

Sinclair SRL114 antenna

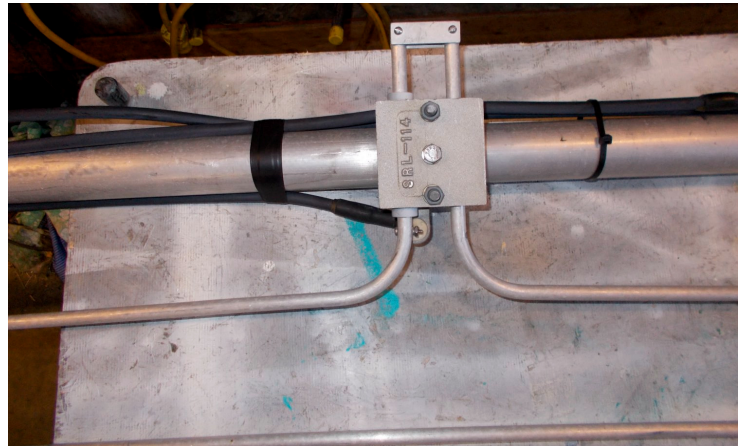
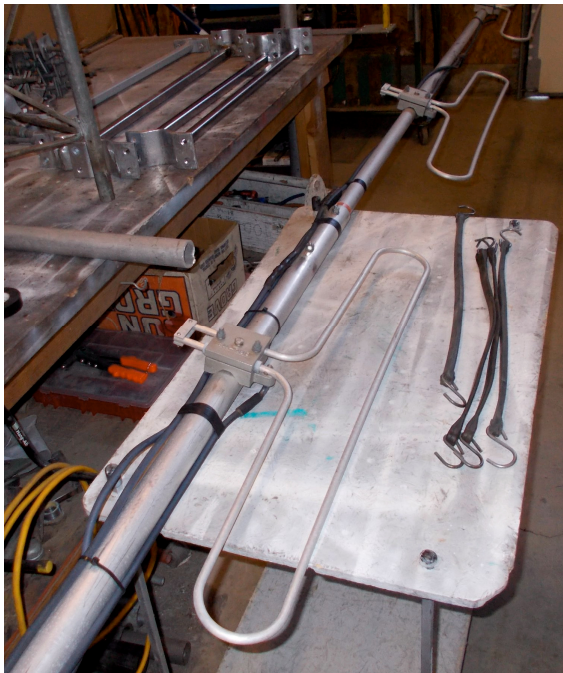
by Karl Shoemaker

Introduction:

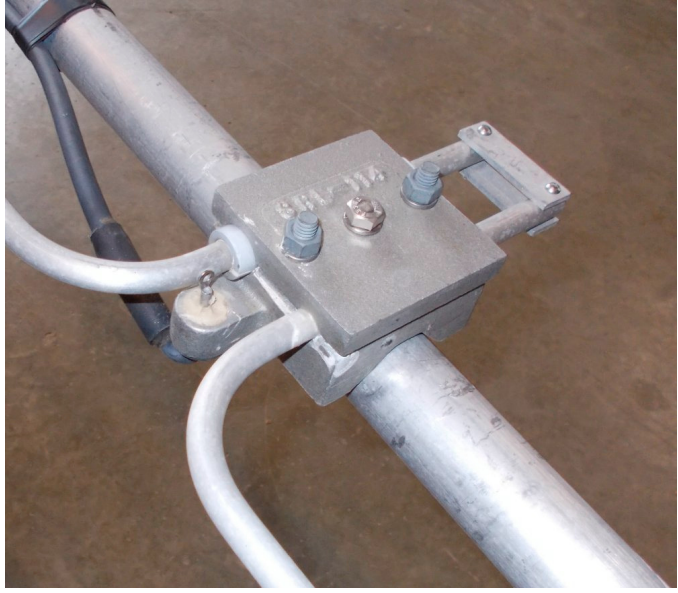
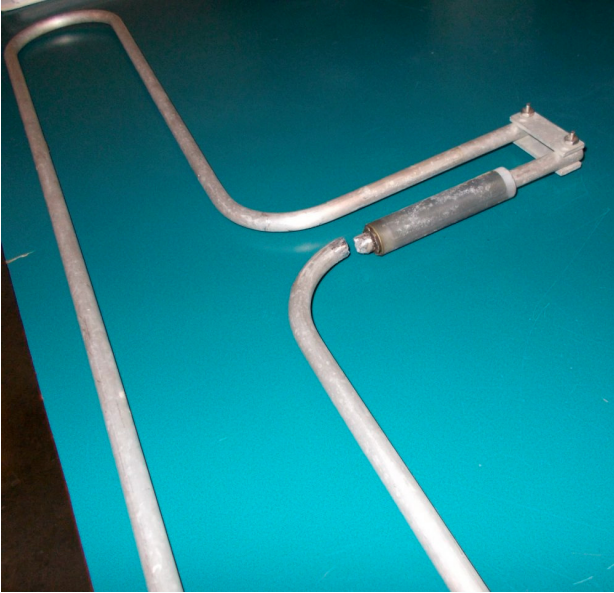
The Author has been using commercial type antennas for years. This is a report for another commercially made one.

