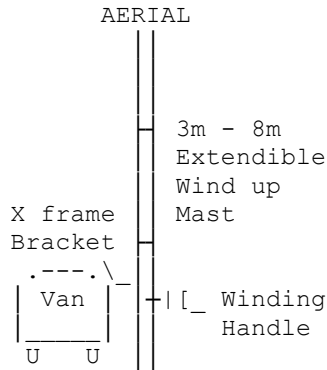


Windup 8M /P mast design.

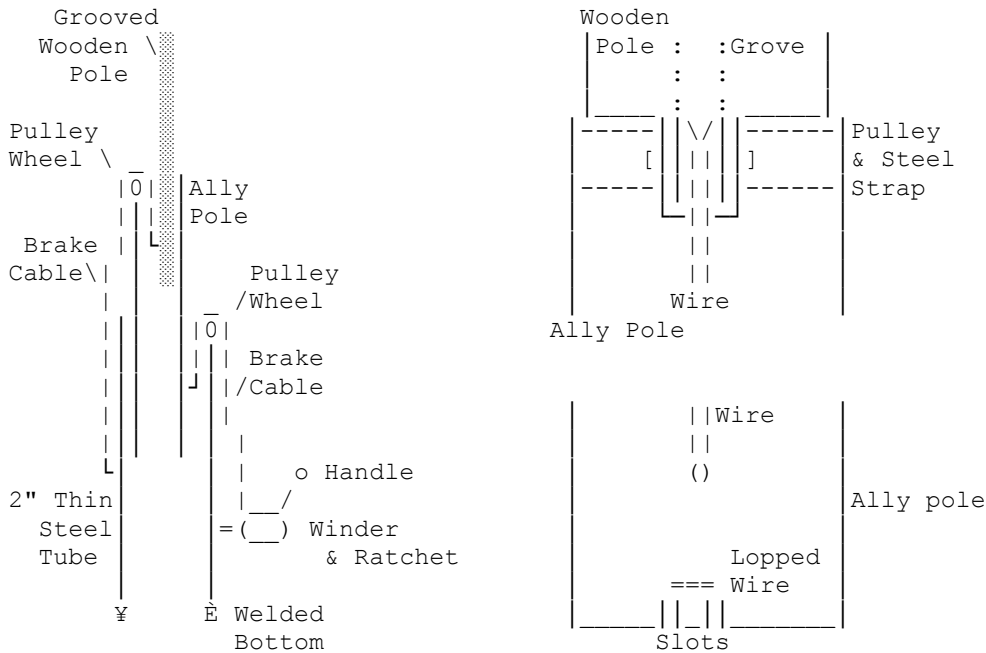
From: G8MNY@GB7CIP.#32.GBR.EU
 To : TECH@WW

By G8MNY (new Nov 04)
 Here is a mast system for the side of a car or van with a gutter.



(The X bracket description is in another bul.)

WIND UP MAST SYSTEM



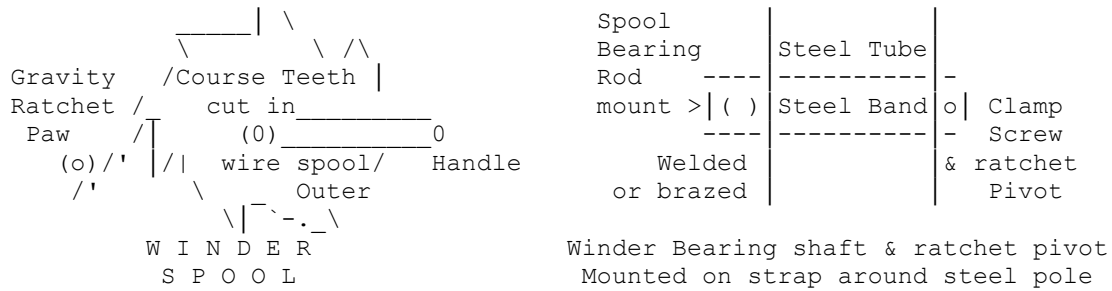
HOW IT WORKS

When U wind the handle the middle ally section is lifted, that in turn lifts the inner wooden section as well. So the 3m pole soon becomes 8m!

It consists of a 1.25" dia 10ft wooden pole inside an ally 1.5" dia tube inside a 2" steel tube. The wooden pole has a V shaped slot cut in it down one side for the flexible pull up bicycle brake cable wire. The Aluminium & Steel poles have a slot for small pulley wheels at the top of each, supported by a thick steel strap around the pole to hold the axle (bolt).

Near the bottom of the wooden pole (35cm) is attached to a steel cable that runs over a pulley on the top of the ally pole & fixed to the steel pole (winding hand shaft).

Another flexible steel wire attaches on the same side as its pulley, to the inside bottom (slots made for a loop) of the ally tube & threaded though a hole (35cm up) & goes over a pulley wheel on the top of the steel tube, then on to a winding wheel & ratchet!



When the mast is fully up the 2 wire attachment points will be opposite the pulleys resisting pole section rotation at the overlaps.

IN USE

Put aerial & coax on to wooden pole with clamps. Pop the pole vertical, attach to X bracket (bungee), then wind the handle. Use the bungee tension to stop the mast for turning! Keep the bottom position on the ground to keep vertical.

Depending on conditions bottom can be left on the ground or a bearing plate pegged in. Drive over ones seem a good idea but U need to be able to reposition it to make the mast vertical.

It is generally wise to have cables well secured tp the top section, so that there is something to pull down with of it does not telescope shut smoothly!

In public areas I guy the mast with 4 guy strings for safety as well!

Also used with it is a 12V rotator that the mast sits on. It is a low torque easily stalled rotator so if anything fouls up, it does no damage!

Why Don't U send an interesting bulletin?

73 de John G8MNY @ GB7CIP