

**HexBeam Installation, 11 August 2003:**



Here is the HX-B5i five band HexBeam, assembled and awaiting installation. Solo construction took about 2 1/2 hours. There were no missing parts, and everything fit just fine.



This is the feedpoint of the HX-B5i HexBeam. the red wires shown here are the 20 M driven element, and the black wires are the 20 M reflector.



This is the HexBeam base. Everything attaches to that big hexagonal aluminum plate. The black blob on the RG-213 feedline is an RF choke, made from six Amidon FB-77-1024 Ferrite cores, wrapped up and weatherproofed.



Braver men than I would have simply muscled the HexBeam up onto the rotator, but I was not able to do so. I tried to do it without the crane, but in the end decided that it would be less expensive to pay the minimum charge for the crane to come up from Gadsden Alabama, than to risk damaging the antenna or find myself in the hospital emergency room. Here we see the crane lifting the HexBeam into place. Here I am guiding it to line up the rotator stub with the bottom hub on the HexBeam.



Next it was necessary to tighten the hex screws in the hub to initially lock the hub to the rotator stub. There is also a bolt which goes through the hub and stub in order to completely fix the direction of the HexBeam.



The riskiest part of the whole process was climbing up past the plate and disconnecting the crane strap. The vertical mast above that point is plastic and is not safe to use for support. As can be seen here, between the crane operator and I we got the disconnection accomplished.



Here is a detailed picture of the completed rigging of the feedline for the HX-5Bi HexBeam, and the control cable for the Yaesu G-800SA rotator. Proper strain relief for the cable is the next step to be done.



This picture from the other side shows the entire antenna, rotator, and pole attachment. This is a very strong setup, and there is every reason to believe that it should survive many years. Our only worry is birds - very large birds. We have seen a nesting pair of osprey in the neighborhood, and I have to wonder if they are attracted to this sort of structure. (These birds have what appears to be a 1.6 meter wingspan).





Finally, this is what the entire installation looks like from the ground. The height of the HexBeam is about 13 meters (41 ft.) and no guys are required. There is a 40 meter (135 ft) long flat top attached right below it.

All of my tests show that the HexBeam works well, and I have every reason to like it. It is very directional, and the difference on receive between it and the wire I was using is nothing short of amazing. There are deep nulls about 135 degrees to both left and right of the main lobe. I get great signal reports, better than with any other setup I have ever owned.

But really, there are three attributes which make it fit my needs. First it is compact. The turning radius is all of 3 meters, which makes it so that it fits in our very narrow downtown city lot. Second,

it does not look like a typical ham antenna. The TH-3 I had in California was a complaint magnet, because everyone knew what it was. Third, it covers 20-17-15-12-10 meters equally well. For my operation (primarily CW or PSK-31, and usually barefoot) this is a great advance.