

# **A REPORT ON USING BEXT TRANSMITTERS IN DIFFICULT ENVIRONMENTS**

## ***How Peace Radio was built in Africa, by Dave Black of Coastlands Ministries***

In February of 2002 a team of three, Pastor Dave and Tana Black formally of Bellingham, Washington but now of Lami, Fiji, and Alethea Youse from Bowen Queensland, Australia traveled to Kitgum Uganda (near the Sudanese border) as part of Coastlands Ministries to build Peace Radio 91.5.

Peace Radio was a long-time dream of Pastor David Livingstone Okello of Kitgum.

Having suffered greatly during the rebellion, David had desired to see a message of hope and of peace broadcast to his people. The area around Kitgum is home to hundreds of thousands of Acholi people without any mass communications.

Peace Radio is the first local station in this area. It is totally run and operated by the Acholi people and broadcasts in Acholi and English. It is a Christian station broadcasting the Gospel and Christian music from all over the world. Health and welfare programs are also broadcast to help prevent some of the terrible witch-doctor practices and to educate the people about Ebola and AIDS.

We arrived in Kitgum on Monday and were operating on Friday. Though the temperature was way over 100 degrees, the humidity was very low (think Death Valley) and if you didn't move too fast or work too hard and drank a lot of water you were fine. There were lots of mosquitoes and many were suffering from malaria. We had to be very careful where we walked, as there were numerous poisonous scorpions and snakes (cobras).

My wife inadvertently picked up a scorpion one night and it was truly the grace of God that she wasn't stung!

It was a continual battle with the large African cockroaches and we were very thankful for our mosquito/scorpion/lizard/snake/roach/rodent net. Trips to the outhouse at night were a real adventure. One had to plan for an extra few minutes to rid the outhouse of critters before use.

Peace Radio FM is a very basic station. It consists of a BEXT dipole antenna, one BEXT XT-300 monaural exciter/transmitter, a compressor/limiter/expander, and a parametric equalizer. The audio equipment consists of an older Broadcast Electronics four-channel mono mixer, two CD players, one dual cassette deck and a VCR. We used a common consumer FM receiver/amplifier for our studio monitor which we muted through the board (the metering circuitry of the transmitter served as a modulation monitor). The STL consisted of common telephone wire with transformers on both ends.

The station sounds great! The BEXT equipment is wonderful! The transmitter is very robust.

We had frequent power outages. The fluctuations of the commercial power varied between 0-260VAC yet the transmitter only hiccupped when it dropped below 190VAC. I have never seen anything take that much abuse and survive (the Livingstone's refrigerator didn't survive). We finally managed to install a dropout circuit for when the power dropped below about 200VAC or rose above 250VAC. It was all we could do.

A UPS would sure be nice! One must remember that we were miles (and dangerous miles at that) from any source of supply and were operating on a very limited budget. A trip to Kampala, the only possible source of supply was a two day adventure over roads recently under rebel attack. When the road was good you drove fast to avoid snipers and hopefully clear land mines. When the road was bad you drove even faster!

We had one problem with the antenna (it was damaged in shipping) and needed some advice.

The BEXT personnel were wonderful! We were able to contact them using email via a satellite phone.

Their response was immediate, considerate, and right on! We were able to correct the problem quickly and get up to full power with very low VSWR. What a refreshing blessing in this day and age! All in all, we had a wonderful time and are looking forward to future projects with BEXT equipment in Papua New Guinea, Nigeria and in other remote, isolated parts of the world.

Sincerely,

Pastor Dave Black of Coastlands Ministries

[ *Dave Black can be reached via email at the following address: Liberty@Coastlands.Net* ]