



# The Short Circuit

AUGUST 2018

since 1927

Volume 91, Issue 8

The August meeting of the United Radio Amateur Club will be held SATURDAY, August 4th in conjunction with the First Saturday Breakfast, 8 am at the Think Café (302 W 5<sup>th</sup> Street) in San Pedro. There will also be a PICNIC in August: Saturday, August 18<sup>th</sup> in Friendship Park, San Pedro (see page 2)

## **Program: ALVIN, the Deep-Submergence Research Vehicle**

ALVIN is a Deep-Submergence Research Vehicle owned by the U.S. Navy, ONR (Office of Naval Research).

The original ALVIN was launched 50+ years ago. The current iteration (2014 rebuild) will eventually be capable of submerging to over 20,000 feet - deep enough to survey 99% of the ocean's depths.



We will take a tour of ALVIN and see some of what ALVIN saw ...



David Ziskin, AG6E, is now retired (unless the Navy calls) and currently involved with the Iowa, the Lane Victory, teaching the occasional STEM class, and - of course - RPA's and AUV's, which are areas of specialized robotics. He has even been known to operate amateur radio, but very rarely these days.

## **PICNIC; Friendship Park picnic area, San Pedro**

Cost: \$10 per head and a side dish: Pay Gary N6HMR

Just to remind you... Date: Saturday, August 18th, 2018

Time: 11:00 a.m. to 5:00 p.m.

Set-up Begins at: 11:00 a.m.

Where: Friendship Park, San Pedro (same as last year)

Cost: \$10.00/person, all ages

Bring: Either a side dish (e.g., green salads, potato salads, macaroni salads, beans, veggie platters, fruit platters, chips and dips) or a dessert. Please remember to bring a serving utensil for either your side dish or dessert.

Hamburgers, hot dogs, buns, cheese slices, condiments, pickles, bottled water, ice, plates, napkins, Styrofoam cups, and eating utensils will be provided by URAC. Bring your own sodas, if you wish. Alcohol is not permitted.

Please plan to show up early (11:00 a.m.) to assist with the set-up of the picnic area. We will also need assistance with the clean-up.



## **Get your free copy of A Field Guide to Simple HF Dipoles**

by Dan Romanchik, KB6NU

A link to [A Field Guide to Simple HF Dipoles](http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf) (<http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf>) was posted to reddit recently, and I liked this document so much that I thought I would share it with you. It was originally written for the military, but is now available for free from the Defense Technical Information Center.

The preface to this document reads:

[Continued next page](#)

“Under project Agile, Stanford Research Institute has supplied several teams to assist operating personnel in improving the performance of field radio networks. In this work, it has been observed that U.S. military and civilian antenna manuals often contain misleading information regarding the operation of field antennas and tend to be overly complex. Consequently, this guide has been prepared to assist in training personnel concerned with the construction of simple HF antennas in the field.”

I must say that *A Field Guide to Simple HF Dipoles* does this very well. It not only explains how dipole antennas work, it also does a very good job of describing the basics of radio waves and propagation. And it does this without getting overly technical.

For example, below is Figure 10. It's used to describe current flow in a dipole antenna.

