## Correspondence Letters from Our Members

## **True North the Hard Way**

A remarkable method was left out of Ron Berry's, WB3LHD, excellent article "5 Ways to Find True North" in the July 2019 issue of *QST*. The method of determining true north via DX radio using a sundial might rate as being the first method for radio amateurs.

After landing on Mars, NASA's InSight lander deployed its seismometer, and it needed to know true north, just like our antennas. The article "Determining True North on Mars by Using a Sundial on InSight" (available at https://hal.sorbonne-universite. fr/hal-01977462/document) describes how the Earth-based international crew accomplished the task.

They were limited in executing their mission by time lag for instructions, data, and images; finding the exact position of the lander; the geometry of the sun and Mars, and limited time for observing and imaging the shadow of the sundial pin passing over the calibrations on the top of the seismometer.

The article is an interesting read.

Marvin Taylor, AEØEG Omaha, Nebraska

## **Increasing Repeater Use**

Repeater usage is significantly down from years past. There are lots of reasons for this, but perhaps we can mitigate some problems. My suggestion is that clubs could ask members to pick a 1-hour time slot per week (or more if they're willing) to monitor the local repeater and encourage usage by:

(a) Responding to random calls from any people driving through the repeater area. Nothing is as discouraging as putting your call out there and being greeted by total silence.

(b) Calling out every 5 - 10 minutes that they are "listening," if the repeater is quiet. This encourages other listeners to give a call.

(c) Mentioning other club meetings and activities, to grow participation.

The goal for all of these suggestions is that, if anyone calls out their call sign, they are not only hearing dead air. And this act of volunteering can be very easy — the volunteer doesn't have to leave the comfort of home or worry about inclement weather, and it wouldn't cost the club any money. I can only see a potential upside for the club itself, as well as the vocation.

Louis Janicek, N2CYY Ramsey, New Jersey

## **Expand Your Range**

I have been pleased with the various articles on non-ham radio, such as Steve Ford's, WB8IMY, "Radio on the Rails" in the February 2019 issue and Allison McLellan's "The Legacy of Radio at Grimeton Station, SAQ" in the July 2019 issue of *QST*. There was - and still is - much more than hams to be heard. I believe that in ham radio, as in much of life, the broader your knowledge in your topic of interest, the more value and satisfaction can be obtained. Most transceivers made in the last 30 years have receive coverage of LF, HF, V/UHF. and there is much information online about what can be heard. Hearing how other radio systems operate can be enlightening. There is SSB, AM broadcast, CW, RTTY. and many digital modes in use, along with a variety of FSK tones. Programs are available to decode many of these modes, and websites with sound clips help identify what the various sounds might be.

Some ways to experiment include late-night winter AM radio DXing, using the 630-meter band, the entire aeronautical world including HF voice SSB from airliners over the oceans, LF aeronautical beacon stations for homing in aircraft, and the US Air Force High-Frequency Global Communications System.

Any antenna will do. The Amateur Radio Service bands inhabit only a small portion of the available radio spectrum. Go experiment, explore, and learn.

Doug McCray, K2QWQ Southampton, South Jersey

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