UP ABOVE THE WORLD SO HIGH

Joe, the Rigger at Titahi Bay, Has a Job Few People Would Like But He Enjoys it

To a sailor nothing is impossible. Joe is as much at home swaying in the winds a clear 700 feet above the 2YA transmitter at Titahi Bay as he is gathering mild cockles off the beach or making peaceful pikelets in the men's quarters.

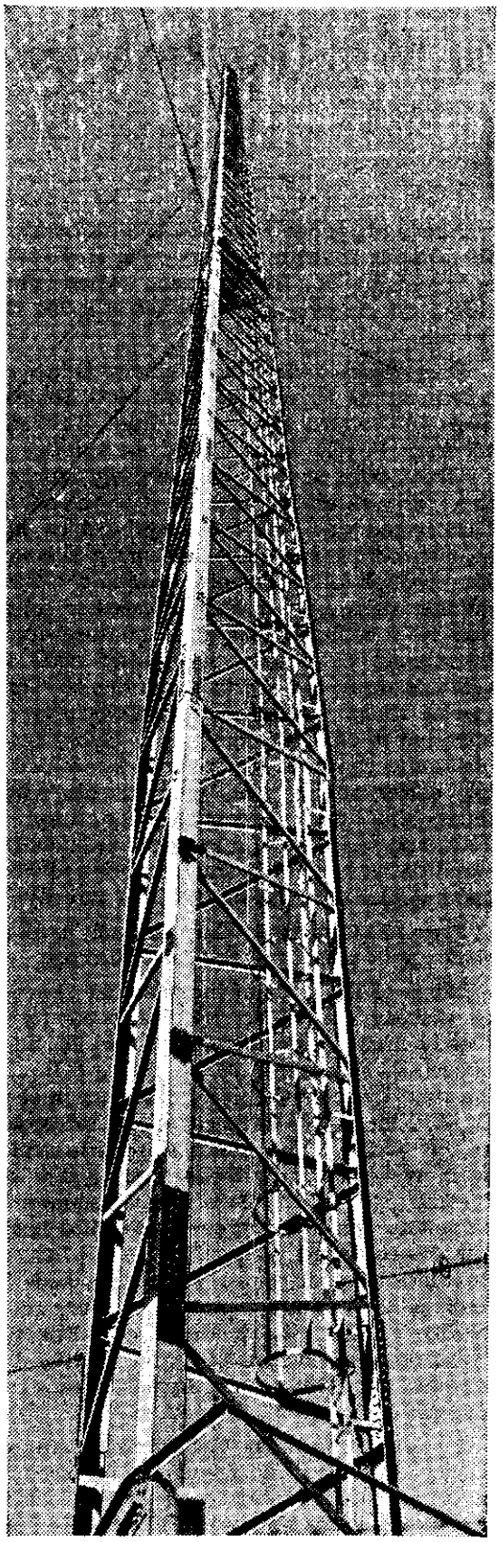
Of the dozen tall radio masts in New Zealand, Joe is most proud and fond of the "big fellow" at Titahi Bay. The others require attention from him as the National Broadcasting Service's official rigger, but he is stationed at Titahi, and it is at present his engrossing life's work to clamber over the tall steel framework you see on this page.

At Titahi Bay the mast gathers personality as it climbs in endless height from the so obviously precarious foundation of the upturned pivot at its base. It is Joe's delight to expound this personality to a visitor. He speaks casually, but as he talks and gesticulates, a growing enthusiasm reveals in him the same secret excitement as fond parents have in showing off the favourite son, accountants their latest filing system, or the bride her new home.

It is, after all, not a bad mast as masts go. And it is more Joe's mast than any one else's. Professor Shelley may say what he likes, but who else could be so attached (and could remain so) to the mast as to take great joy in climbing up the outside of it with two or three hundred feet of heavy wire uncoiling behind him; or in twitching the top so that an exquisite vibration travels down, and back, and down again, till the great length of it sways and swings him feet, and feet, and feet into space; or in knowing each bolt of the 12,000 in the steel-work so well that each slackening or weakness is anticipated; or in watching with anxious eyes on stormy nights as each 1,200 feet of guy wire stretches and warps to the tune of 20 tons a time?

Joe does all these things and more, delighting in his own sailor's expertness with the monster he manages. The mast weighs 56 tons in itself, and has downward stresses of about the same weight from the guys. Yet Joe can jack it up the three-quarters of an inch necessary for changing one of the porcelain insulators upon which it rests. An hydraulic jack is almost his only mechanical aid. The rigging of the far stretching guys is done with the assistance of a small hand winch.

He has to play also with the incalculable forces of induced electric current. The main tower carries one end of a very long straight aerial for 2YC and three "umbrella ribs" for 2YA. Heavy insulators separate these from the masts but do not prevent a high potential of induced current from travelling into the steel-work. If Joe happened to be on the mast and with no connection to earth when the stations came on the air Joe would notice nothing, but if he came down and made contact between mast and earth he would be severely burned. Similarly, he cannot get from earth to the mast when the current is running. On lesser masts a good jump might take him through the danger area, but he plays no tricks at Titahi Bay. Under certain conditions of electric intensity, not only the mast, but also fences round it, and buildings nearby, might become charged, and Joe tells of queer pranks played on dark, stormy nights by the static electricity as it leaps in coloured flame from point to point.



STEEL LADDER TO THE STARS—A worm's-eye view of the 2YA mast at Titahi Bay, Wellington, which is described in this article

One night he tried to carry up a wire for emergency repairs while one aerial was still on the air. As he climbed, the wire he carried picked up more and more current. It began to burn him. Watchful operators below switched off at his urgent signal.

Joe has an interesting job ahead of him. In five or six years the guys will need painting with pitch. Not one of them can be taken down for stresses must be absolutely even if the mast is to be kept balanced on its narrow base. So Joe plans to make himself a cage, rig it to the winch at the foot of the mast, and carry a rope up the mast and down the guys so that he can slide at will suspended thus in space.

Not even on a high mountain precipice, or in any aeroplane, is it possible to gain such an impression of height as from a tall slender mast like the one at Titahi Bay.

In an aeroplane there is a seat to sit in, wings and struts around, and nothing else close at hand with which the eye can make the comparisons necessary for a conception of height.

On a mountain it is seldom possible to look down perpendicularly for as much as the 710 feet of the radio mast. Something interrupts the line of sight.

But at Titahi Bay, on the top platform of the mast, there is the plain fact of empty space between the eye and the ground below. Nothing interrupts the view and nothing would interrupt the passage of a body falling out and down.

Joe does not think of this. The steel-work of the stays and girders is home to him, and he can tighten a bolt as contentedly at 700 feet as any mechanic lying in a pit under a motor car.

The ground, for him, is just something to be walked upon when necessary—and as seldom as possible.

The air is his element.