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Amateur Radio

COMMUNICATIONS & TECHNOLOGY

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**Celebrating
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• **Celebrating “Newbies”...**

• **Being the “New Kid on the Block,” p. 10**

• **The Ragchewer’s Conversation Guide p. 16**

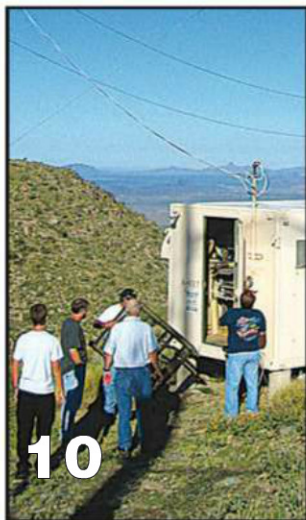
and more...

• **CW Results, 2014 CQ WPX Contest, p. 24**

• **Remote Ham Radio and DXing, p. 44**

• **WRTC 2014: A New Ham’s Perspective, p. 117**

On the Cover: Steve Werner, KD3WK, of Downingtown, Pennsylvania. Details on page 96.



10



18



35



62

FEATURES

Be a Newbie Again ...

- 10 **BEING THE NEW KID ON THE BLOCK**
By Mike Pulley, WB4ZKA
- 16 **THE RAGCHEWER'S CONVERSATION GUIDE**
By Dvere "Dee" Logan, W1HEO
- 18 **ON THE ROAD WITH "HAMS IN SPACE," OR MAYBE YOU SHOULD GIVE A HAM RADIO PRESENTATION**
By Randal R. Schulze, KDØHKD
- 69 **LEARNING CURVE: Using H-Plane Patterns to Pick the Right Antenna**
By Ron Ochu, KOØZ
- 73 **THE HAM NOTEBOOK: Making the Right Connections: RF Connector Assembly**
By Wayne Yoshida, KH6WZ

-
- 24 **RESULTS OF THE 2014 CQ WW WPX CW CONTEST**
By Terry Zivney, N4TZ
 - 35 **SNAPSHOT: 2014 WORLD MAKER FAIRE**
By Rich Moseson, W2VU
 - 44 **COUNTING COUNTRIES AGAIN: HOW REMOTE HAM RADIO RE-ENERGIZED MY DXING**
By Gary Liljegren, W4GAL
 - 49 **MATH'S NOTES: Inexpensive High Speed Pulse Generators**
By Irwin Math, WA2NDM
 - 58 **QRP: QRP Fun With Tuna Tins and Android**
By Cam Hartford, N6GA
 - 62 **KIT-BUILDING: Direction Finding and CW Fun**
By Joe Eisenberg, KØNEB
 - 65 **CQ WORLD WIDE: Fairs, Festivals, Field Day, Changes, and Some Interesting New Bands and Products**
By Tom Smerk, AA6TS
 - 81 **MAKERS: A Half-Century of "Making" With Ham Radio**
By Rich Moseson, W2VU
 - 84 **MAGIC IN THE SKY: 'Tis the Season**
By Jeff Reinhardt, AA6JR
 - 93 **CQ AWARDS ADD CATEGORIES FOR REMOTE OPERATION**
By CQ Staff

DEPARTMENTS

- 52 **EMERGENCY COMMUNICATIONS: EmComm: By Its Proper Name, the Critical Role Radio Amateurs Embrace**
By Richard Fisher, K16SN
- 86 **VHF PLUS: Update on 10-GHz EME QSOs at Central States VHF Conference**
By Tony Emanuele, WA8RJF
- 90 **AWARDS: Spotlight on Canadian Awards**
By Ted Melinosky, K1BV
- 94 **DX: A DXer's Centennial and a Possible New Path for IOTA**
- 99 **CONTESTING: Contest Logging Programs — Win-Test**
By George Tranos, N2GA
- 105 **PROPAGATION: Good to Excellent Conditions Predicted for CQ WW DX CW Conest 2014**
By Tomas Hood, NW7US

2	ANNOUNCEMENTS	76	SPURIOUS SIGNALS
8	ZERO BIAS	110	HAM SHOP
9	HAM RADIO NEWS	111	ADVERTISER'S INDEX

How did three new hams suddenly find themselves as a sought-after team to make presentations on a very specific type of ham radio operation? And can you do it, too? KDØHKD says yes!

