Bencher Skyhawk

It has 3 ele on 20 and 15 and 4 ele on 10. Trapless. It is a large antenna with a 24 ft boom. Wind compensated to reduce rotor wear.

Changing to this beam was a huge improvement to my station. This is an unscientific comment, but immediately after moving from an A4S at 30 ft to the Skyhawk at 50 ft my scores improved by about 30%. True, there were two factors changing at the same time there. However, I have received numerous unsolicited comments about how loud I am compared to other stations in my area and that tends to back up my thought that the antenna and not the height deserves some of the credit.

I chose this antenna based on the work done by NOAX and K7LXC comparing triband antennas. They published their results in a book available from Champion Radio and DXEngineering. It wasn't tops, but had a good mixture of features.

High measured gain at 3 to 5 dBd which is fairly consistent across the bands instead of that being just a peak value on a narrow part of one band. Since I only run 100 watts I need every dB I can get to compete with the KW and tall tower crowd. For those who hadn't thought much about it, you shouldn't take the specifications published by a vendor at face value. They often cherry pick the best figure to publish gain claims and that figure isn't always representative of overall performance.

The Skyhawk sacrifices front to back ratio for better gain. It does okay on front to side. Had an old timer scoff at this antenna once because it didn't have good rejection on the rear. Think about it though. He was from Ohio. We are in 4 land. Who is behind us to cause interference when we point our antennas at the population centers of EU and JA? And if I point to SA I want the New England crowd to know I'm there so they don't crowd on my frequency so much when running. It helps that I'm a hop ahead of them when pointing south because I get about a 7 to 10 dB gain because of their extra hop. I routinely beat out high power stations from New England when beaming south. Another benefit of lower F/B ratio is I can often work the Caribbean mults while pointed to EU and JA without having to swing the beam. Kind of like the instant reverse feature of the Step IR's.

Speaking of the StepIR... Thought about getting one, but I'm concerned about the stepper motors wearing out. Being a trapless design, as long as I keep the tree limbs trimmed back I can't think of a lot that would go wrong with the Skyhawk. I'm getting longer in the tooth every day and climbing towers to make antenna repairs isn't something I enjoy much anymore.

A complaint. The antenna is a bit finicky on 15 meters. You need to hold the driven elements exactly in place or it gets lousy SWR. That was discussed in the Tribander report mentioned earlier. After that particular bad review point Bencher added a plastic spacer to hold them in place and it makes a world of difference. That spacer broke one time when the element caught on a branch and 15 was horrible. It also affected 20 and 10. As soon as I replaced it things came right back to the high level of performance I had come to expect from that antenna.

Tain't cheap. Pretty big. Great antenna.

Kevan N4XL