The prices for the various holdings vary from \$200 for 50 acres of cut over timber land to \$20,000 for one excellent farm....The Government can buy most of the properties for less than \$5,000 in each case. The average price is around \$34 which I am convinced is very reasonable. The entire tract is hilly and it is mostly pastures, wood lots and some tillable land." The uneven topography with moderate and abrupt elevation changes was well-suited to artillery exercises (MacDonald and Mack 1984:15). The slopes of the Green Mountains to the east in Underhill and in Bolton provided a natural backstop for various weapons.

There were some objections to the new practice area. Nearby landowners worried about the danger from wild marksmanship and noise. Others were concerned with the damage to the tax rolls. Members of the Green Mountain Club worried about the fate of hiking trails, reforestation projects and nesting birds. The Chamber of Commerce, however, complained that these critics were stirring up "unpatriotic feelings" (Ferrell 1997:36).

In December, 1924, the Vermont legislature approved the sale of 1,234 state-owned acres in the proposed range for \$1,800. In 1926, the President signed the authorization to buy the rest. It took four years to complete the purchases. Landowners complained that the government was offering them too little for what had become valuable real estate. Searching land titles also proved to be a slow process. By December, 1928, when it looked like there would be a \$9,000 shortfall, condemnation was threatened. But in 1930, the government appropriated an additional \$7,500 to complete the purchases. The range was officially named the Fort Ethan Allen Artillery

Range. In the early years, newspaper articles often referred to it as the Underhill Artillery Range.

Buildings were removed from all the properties within the range boundaries. Some structures were dismantled, and others were burned. Foundations and wells were mostly left intact and not filled. In the early decades, the military used the existing road network. Photos of early encampments often include standing farmhouses, barns and outbuildings, so the buildings may have been removed gradually.

The first large-scale training maneuver took place in the fall of 1931. Nearly 2,000 enlisted men and officers of the First Corps came from all over New England. The exercises included three airplanes from Mitchell Field in New York and a chemical warfare demonstration (Free Press and Times Sept. 11, 1931). Photographer L. McAllister was on hand to record the training. One panoramic photograph shows the troops camped in West Bolton (Figure 14). Firing ranges included the Known Distance Range at the Doyle farm (Figure 15), initially established when the land was leased. The open flat land in the Lee River valley allowed soldiers to fire rifles at 600 yards. Today, the area is grown over with poplars, alders and pine trees. The Doyle farm is labeled on a 1928-1929 map, although the distance range is not indicated (Figure 16). That map shows the location of observation posts, firing posts, and a machine gun school.

The machine gun school was located on the West Bolton Road in Underhill. On the 1928-1929 map, two buildings are shown in the vicinity of the machine gun school. Eventually, the machine gun school included some permanent buildings, a water system, sewer system and numerous tent platforms. A moving target ran for about a mile on railroad tracks east of the machine gun school on the west side of Beartown Road.

Encampments were held in the Lee River valley and in West Bolton. The panoramic photograph that captured the 1931 West Bolton encampment shows small tents set up in cleared fields. A water tank visible in the photo remains east of the West Bolton Road. A 1937 aerial shows military camps south of and along the Lee River Road. Other encampments undoubtedly were set up over the years. A number of contemporary panoramic photos show these camps, with tents and small sheds. Time and familiarity with the landscape might make it possible to figure out where the photographed camps were located.

Other military facilities dating from the 1926-1940 period are poorly documented. A stone ammunition bunker stands on the Range Road (once Poor Farm Road) near the border of Jericho and Underhill. The building appears to be a nineteenth-century structure reused by the military in the 1930s (MacDonald and Mack 1984). It is located northeast of two farm sites (J49 and J50 in the site inventory), and may have been associated with one of them. Concrete firing positions and old communications lines and poles also remain.



Figure 14. A Portion of a Panoramic View of a 1931 Encampment in West Bolton (courtesy of Col. Alan Nye, VTARNG).

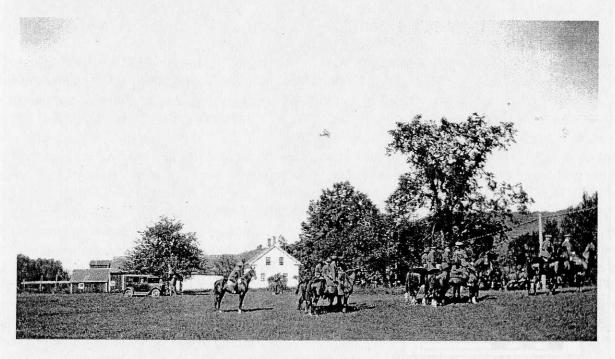


Figure 15. Troops Next to the Doyle Farm House Around 1928 (photo from VTARNG).

In 1933 President Franklin Roosevelt established the Civilian Conservation Corps, a program to provide jobs for the unemployed by funding the improvement of public forests and recreational areas. Two different units of the CCC operated in Vermont. Men in the First Corps, Second District devoted their efforts to forests and parks. The Sixth Corps worked on major flood control projects around the state. The CCC established 27-30 camps throughout the state (Merrill 1959:53-64), bringing "millions of federal dollars into the state's sagging economy" (Stetson 1978:24). The "work of CCC camps put Vermont's state recreational development ahead by 50 years" (Merrill 1959:63).

One of several camps established by the Civilian Conservation Corps in Vermont during the Great Depression was located on Poor Farm Road (now Range Road) just within the original boundary of Fort Ethan Allen's artillery range. The camp operated from December, 1933 to April, 1941. It is known in the records variously by its project number (S-60), its station number (2197), its name (Camp Mansfield; also Camp Underhill), or its location.

Two companies of the CCC First Corps, the 129th and the 1135th, operated out of the camp at Underhill Center. Each company was comprised of about 200 men between the ages of 18-25. Typically, the men enlisted for six-month hitches and were paid \$30 per month. Some of the men were Vermonters, but most were from Massachusetts, Rhode Island and New York (Stetson 1978:25). The Underhill camp was the primary base for work carried out on the western slopes of Mt. Mansfield (Merrill 1936). The men were employed in blister rust control, construction of truck trails, camp shelters, latrines, tent floors, fireplaces, water supply systems, lean-tos, picnic tables, parking areas, ski trails and practice slopes, and general forest stand improvement (WPA 1941).

In October, 1933, ten men from the CCC camp at Waterbury began clearing land and stockpiling construction supplies for Camp Mansfield (Free Press 1933). The camp was located on farm land owned by the Casey family before the artillery range was created in 1926. CCC camps resembled small military posts. A typical camp might include four wood frame, onestory, 50-man barracks; a mess hall; a recreation building; quarters for Army and technical personnel; an infirmary; educational/library buildings; a small garage; tool shed; and machine shop. The buildings were gathered around a small assembly area graced by a central flag pole. The main buildings were about 100 x 24 feet. Most camp buildings were built by local civilian labor under the supervision of the army (Merrill 1981, Stetson 1978). The Underhill camp had 13 buildings, a water distribution system, and recreational facilities. Remnants of the CCC camp include a granite and mortar chimney, the water pump system and well, and the foundation for the water tower, and stairs leading to the main camp area from the road (Nye 1993). The camp is shown on a 1948 map labeled Camp Underhill, and in several historical photographs (see U28 in the site inventory). Local historian Loraine Dwyer remembered in 1983 that "At least one building, the CCC infirmary I believe, was brought down to a site near the foot of Range Rd.,

road also came down from the CCC camp" (Dwyer letter to Prudence Doherty, CAP, Feb. 11, presently a house. Another house on the same