

## Tropical Transmitting

On page 117 of the February issue, Jacques d'Avignon, *MT's* propagation forecaster, contributed a short explanation of Near Vertical Incidence Skywave (NVIS). Ronald Erickson, AK0N, of Essex, Iowa, requested some clarification of Jacques' sentence, "By transmitting on a frequency in the tropical bands and loading an antenna that directs the energy mostly in the vertical plane (such as a Shirley or a Jamaica or simply a half-wave dipole), the local tropical station can cover its market with very low power and good reliability."

Erickson also asks, "What is a Shirley antenna or a Jamaica antenna, anyway? This former broadcaster would like to know!"

Jacques d'Avignon submitted these illustrations of the Jamaica and Shirley antennas. He says, "The drawings have been converted and doctored, and I cannot tell you where they came from at this point. They were conceived for jungle warfare operations over 50 years ago.

"The difference between the Jamaica and the half Jamaica is the length of the dipoles. In one case they are nearly a full wavelength, and in the other they are half a wavelength to save space.

"What I meant by 'directing energy in the vertical plane' is an antenna that radiates

most of the energy towards the zenith. This can be a simple wire like the correspondent mentions in his letter, or a specialized antenna like the Shirley or the Jamaica. In South America and Africa many small stations use a simple dipole when transmitting in the tropical band, and if you look at the drawings you will see that these antennae are simply 'sophisticated' half-wave dipoles."

## In Defense of Franklin

*MT* writer Clem Small comes to the defense of Benjamin Franklin, in response to an "Ask Bob" item in April's issue. Small says, "To call Franklin a 'tinkerer' and not also a 'scientist' overlooks the fact that he made significant contributions to science.

"*Chamber's Biographical Dictionary* lists not only his research in electricity, which made him a Fellow of the Royal Society, but lists work in meteorology: 'discovering the course of storms over the North American continent, the course of the Gulf Stream, its high temperature, and the use of the thermometer in navigating it; and the various powers of different colors to absorb solar heat.'

"Isaac Asimov, in his revised *Biographical Encyclopedia of Science and Technology*, says, 'Franklin also performed an inestimable theoretical service to the science of electricity, with one accidental flaw...' He describes Franklin's flaw in relation to positive and negative electrodes being an excess or deficiency of electrical substance. Then he goes on to vindicate Franklin's work by pointing out that: 'However, if static electricity is considered as an accumulation of electrons or a deficiency of them, the situation as we understand it today is exactly what Franklin proposed.'" For more discussion on which direction electricity flows, turn to this month's "Ask Bob" column.

Clem Small adds, with respect to another question in the same column, "I'll argue a bit in favor of the statement that the rules for 'skip' reception and propagation are the same for shortwave as for scanner frequencies. This may be nit-picking,

but I think of the 'rules' that govern our radio waves as the applicable laws of physics. The rules (laws of physics) for different wavelengths are the same for HF or VHF-UHF; it's just that when we plug in different wavelengths to our equations, they give different answers."

## Touching Testimonial

This letter from Kevin Houlton of Seattle, Washington, was an especially enjoyable one. Kevin says, "After reading your admonitions about responding to *MT* features and columns we readers find useful, I wanted to give praise to Doug DeMaw, and 'DeMaw's Workbench.'

"My radio hobby roots go back to when my father built a crystal radio set for me for my 7th Birthday (1962). Shortwave followed, then scanning. One rainy day lunch break about two years ago, I picked up my first copy of *MT*. Needless to say, I was very late getting back to the office after lunch. I really couldn't pull my nose out of that magazine.

"Doug's 'Tape Recorder Interface' (Jan 1995) construction article later caught my eye, and for the first time since 1974, I fired up the soldering iron and tried it. I brought the completed unit into the office the next day, along with the issue of *MT*. Several of my co-workers were immediately taken by both my project and *MT*. Fortunately, an *MT* outlet is right around the corner.

"A major rebirth of radio hobbies has hit our office. Our purchasing manager has gone kit crazy, ordering from several *MT* advertisers; one of our district managers jumped back into scanning, another started aero-scanning (we are just blocks from Seattle's Boeing field), two other employees are looking at a ham ticket, my brother is a new scanning fan, my father is back into shortwave and is starting out in CB, and I have embarked on a new adventure as a Part 15 broadcaster. ALL of this was due to that first issue of *Monitoring Times* I brought to the office.

"Doug's 1995 series of articles and projects in 'DeMaw's Workbench' were responsible for my new passion, KFIR - 790 AM. I'm broadcasting with a crystal controlled version of Doug's 'Understanding Transmitters Without a License' project. I am currently building his 'Universal Amplifier' for KFIR's new antenna. Please feel free to call our KFIR Voice Mail line at (206) 789-8733 (789-TREE)."

May you all be as successful as Kevin in spreading enthusiasm for the hobby; and may all your best times be monitoring times!

—Rachel Baughn  
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