

### **The tramway, landing, associated features and the multiple cranes**

The transport system for the station was a significant building achievement. The first move for the 1908-09 construction team was to build the landing and crane, followed by the tramway and winch and then the associated storage buildings.



Figure 36 – The view of the gantry from the stores boat during World War 2.

#### ***The Landing/Gantry:***

To build the landing, the rock at the top of the platform had to be blasted to create a flat area for unloading and loading goods and materials onto the tram trolley.<sup>111</sup> Few details are available about the actual construction of the concrete and iron pillar which forms the base of the landing.

The safety on the landing was always a key issue, especially after an unfortunate accident during World War 2 when a young naval rating fell from the landing and

died.<sup>112</sup> The department's reaction to this accident was to enlarge the landing block and to order the installation of safety barriers to prevent further falls. Permanent barriers were concreted in on the eastern side of the landing, with those on the west being removable. The removable barriers allowed offloading of stores straight onto the block, and the barriers could not be washed away in large swells.



**Figure 37 – The crane during a storm with the barriers removed.**



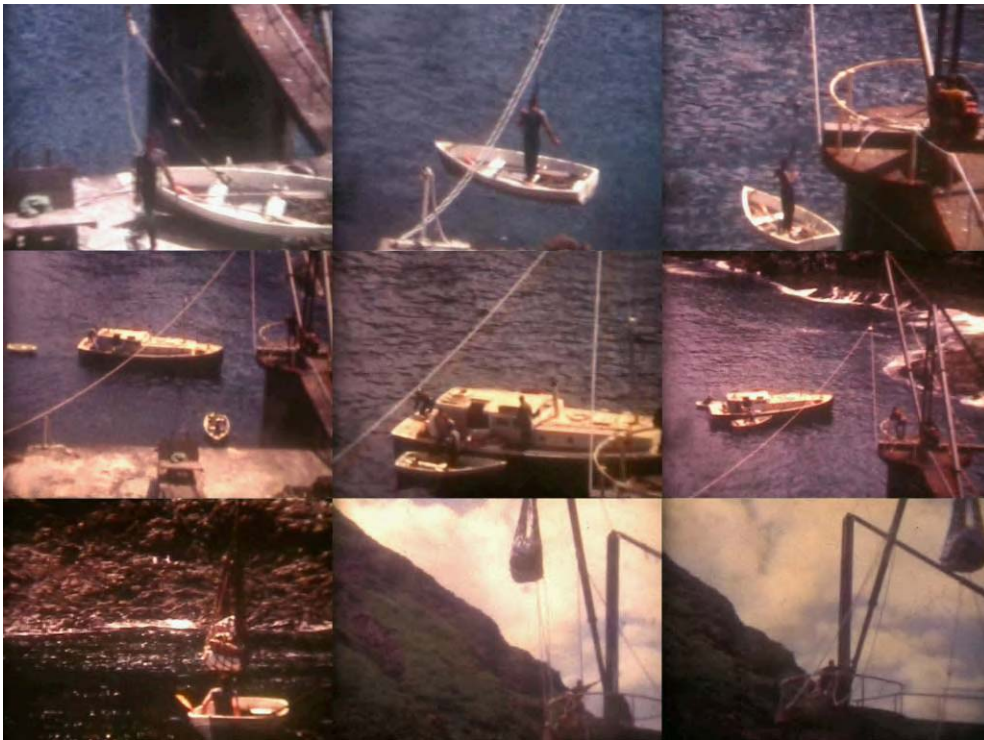
**Figure 38 – The barriers in place in the 1970s.**

***The Crane:***

The first of the series of cranes to be built at the Cape was a one ton derrick constructed by the W. Crabtree and Sons Company based in Wellington.<sup>113</sup> Predominantly of iron and powered by a hand winch, it lasted until a severe storm in 1924 washed it right off of the landing and into the ocean.<sup>114</sup>

The cranes that followed were frequently damaged during storms, resulting in repairs or replacement. When a crane became damaged beyond repair the department usually used to opportunity to update the crane based on new designs or technology.

The crane was used to move stores, mail, keepers' property, animals, construction materials and other items, from the various boats on to the landing. Figure 39 is a series of pictures illustrating the crane's operation in the 1960s.