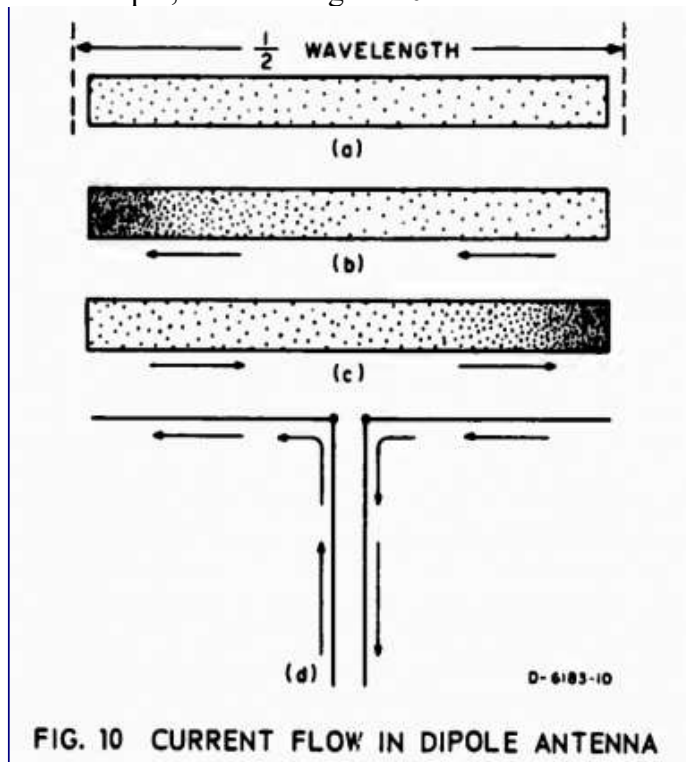


FIG. 10 CURRENT FLOW IN DIPOLE ANTENNA

The *Field Guide* reads:

“Electric current in a conductor consists of the flow of small particles called electrons. Figure 10(a) represents a dipole with electrons in it. When the transmitter is turned off, the electrons distribute themselves evenly throughout the dipole, as shown. All electrons repel each other and try to get as far from each other as possible; that is how they achieve the uniform distribution shown in Figure 10(a). When the transmitter is turned on, the electrons flow back and forth from end to end as shown in Figures 10(b) and 10(c). First the electrons flow to the left and crowded at one end as shown in Figure 10(b). Second, since the electrons repel each other, they push off to the right and get crowded together at the other end, as in Figure 10(c).”

It then uses this description to talk about voltage and current distribution along a dipole antenna:

“The difference between voltage (volts) and current (amperes) in a dipole is also illustrated by Figs. 10(b) and 10(c). You can see that the maximum flow of current is going to be in the middle of the dipole. An observer at the center of the dipole would see the electrons rush past, first one way and then the other. The center is the maximum current point. Very little current flows near the end of the dipole; in fact, at the extreme ends there is no current at all for there is no place for it to go. However, at the ends of the dipole, there is a great change of voltage; when the electrons are densely packed, this represents a negative voltage, and when there is a scarcity of electrons, it represents a positive voltage. Thus you can see that the voltage at each end swings alternately positive and negative. An end of the dipole is a maximum voltage point.”

[Continued next page](#)

A Field Guide to Simple HF Dipoles is packed with all kinds of goodies like this. Download it (<http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf>) right now.

When he's not building dipoles or teaching ham radio classes, Dan blogs about amateur radio, writes exam study guides ([www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)), and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him about your experiences with simple HF dipoles at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

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**August Special Event Stations: (note, due to the large number of Special Events in August, only the first few will be listed here.) To see the complete list, please see:**

