

Congratulations on purchasing your new SAS-1 and SA-4 "SLOPER ANTENNA SYSTEM." Following a few simple steps you will be on the air with the new system. Your entire tower will be turned into a dynamic low frequency antenna system. You may also mount the SAS-1 and SA-4 on the ground with the antenna supported from a tree. This becomes a ground mounted vertical and of course be sure to put radials under the system. Take some time to read "A LOOK AT THE SLOPER." This article is from the "AMP LETTER" and will give you insight into the basic SAS-1 SLOPER SYSTEM.

### INSTRUCTIONS

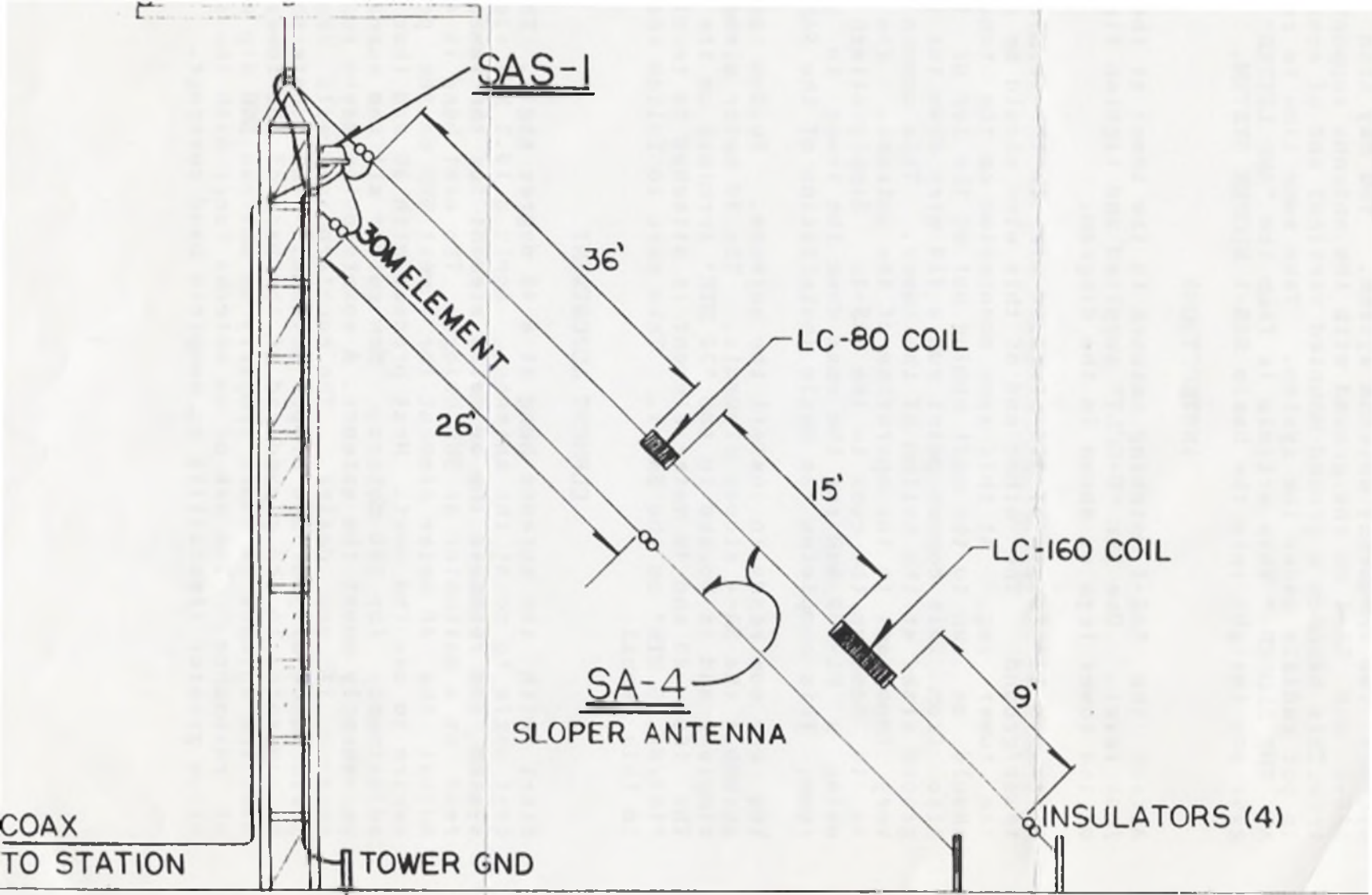
Attach the SAS-1 matching network to the tower at the 30 to 50 foot level. Use the "U-BOLT" supplied and tighten firmly to one of the tower legs as shown in the diagram.