**Figure 39 – The crane under operation, 1960s. Keeper Murray is in the dinghy transferring stores, while keeper Rodda operates the crane.**

***The Tramway:***

The tramway was constructed using concrete and rails and was originally powered by a single horse and whim working from the top of the tramway. A large trolley on a long cable moved goods up and down the tracks. It was later operated using a diesel engine housed in one of the tramway sheds.

During World War 2 the tramline was extended through the manuka scrub up to the ridgeline above the lighthouse. This connected the station's major supply line to the naval station to move supplies up to the Navy personnel. When the naval station was closed the tramline was shortened to its original length.

The tramline was modified one final time when it was shortened to approximately half its original length and ran to just above the level of the second house (the current

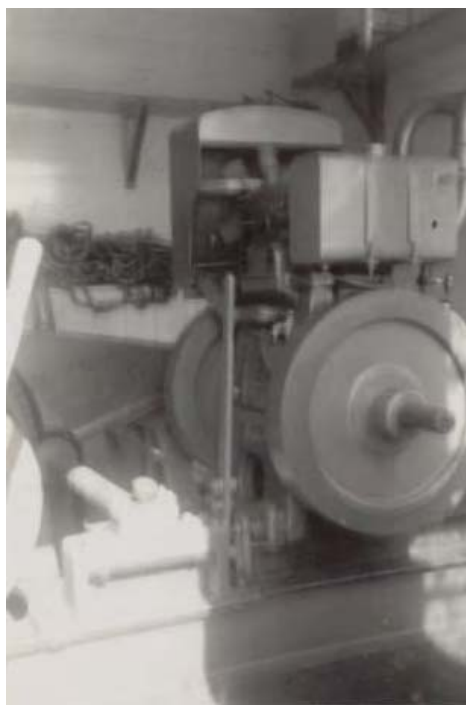
DOC trampers' hut). This was an economic move by the Marine Department: the top half of the tram was no longer needed to move fuel or a large quantity of supplies right up to the lighthouse, and it reduced the stress placed on the engine.