<https://ke2yk.com/special-events/>

- **08/01/2018 | 145TH Anniversary of the Cable Car in San Francisco** Aug 1-Aug 8, 0000Z-2359Z, N6C, Healdsburg, CA. William Pattullo. 21.265 14.265 7.265 3.815. QSL. N6C – Will Pattullo, 161 Presidential Cir., Healdsburg, CA 95448. August 2, 1873, Andrew S. Hallidie tested his first cable car system near the top of Nob Hill at Clay and Jones streets, San Francisco. N6C is the special event call sign to commemorate this historic San Francisco landmark anniversary. <https://www.qrz.com/db/AE6YB>
- **08/01/2018 | Hamfesters Radio Club 85th Anniversary** Aug 1-Aug 5, 0000Z-2359Z, W9AA, Midlothian, IL. Hamfesters Radio Club. 28.410 14.310 7.210 3.810. Certificate. Jim Riley, 12121 W. Venetian Way, Orland Park, IL 60467. Request certificates for download at above email address. [kb9cyl@yahoo.com](mailto:kb9cyl@yahoo.com) or [www.hamfesters.org](http://www.hamfesters.org)
- **08/02/2018 | Deschutes County Fair & Rodeo** Aug 2-Aug 5, 2106Z-1719Z, W7JVO, Bend, OR. High Desert Amateur Radio Group. 7.230 14.250. QSL. Max Vaughan, 1723 NE Lytle Street, Bend, OR 97701. [hidarg.org](http://hidarg.org)
- **08/03/2018 | US Coast Guard 228th Birthday** Aug 3-Aug 4, 1400Z-0400Z, K1CG, Port Angeles, WA. Coast Guard CW Operators Association. 21.052 14.052 7.052 3.552. QSL. See website for, QSL, information. [www.qrz.com/db/k1cg](http://www.qrz.com/db/k1cg)
- **08/04/2018 | 2018 ARRL Midwestern Division Convention** Aug 4-Aug 5, 0000Z-1800Z, K0N, Central City, IA. Cedar Valley Amateur Radio Club. 28.392 21.362 14.292 7.192. QSL. David Cripe, 118 Hilltop Dr NE, Mount Vernon, IA 52314. [www.ARRLMidwestConvention.org](http://www.ARRLMidwestConvention.org)
- **08/04/2018 | 65th Anniversary of the Squaw Island ARC** Aug 4, 1400Z-2300Z, K2BWK, Canandaigua, NY. Squaw Island Amateur Radio Club. 28.400 14.250 7.250. QSL. Tom Sanders, KB2NCI, 6310 Gillis Road, Victor, NY 14564. [siarc.us](http://siarc.us)
- **08/04/2018 | Lighthouses On The Air** Aug 4, 1400Z-1830Z, K9EAM, Green Bay, WI. Green Bay Mike & Key Club. 7.270 14.270. QSL. Green Bay Mike & Key Club SE, c/o Dave N8KQS, 2937 Beth Dr, Green Bay, WI 54311. [www.k9eam.org](http://www.k9eam.org)
- **08/04/2018 | Port Clinton Lighthouse Festival** Aug 4, 1500Z-2100Z, W8GNM/8, Port Clinton, OH. Port Clinton Lighthouses Conservancy. 21.325 18.155 14.325 7.225. QSL. QSL via , LoTW only to, W8GNM/8. [portclintonlighthouse.org](http://portclintonlighthouse.org)