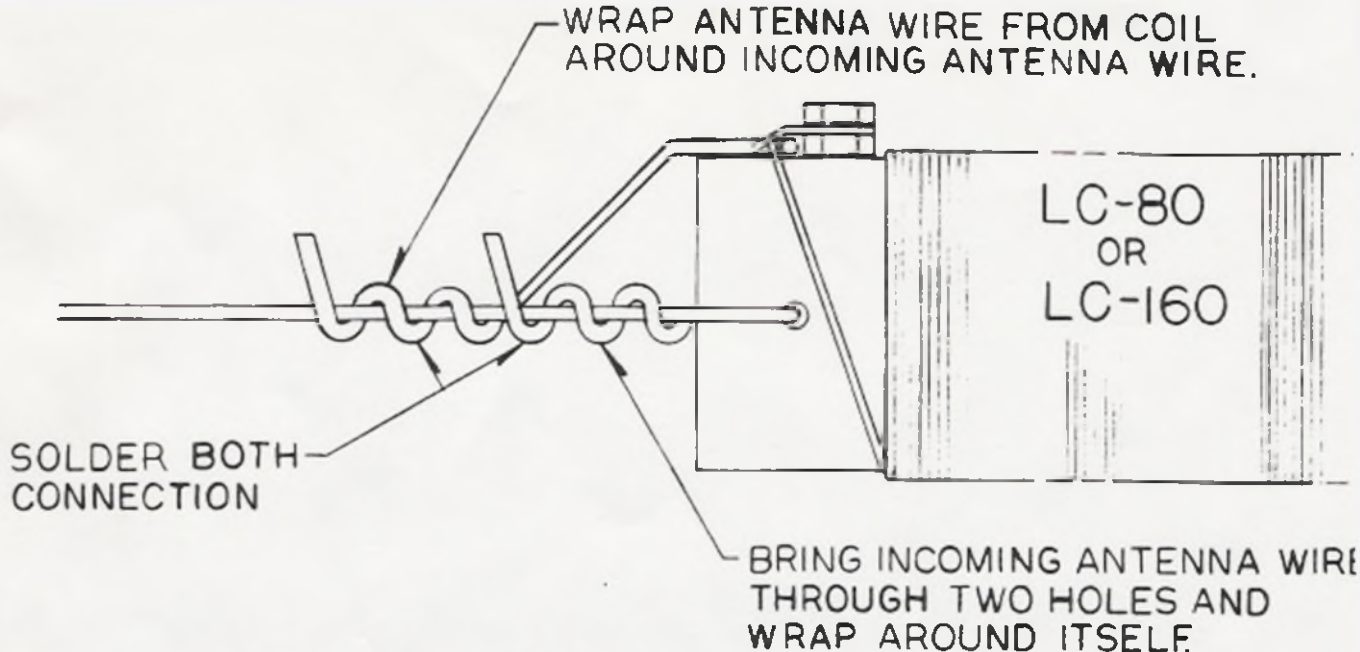
Attach a 14" length of #14 stranded wire to the terminal marked tower/ground. The other end of this wire should be clamped to the tower leg. At this same connection on the tower a wire should be run to the mast coming out of the top of the tower. Also from this common point run a #14 wire down the tower to a ground stake at the bottom of the tower. This common ground is very important to the operation of the antenna. The final step is to hook up the coax to the SAS-1. Simply attach the coax using a PL-259 and run the coax down the tower to your radio room. This completes the basic installation of the SAS-1.

You are now ready to install the antenna. Follow the chart and assemble the SA-4 sloper elements. The 30 meter element is the simplest and is hooked to the "30 MTR" terminal on the SAS-1 box. The 160, 80 and 40 meter element is attached to terminal marked "160/80 40 MTR" on the SAS-1. Take care to follow the pictorals in this manual.

### ELEMENT ADJUSTMENT

Start with the antenna hung at a 45 degree angle. This is the best angle to mount the antenna. Apply a 10.1 MHz signal to the system and resonate the 30 meter element for the lowest SWR as read on a wattmeter or SWR bridge. The next band is 40 meters. Adjust the 40 meter element for lowest SWR on the portion you desire to use the most. Next proceed with 80 and then finish the adjustments for 160 meters. Now solder all the connections and permanently mount the antenna. A counterpoise maybe run under the antenna if you desire. The counterpoise will increase the performance of your new sloper antenna. The counterpoise should be connected to the ground rod at the base of the tower. Remember when the antenna is tuned properly an obvious SWR dip will occur at resonance. The use of an antenna tuner with the sloper will allow greater flexibility on complete band coverage.





SA-4 SLOPER BASIC TUNING CHART

BAND	FREQUENCY	40	80	160
40 CW	7020	36'6"		
80 CW	3550		16'10"	
160 CW	1805			14'6"
40 SSB	7180	35'8"		
75 SSB	3790		12'6"	
160 SSB	1820			10'8"

THE MEASUREMENTS ABOVE WILL VARY WITH EACH  
ANTENNA LOCATION....ADJUST FOR LOWEST SWR  
SOLDER ALL CONNECTIONS AFTER RESONANCE...

AMP SUPPLY CO. 1-10-83