**Figure 40 – The tramway running through the centre of the station — from the landing to the naval radar station.**



**Figure 41 – A photo from the base of the navy stretch of tramway looking up towards the radar station, World War 2.**



**Figure 42 – The "Giggling Gertie" winch two cylinder Lister diesel engine, used to operate the tramway in 1959.**

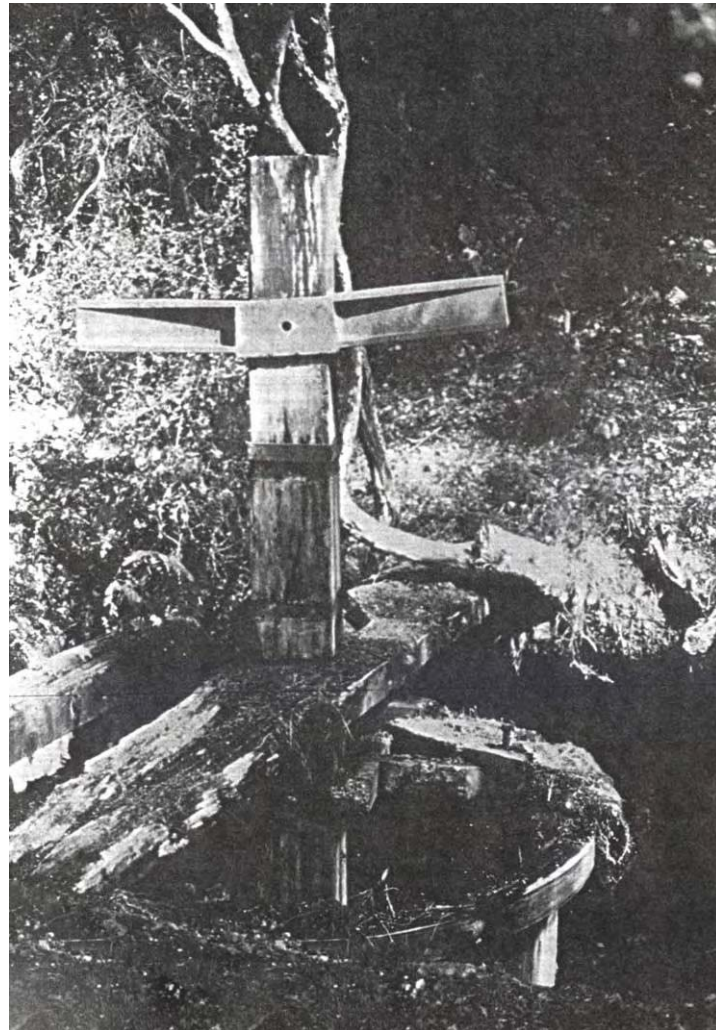
***The Whim and the Engine Shed:***

The whim was described as being:

*'a large wooden capstan that turned inside an underground housing. Two poles were set into the top of the capstan, a horse harnessed to each pole as they plodded round and round they drew the trolley with the tower sections steadily uphill.'*<sup>115</sup>

A hole was blasted into the rock and the whim was built using Kauri timbers. Horse power pulled the loaded trolley up the long tram and the original horse supplied during the station's construction worked until 1922, when it died from old age.<sup>116</sup> An article published in 1974 by the *Auckland Star* reports that an 8inch horseshoe hanging on the wall indicated the horse was probably a Clydesdale, but whether the shoe belonged to the whim horse is unknown.<sup>117</sup> The whim only ever operated with a single horse though it could operate with two.

After the horse died a 12hp (horse power) Anderson oil engine was installed in January 1922.<sup>118</sup> The engine was housed in a shed at the point where the path to the lighthouse crossed the tramline. This engine is reported to have stayed in use until 1953 when it was removed.<sup>119</sup>



**Figure 43 – The whim during the 1970s.**

Mabel Pollock makes reference to the construction of an engine shed, and remembers the schedule as:

- Day One – the workers laid a large concrete slab with embedded bolts.
- Day Two – was the erection of the corrugated iron shed that was built over the concrete pad and the attachment of a tank for rain water to its roof.
- Day Three -- was the installation of the engine – to do this the engine was hand winched to the shed and bolted to the pad; the crane cable was attached to the drum and then cranked into life.<sup>120</sup>

The whim was unused through World War 2 and acted as a piece of playground equipment for the children of that period. Mabel remembers that the whim's two poles were removed, the base was immobilised by dirt, and manuka scrub encroached into the surrounding area.<sup>121</sup>

A photo from the Proebstel family shows that the whim was largely intact in the 1970s though some of the wood appears to have begun to rot (see Figure 43). In 2008 the capstan is still recognisable in the hole, though the area is surrounded by dense scrub.



Figure 44 – The cut for the whim in 2007. Note the capstan lying in the bottom right corner.

**General:**

The transport system generally ran smoothly as long as the horse was present or the engine was operating. The real problems were often caused by the weather – mainly the infamous storms that would batter the station (see Storms on page 139).

The tramway and trolley provided the Marine Department with many headaches. The most common was the constant ‘riding’ of the trolley by the keepers, the children and the naval staff. The first time the trolley cable broke (according to Mabel Pollock) it was loaded with drums and, when the cable snapped, the trolley and its load flew through the dry store wall. After this accident, when the cable was re-established, a new safety device was fixed to the trolley to prevent this type of accident happening again. The Marine Department issued a memo stating that there would be disciplinary actions taken for this event. However there were no reported injuries to the keepers or their families in the first 40 years of the station’s life (at least not for riding the trolley).

One near miss that did occur with the tramway was when barrels were being moved up the tram on the trolley. Something faulted, causing them to go rocketing back down the tramway. The supplies boat was still sitting directly in front of the landing when the barrels came flying towards it. Luckily at the moment the barrels were about to hit the boat, the ocean swell dipped and the barrels hit the water instead.

### ***Puff the Magic Wagon***

The motorised wagon was used to transport stores from the tramway to the buildings on tracks constructed from the rails no longer needed for the tramway. The wagon was commissioned in the late 1960s and named ‘Puff the Magic Wagon’ by the lighthouse children.

