



The Five Various Steel Fire Tower Models Utilized in New York State



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The Early Years 1909 – 1915: wooden era:



Photo 1 - Ft Noble Mtn 1910



Photo 2 - Pharaoh Mtn 1910

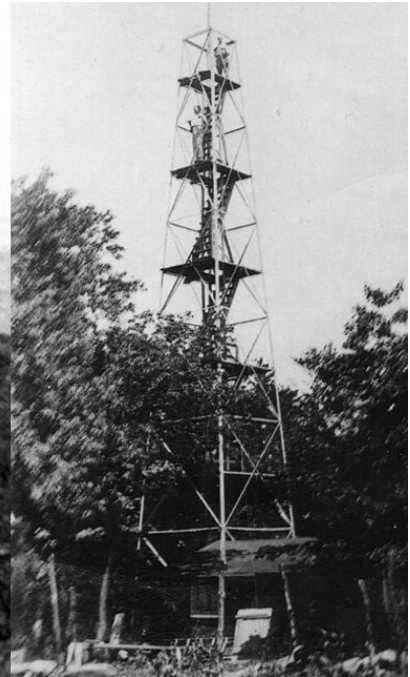


Photo 3 - Belleayre Mtn 1913

The statewide fire tower network began operating in 1909 with the creation of a handful of fire detection stations in the Adirondack and Catskill Parks. In almost every case crude towers were made using timbers found on the mountaintops (see photo 1). In three cases a tent first served as the observatory (see photo 2) and in four cases converted windmill frames (see photo 3) served as the first tower. Yet by 1914 state officials were seeking a permanent structure, with an enclosure on top, to protect the Forest Fire Observers from the harsh mountaintop climates. The standardized steel fire towers were introduced in 1916 with the installation of 10 Aermotor model LL-25 fire towers.

The Aermotor Model LL-25 Fire Towers:

The Aermotor model LL-25 was the first standard steel fire tower installed in New York State. In 1916 ten of these fire towers were erected on peaks in the Adirondacks. The construction of the fire tower on Hadley Mtn began late in 1916, but was not complete until early 1917. The LL-15 was originally equipped with an external ladder in order to gain access into the tower (see photo 4) however it was soon realized that this was unsafe for both the forest fire observer and visiting public. In 1917 wooden stairways, with landings, were installed on all ten of these fire towers. These wooden stairs required a great deal of maintenance and many required replacing because of their exposure to the mountaintop climates. Therefore in 1929 Aermotor offered a kit to be installed on these fire towers that would support a permanent stairway system on these fire towers. In photo 5 laborers are installing the new kit stairway system from the ground while the wooden stairway system is being removed from the Cathead Mtn fire tower. Photo 6 illustrates the stairway system on the Cathead Mtn fire tower as being an independent self supporting stairway system.

Aermotor model LL-25 fire tower photos on the next page.

Illustrated below are three views of an Aermotor model LL-25 fire tower.



Photo 4 – Makomis Mtn 1916

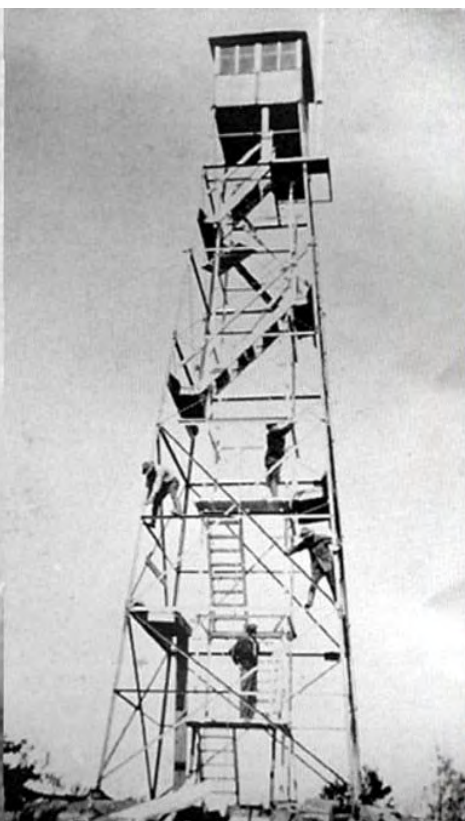


Photo 5 – Cathead Mtn 1929



Photo 6 – Cathead Mtn 1980

The Aermotor Model LS-40 Fire Towers:



Cat Mtn. in 1963

The LS-40 is this most numerous and most recognizable fire tower in the state. The LS-40 was found in every region of the state where fire towers were in use, introduced in 1917 containing a self supporting stairway system that was integrated into the super structure of the fire tower. The stair risers run back and forth up the fire tower between large landings, an important safety feature, making the LS-40 the preferred fire tower of the officials in the Bureau of Forest Fire Control. One may determine the height of a LS-40 fire tower through simple observation and by counting how many stair risers on the tower.