It appears to be built for a medium duty application for a commercial station at the home (low-level) or medium level (non-harsh) site. It's well built and appears to last several years. The main advantage it's broad banded. This donated one out of commercial service and will still work in the 2-meter band. Because of its age (40-years) it does have possible slight performance degradation. When new it's assumed this was a top-performing antenna.

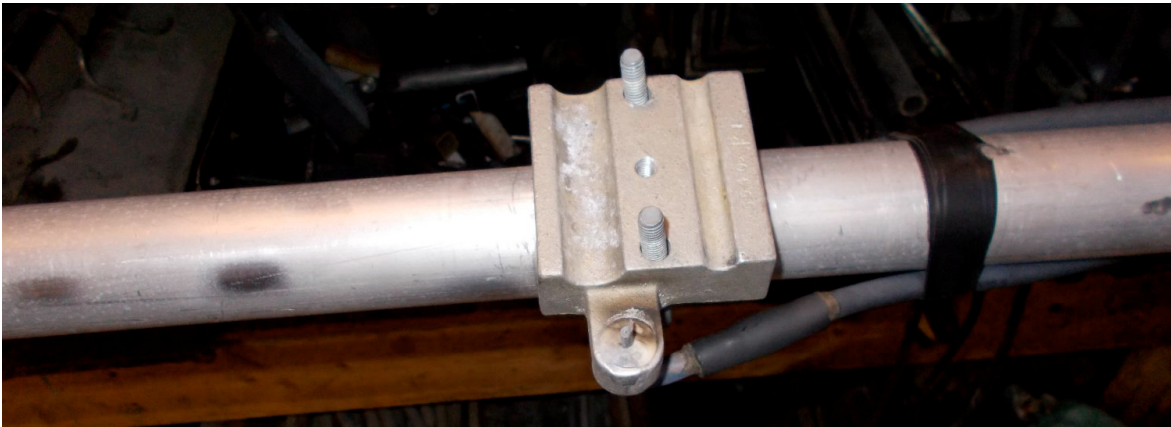
The Author installed it years ago. Recently, during a site visit the Author discovered one of the elements was damaged, most likely from the high winds at the site. The Author brought it down and back to the shop. Shown here are close-ups on the design, front and back. The connection points are made with stainless steel bolts.



Here's the broken element on the left. A normal element is on the right.



Taking the element off the array shows the back plate. Below are some close-ups on the center coax connection point for each element.



Here's a normal connection point, then with the (6-32) bolt and nut removed.



Here's the backside.



A MIG unit for aluminum was located for the Author to use, which had only 5 minutes of experience about 30 years ago. Therefore, it was a little ugly but should be strong enough to hold up with the high winds at the site. Shown here is the hole drilled for the bolt, washer and nut to be installed.



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