- **08/04/2018 | QCWA Chapter 8 Annual Picnic Aug 4, 1700Z-2200Z, AA0HQ**, Minneapolis, MN. QCWA Upper Midwest Chapter 8. 7.049 18.110 28.400 146.55. QSL. Jim Oathout – WB0KZB, 4824 Georgia Ave N, Minneapolis, MN 55428. For more information, contact [wb0kzb@arrl.net](mailto:wb0kzb@arrl.net).
- **08/04/2018 | River City Days Aug 4, 1500Z-1900Z, AA0RW**, Red Wing, MN. Hiawatha Valley Amateur Radio Club. 7.200 14.250 147.300. Certificate. Bill Eichenlaub, 1966 Launa, Red Wing, MN 55066.
- **08/04/2018 | Salem Maritime Festival Aug 4, 1500Z-2300Z, N1S**, Wilmington, MA. POTA\*413. 14.300 14.074 14.044 7.200. QSL. KC1DKY / N1S, 199 Taft Road, Wilmington, MA 01887. Salem Maritime NHS is celebrating their 30th annual Festival. The parks on the air team will again transmit from the site with a special 1×1 call sign this year. We will run SSB, voice, and FT8 as part of our public demonstrations during the event. Credit for WWFF, KFF, and 2018 Grid Chase will be available. Send \$1US + SASE for domestic QSL \$3US + SASE for international
- **08/04/2018 | US Coast Guard 228th Anniversary Aug 4-Aug 5, 1400Z-0400Z, W5CGC**, Southlake, TX. USCG Amateur Radio Club. 21.327 18.127 14.327 7.227. QSL. W5CGC, 4553 N. White Chapel Blvd., Southlake, TX 76092. Club members will operate from their home QTH from different states. Contact with any one station qualifies for a QSL. Please QSL via Callbook address. SASE appreciated. [www.w5cgc.org](http://www.w5cgc.org)
- **08/06/2018 | 62nd Annual Steam Power Show and Threshing Bee Aug 6-Aug 13, 1400Z-2200Z, W9S**, Sycamore, IL. Kishwaukee Amateur Radio Club. 14.275 7.275 7.028 3.980. Certificate. Kishwaukee ARC – SE, P.O. Box 371, , DeKalb, IL 60115. 9X12 SASE Please. [www.karc-club.org](http://www.karc-club.org)
- **08/09/2018 | Daniel Emmett Days Aug 9-Aug 11, 1600Z-2359Z, K8EEN**, Mount Vernon, OH. Mount Vernon Amateur Radio Club. 21.240 7.080 7.030 3.840. Certificate & QSL. MVARC, PO Box 372, Mount Vernon, OH 43050. <http://www.qrz.com/db/k8een> or [www.mvarc.net](http://www.mvarc.net)
- **08/09/2018 | Worked All Capitals Aug 9-Aug 19, 1600Z-0000Z, K9S, W9V, W9I, K9K**, Springfield, IL. Sangamon Valley and Lewis and Clark Amateur Radio Clubs, and Okaw Valley Amateur Radio Club. 15 20 and 40 meters. Certificate & QSL. Worked All Capitals – SVRC, Box 9162, Springfield, IL 62791. Other stations: K9K, W9I, and W9V. Commemorating the three communities that have served as Capital Cities for the state of Illinois. SASE for QSL. Work all four stations and receive a certificate. Work this event and received 5 bonus points toward the IL200 QSO Party. <http://www.k9ham.org>, <http://www.w9cwa.net> or [www.svrc.org](http://www.svrc.org)
- **08/10/2018 | Bigfoot Radio Net, Summer Expedition Aug 10-Aug 14, 2300Z-0500Z, KF5THB**, Honobia, Broken Bow OK/Fouke AR/Uncertain TX. Bigfoot Radio Net. 7.255 14.255. QSL. M. Brent Boydston, 103 N. Crockett, Henrietta, TX 76365. The weekend of 10-13 August will find the Bigfoot Radio Net Expeditionary Team cruising the woods of South East Oklahoma/North East Texas. Details are not yet determined. Start and stop times are approximate. Radio operations will be running backwoods, solar powered, tent sheltered, guerilla style. Stop by, say hi, go boo! FMI see => <https://www.facebook.com/groups/154008065032703> from time to time to get the latest development plans, schedules and frequencies. <https://www.facebook.com/groups/154008065032703>
- **08/10/2018 | DSES Annual Radio Telescope / Astronomy Open House Aug 10-Aug 12, 1800Z-2300Z, K0PRT**, Haswell, CO. Deep Space Exploration Society. 14.253 7.238 146.460. QSL. Deep Space Exploration Society, 4164 Austin Bluffs Parkway #562, Colorado Springs, CO 80918. DSES is restoring a 60-foot dish antenna for radio astronomy in southeast Colorado. Our annual open house is for sharing radio and astronomy with our local communities, and takes place during the Perseid Meteor Shower. We may operate additional bands if those are open. [dses.science](http://dses.science)

~ August 2018 ~						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			<b>1</b>	<b>2</b> URAC 2M simplex roundtable: 8 pm, 145.510	<b>3</b>	<b>4</b> URAC First Saturday Breakfast and member meeting: 8 m, Think Café, San Pedro
<b>5</b> International Friendship Day	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b> URAC 2M simplex roundtable: 8 pm, 145.510	<b>10</b>	<b>11</b>
<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b> URAC 2M simplex roundtable: 8 pm, 145.510	<b>17</b>	<b>18</b> URAC Picnic, starting about 11 am, Friendship Park, San Pedro <b>International Lighthouse/Lights hips Weekend</b>
<b>19</b> International Lighthouse/Lights hips Weekend	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b> URAC 2M simplex roundtable: 8 pm, 145.510	<b>24</b>	<b>25</b>
<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b> URAC 2M simplex roundtable: 8 pm, 145.510	<b>31</b>	

**DX OPERATION FO AUGUST 2018**  
Per NG3K

Guernsey, GU: Is now operating thru 8/11/2018. QSL via SP7VC.