On the Road With “Hams in Space,” or Maybe YOU Should Give a Ham Radio Presentation

BY RANDAL R. SCHULZE,* KDØHKD

This is the story of Eddy, Jeremy, and Randy, and their adventures presenting as *Hams in Space!* Although our topic is amateur radio satellite communications, this article is more about hitting the road (Photo A) and giving presentations to the amateur radio community at club meetings and hamfests than the specifics of our talks.

Going on five years now — starting very soon after we all got our ham licenses — Eddy Paul, KYØF (Photo B); Jeremy Widner, ACØDX (Photo C); and I, Randy Schulze, KDØHKD (Photo D), have been providing presentations to the amateur radio community on the topic of FM amateur radio satellites. To date, we have presented to over 40 events for hundreds of people across the Midwest (Photo E), and have more scheduled.

Would I recommend that others get involved in providing presentations? You bet I would! Although it has been a lot of work, and a degree of travel and expense, it has been a very rewarding experience. Here's a look at our adventures as *Hams In Space*.

In the Beginning ...

Although involved in communications professionally most of my adult life, I didn't earn my amateur radio ticket until 2009. I'd always known about, and was interested in, ham radio. It just seemed that something always came up, or got in the way of my studies until a friend urged me to just go out and test for my license.

After I earned my Technician Class license, one of the first things to capture my imagination was working the FM amateur radio satellites. This was great fun, and a not-too-expensive way to work some amazing distances with an HT. I was working satellites every chance I got, and it was not very long before my neighbors grew accustomed to seeing the crazy fat man with the purple, gnarly looking antenna wandering about his yard day and night, mumbling cryptic phrases into a little black box. I was even working satellites during breaks at work.

In pretty short order, I started accumulating a pretty good stack of QSL cards from all over North America, including Canada, Alaska, and Mexico! Soon, the same Elmer who suggested I go out and test for my Technician license said, “You know, you're probably eligible for a certificate for work-



Photo A. Hitting the road with your ham radio presentation can be a fun and rewarding experience. (Photos by and courtesy of the author)

ing all those hams via satellite ...” So I went out to the AMSAT¹ website, and sure enough, I had worked enough contacts for the OSCAR² Satellite Communications Achievement Award. I gathered up my QSL cards and submitted the application. To my surprise, I received not only the certificate I applied for, but also the South African Satellite Communications Achievement Award. *Holy Cow!*

Then my Elmer asked, “Didn't you work all those satellites with five watts or less?”

Seven days later, I received a QRP award with satellite endorsement.

The Presentation is Born

A few weeks later, I was attending a meeting of my amateur radio club, where it was asked, “Has anyone done anything interesting in ham radio this month?” So I said, “Sure! I got these really cool certificates for working satellites.” I got a lot

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of our guys! We know exactly who that was and we've corrected the problem!"

You Know You've Made the Big Time ...

Our presentations started small, with no real plan in mind. We've never set out with a goal that we were going to do this more than once, or with any particular venue or event in mind. The first year was mostly to amateur radio clubs. While we still do ham clubs, most of our recent appearances have been at ham-fests, conventions, and a few institutions. Most recently, we've provided our presentation (Figure 1) at the ARRL

Midwest Division Convention and the 2014 Dayton Hamvention®! Twice, we've had the honor of having NASA astronauts participate in our presentation! (Photo F) Around 2011, we formalized our name from "those satellite guys" to *Hams In Space*, and came up with an original logo (Figure 2). Here and there, we've put together a few videos which we've published on YouTube. I'll admit they are very amateur in nature, but we hope they provide good information to the interested ham.⁴