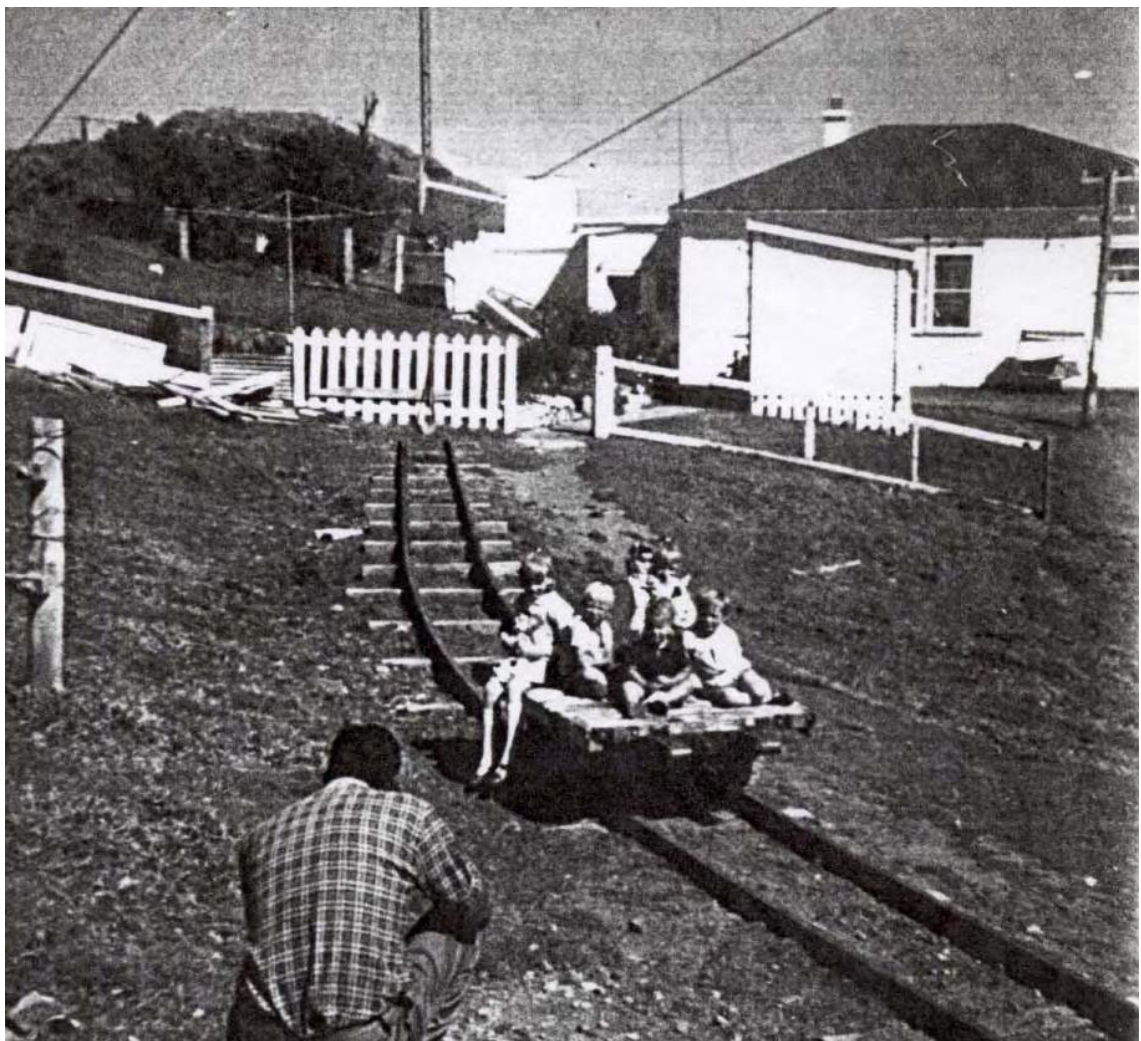


**Figure 45 – The opening of the Puff track with all the station’s residents in attendance.**





**Figure 46 – Noel Proebstel on the motorised Puff wagon.**



**Figure 47 – The children being photographed on Puff.**