- 3 flights of stairs = 22 feet high
- 5 flights of stairs = 35 feet high
- 7 flights of stairs = 47 feet high
- 9 flights of stairs = 60 feet high
- 11 flights of stairs = 73 feet high
- 12 flights of stairs = 80 feet high

As determined from factory blue prints a fire tower is always measured to the floor of its cab, not to the peak of the roof, and does not include the concrete footings.

The Aermotor Model LX-25 Fire Tower:



There is only one model LX-25 fire tower in the state that was used by the NYS-DEC, the Number Four fire tower. This fire tower was erected in 1928 by Mr. Clarence Fisher of the Fisher Forestry and Realty Company to stand watch over his vast land holding in and around eastern Lewis County. Mr. Fisher turned over control and operation of the fire tower to the state around 1945. The LX-25 fire tower appears quite similar to a LS-40 fire tower with the exception of ladders being used between the landings instead of stair risers (see the attached photo). When the state took over the operation of the fire tower they replaced these ladders with the typical stair riser's familiar on the LS-40 fire towers. The height of a LX-25 is slightly higher than an LS-40 fire tower, typically a fire tower with 11 flights of stairs is 73 feet high, but on a LX-25 the fire tower is 2 feet higher. The Number Four fire tower has since been moved to DEC's Nature Demonstration Area at their Lowville, NY office where only the top 25 feet of this fire tower has been re-erected.

An Aermotor Model LX-25 Fire Tower.

The International Derrick Fire Towers:

The International Derrick fire towers came to New York State from the U.S. Forest Service via the C.C.C. (Civilian Conservation Corps) between 1933 and 1940. They were erected in areas outside of the Adirondack and Catskill Parks to provide observation protection of the various C.C.C. reforestation projects.

They're two different models of the International Derrick fire towers, the model 1933 and model 1937, which will be explained below. The model 1933 was developed through a cooperative effort between The Aermotor Company and the U.S. Forest Service. The model 1933 was made by each of the major fire tower manufacturers over time via the sealed bid process, although here in New York each was made by The International Derrick Company. In other states people encounter the model 1933 fire tower, but know them as an Aermotor model MC-39.

It appears, however, that the model 1937 is an entirely U.S. Forest Service design making minor changes from the model 1933 design. Yet again here in New York the model 1937 fire towers were also manufactured by The International Derrick Company.

The stairway configuration rising up from corner to corner inside the super structure in between small triangular landings became a safety concern for state officials. The International Derrick fire towers were never popular with the officials of the Bureau of Forest Fire Control and because of this when the state purchased ten new fire towers in 1950 they bought Aermotor model LS-40 fire towers.

The International Derrick Model 1933 Fire Tower:



At a quick glance the model 1933 looks no different than an Aermotor model LS-40 fire tower, but on closer inspection the stairway configuration stands out as being unusual. Long, swaying, bouncing stair risers go up the fire tower inside the super structure from corner to corner between small triangular landings. This stairway configuration was a safety issue with the officials of Forest Fire Control ultimately making both models unpopular. Once inside the fire tower cab one will notice the metal window sashes which open outward from the bottom as they pivot on center pins in the middle of the sides of the window opening. However unlike the Aermotor fire towers all eight window sashes will open.

An International Derrick model 1933 fire tower on Utsayantha Mtn. Nov. 2009.

The International Derrick Model 1937 Fire Tower:



There is no mistaking that the model 1937 fire tower is entirely different from the four other fire towers. Of course one will notice the familiar corner to corner stairway configuration, but the cab is quite different. The cab is slightly taller with a larger glass area and large rectangular window sashes that pivot out from the bottom in the middle of the glass area. The visors over the windows are a nice feature in helping to block out the glare of the afternoon Sun. As with the model 1933 fire tower the super structures appear to be a heavier duty structure over the Aermotor fire towers as well.

An International Derrick model 1937 fire tower on Sugar Hill in June 2009.