We've observed that our videos and other materials have been published widely in the U.K., Europe, and else-

where around the world (Photo G). It's very interesting to see our presentation deck, with all our photos and formatting translated into an exotic, foreign language or script (Figure 3). During a recent Google® search on my callsign, returning among the many hits was, "KDØHKD Hams in Space T-Shirt." Although not a bad idea, I've never produced a t-shirt for our presentations. A friend, Clint Bradford, K6LCS⁵, who also does presentations, remarked, "*You know you've made the big time when others start pirating your brand name!*"

"The One"

Every club or hamfest has its own unique culture or personality. Some clubs call their meetings to order, read the minutes from the last meeting, confirm there's money in the bank, and move on to start the guest presentation, all within the first five minutes. Others go through very complex and lengthy agendas and attempt to resolve the issues of world peace before getting to the presentation. One club went so far as to have a 30-minute discussion comparing the writing styles of two different authors in one of the popular amateur radio magazines.

The single thing we've found in common to all venues is "*The One.*" The One is that guy or gal from way out in the weeds who comes up with the most bizarre question or point of view, and typically *won't let it go!* We were at one venue where we explained that when operating the satellites, it's always good to give your callsign and grid square phonetically. For instance, grid square EM28 should be sent out as Echo-Mike-Two-Eight. The One in this case took hold of the topic and explained that all operators must "*provide all information*



Photo E. A typical *Hams in Space* presentation, this one at the 2012 Ararat Hambash in Kansas City, Missouri.



Figure 1. The front page of the Version 7 issue of the *Hams in Space* presentation. This version uses the group's new logo.



Figure 2. The *Hams in Space* logo. It's copyrighted but that hasn't stopped it from showing up on websites around the world.



Figure 3. Version 5 of the Hams in Space presentation on a Japanese website. Randy says the group's presentations have been "borrowed" by many other groups and translated into several different languages (all without permission).



Photo F. Hams in Space team with NASA Astronaut Col. Doug Wheelock, KF5BOC, at the 2014 Dayton Hamvention®.

sloooooowly and pho-net-ic-ly ... At least three times or more, as often as it takes, for as long as it takes ... sloooooowly and pho-net-ic-ly!" I responded by stating that this was good information and thanked him, when the gentleman gets loud, "NO! You must be speaking sloooooowly and pho-net-ic-ly!" The remainder of the presentation was stopped several times with "sloooooowly and pho-net-ic-ly" being interjected into the conversation. After the meeting, the guy even followed me out to the parking lot while we were loading our equipment, adamantly exclaiming, "sloooooowly and pho-net-ic-ly!"

While we were setting up at another large event, The One from this particu-

lar location takes me to the side and explains that he so glad the satellite guys had arrived, and that he wanted to show us something. He took Jeremy and me outside and pointed to a bright star or planet in the western sky, and explained, "I think that thing was built by the Russians, and is spying on that town over there!" He went on to say, "It might have been built by the Navy ... It looks like a Klingon Bird of Prey ...!" What could I say?

Logistics

Over the years, we've provided presentations to audiences in Missouri, Kansas, Iowa, Nebraska, and Arkan-