Albania, ZA: Will be operating thru 8/12/2018. QSL via SP7IDX.

Sri Lanka, 4S7DMG: Is now operating thru 8/14/2018. QSL via SP9dlm.

Jersey, GJ: Will be operating from 8/11 thru 8/14/2018. QSL via SP7VC.

Antigua, V26NF: Will be operating from 8/12 thru 8/19/2018. QSL via EA4NF.

Austral Is, TX5T: Will be operating from 8/15 thru 8/21/2018. QSL via M0URX.

Tonga, A35RR: Will be operating from 8/15 thru 8/29/2018.m QSL via ZL1BQD.

St Kitts & Nevis, V47FWX: Will be operating from 8/18 thru 8/25/2018. QSL via M0URX.

Kosovo, Z6: Will be operating from 8/20 thru 8/26/2018. QSL via IZ5YHD.

## 2018 URAC Executive Board

**PRESIDENT**  
Sam Lollar  
K1SL

[k1sl@arrl.net](mailto:k1sl@arrl.net)



**VICE-PRESIDENT**  
John Linder  
KC6JHV

[kc6jhv@k6aa.org](mailto:kc6jhv@k6aa.org)



**SECRETARY**  
vacant

**TREASURER**  
Gary Forister  
N6HMR

[n6hmr@k6aa.org](mailto:n6hmr@k6aa.org)



**DIRECTOR**  
Larry Fadden  
KK6TXN

[kk6txn@k6aa.org](mailto:kk6txn@k6aa.org)



**DIRECTOR**  
Steve Mandich  
K6NT

[k6nt@k6aa.org](mailto:k6nt@k6aa.org)



**DIRECTOR**  
Homer Meek  
K6HKT

[k6hkt@k6aa.org](mailto:k6hkt@k6aa.org)



**DIRECTOR**  
Ivan Mikulich  
KB6ATT

[kb6att@k6aa.org](mailto:kb6att@k6aa.org)



**PAST-PRESIDENT**  
Doug Dowds  
W6HB

[w6hb@aol.com](mailto:w6hb@aol.com)



**NEWSLETTER EDITOR**  
Scotty Butler  
K6ZNL

[k6znl@arrl.net](mailto:k6znl@arrl.net)

**WEBMASTER**  
Bruce Sperka  
AD7MM

[bsperka@gmail.com](mailto:bsperka@gmail.com)



**\*\*\* IMPORTANT NOTES \*\*\***

**K6AA Station** We can still use more operators for our K6AA station. See Doug, W6HB, and or Scotty, K6ZNL, for training and checkout.

Check out the special events page on [k6aa.org](http://k6aa.org) for the latest from arrl and e-ham net.

**Additional Calendar Notes****Club Roundtable**

Held weekly on  
Thursdays at 8pm  
145.510 Simplex

**Club Meeting**

Held monthly on the 1<sup>st</sup> Saturday of the month in conjunction with our ...

**No Host Breakfast**

Held monthly on the 1<sup>st</sup> Saturday of the month at 8:00am. Location: Think Café on 5<sup>th</sup> Street in San Pedro

**“VE/CE Session for Amateur and Commercial Licenses**

Monthly on 1<sup>st</sup> Saturday **by appointment**. Go to <http://k6aa.org/licensing-exams/>

If no one schedules an exam, there won't necessarily be an exam team or exam material available.



The Museum is at the Foot of 6<sup>th</sup> Street.