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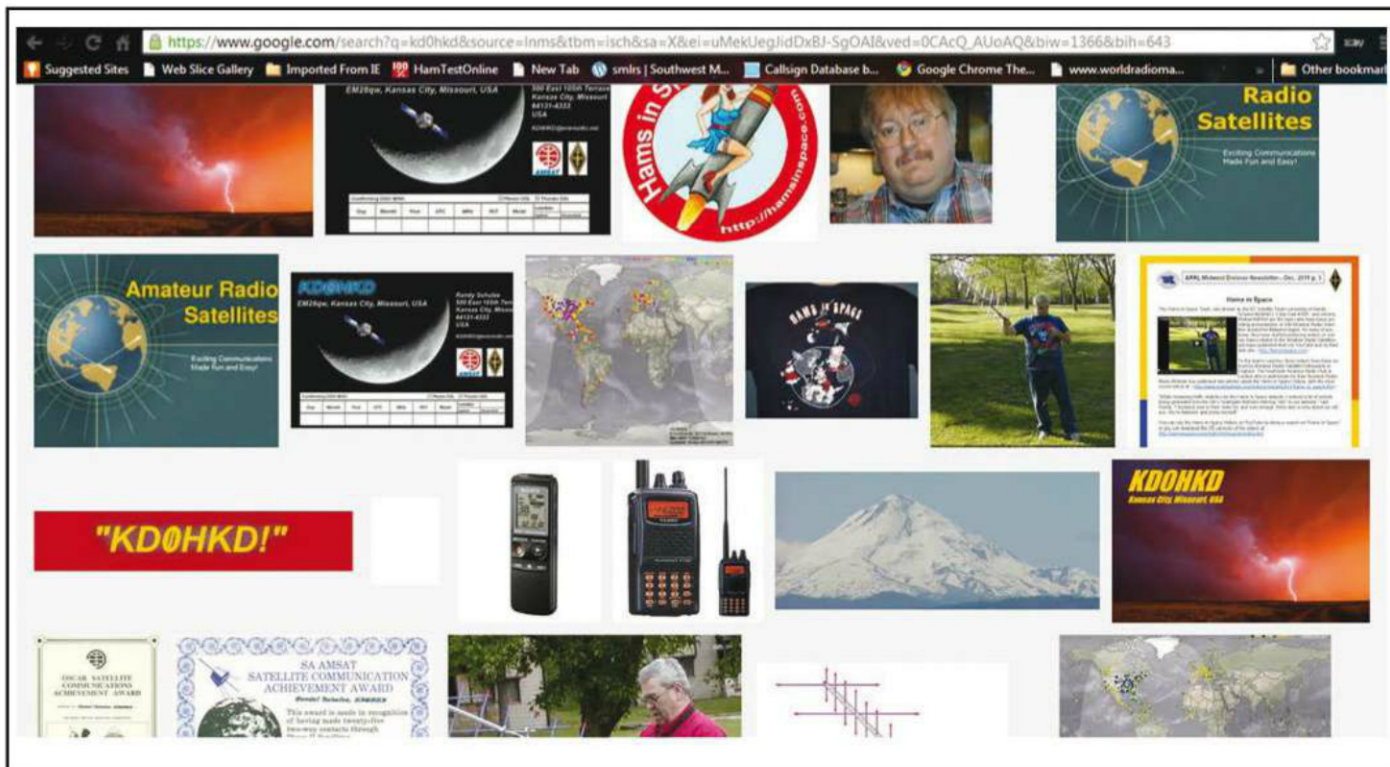


Photo G. Screen shot of part of Google's query response to Hams in Space. Very few of the "hits" are for items posted by the Hams in Space group.

sas. Some groups have been as small as three or four people, while some have had 75 to 100 people in attendance. Just about every ham in the metropolitan Kansas City area has seen our presentation, so most of our appearances now occur farther away from home. With the price of gas being what it is today, traveling to some of these locations has become prohibitively expensive. As such, we typically ask for expenses to be covered by the club or event if distant travel or overnight lodging is required. Some organizations are happy to provide funds to cover expenses, while others want to negotiate over the costs. We try to emphasize that we're not trying to make a profit, although breaking even would be nice.

We've not done a lot of advertising recently, but we still get many requests for appearances, and sometimes have to turn down requests due to schedule conflicts. It's interesting to note, that when we started doing our presentations in 2009, there were five working FM amateur radio satellites, and a very active astronaut/ham, Colonel Doug Wheelock, KF5BOC, on the International Space Station. Today, we have only one working FM amateur radio satellite⁶, and although the International Space Station is still there, the current crew members rarely get on the air for general ham radio contacts. When asked to do a presentation, we point out that the satellite fleet is not what is used to be, and want the organizations to know this before they provide good money to cover our expenses. Nonetheless, we still seem to be in high demand on the topic of FM amateur radio satellites.

Even if expenses such as travel and lodging are covered, money must be spent in order to provide a quality presentation. Quality written materials must be on hand with information for follow-up contact, and there are always costs, even if you are trained as a web developer, for maintaining and hosting a website. We also like to provide some sort of

About the Hams in Space

"Hams in Space" is comprised of three longtime friends, Eddy Paul, Jeremy Widner, and Randy Schulze, who met while all three were employed together with Information Services and Systems Development at Sprint during the mid to late 1990s. Although coming from different areas of the U.S., each enjoyed common interests, which included amateur radio and fishing.

Eddy, KYØF, is from Louisiana and served in the U.S. Army Signal Corps and as a computer programmer for the Louisiana Department of Revenue before coming to Sprint, where he spent 25 years in information technology management and engineering before retiring. He has been a ham since 2009 and holds an Extra Class license.

Jeremy, ACØDX, grew up in California, attended York College in Nebraska, and has worked as a software engineer and systems engineer for the past 13 years, currently working for the Veterans Administration. Also licensed since 2009, Jeremy upgraded to Extra in 2011.

Randy, KDØHKD, grew up in Nebraska. Randy served 16 years as a law enforcement officer in Nebraska and Missouri before changing careers and going to work in Information Technology for Sprint and now, CenturyLink in Overland Park, Kansas. Like his partners in Hams in Space, Randy was first licensed in 2009 and upgraded to Extra by 2012.

Hams in Space, based in Kansas City, provides entertaining and informative presentations to amateur radio events, such as hamfests, conventions, club meetings, and other related events. More information and details can be obtained at <<http://hamsinspace.com>>. Hams in Space Videos can be found on YouTube, with the search string of "Hams in Space."



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memento of our appearance. I've obtained a batch of pin-on buttons with our logo that we give away to members of the audience. They're reasonably priced, and have proven to be a big hit.

There are also scheduling considerations when it comes to your family and personal life. Trust me when I tell you that your wife will certainly note the amount of time and materials you are investing in this type of activity. I highly recommend that one maintain a reasonable balance.

Branching Out

We've considered providing presentations on amateur radio topics other than satellites. Jeremy is very adept at working the digital modes, and we've seriously considered building a presentation focused on digital as soon as Eddy and I gain more experience in that area. I personally like the idea of coming up with something unique and off the wall, like how to make ham radio part of your next fishing vacation.

The End Result

All in all, I have found the presentation circuit to be fun and very rewarding. Has it been a lot of work? Sure it is. In return, I've had the opportunity to meet some amazing people, and have been to a lot of great hamfests that I otherwise might not have attended. It has also provided some great experience that I've applied to my professional life. I now know what it takes to build, maintain, and present an effective, entertaining, and informative presentation that can be tailored to small or large audiences in a variety of venues. If my boss asks me to prepare a presentation for something in the company, I can confidently reply, "No Problem! When would you like it?"

Most of all, it has been great fun for all of us, and some-

thing I'm very glad I've experienced! As I said at the beginning, would I recommend that others get involved in providing presentations? *You bet I would!*

Notes:

1. AMSAT is the Radio Amateur Satellite Corporation. See <www.amsat.org>.
2. OSCAR stands for Orbiting Satellite Carrying Amateur Radio.
3. Larry's List is one of the great services provided to the Kansas City area ham radio community by Larry Staples, W0AIB. His award-winning e-mail thread reaches over 1,300 subscribers daily! <<http://larryslist.info>>.
4. The videos can be found on <<http://youtube.com>> by doing a search on *Hams in Space*.
5. Clint Bradford, K6LCS, is the former AMSAT Coordinator for Southern California, and is nationally recognized for his presentations on working FM Amateur Radio Satellites, and coordinating educational contacts with the International Space Station with schools via amateur radio. See <<http://worksat.com>>. Also see the article, "Working the Birds" by Rich Arland, K7SZ, in the May 2012 edition of *CQ*.
6. Why has the fleet of satellites been shrinking? These satellites "wear out" for various reasons, most prominently battery failure, especially on the older satellites which use older battery technology. Another issue is that outer space is a pretty rough environment for anything to survive in. Sometimes, the satellites' circuitry is exposed to cosmic radiation and simply burns out. Finally, building and launching any satellite is a very expensive undertaking, thus replacement satellites take a great deal of financial resources. The good news is, it was recently announced by AMSAT, that the *Fox-1 Satellite*, an amateur radio satellite using state-of-the-art technology in an amazingly small package, is scheduled for launch during 2015. See <<http://ww2.amsat.org/?p=529>>.