

The Golden Rule of DX is **PEPSI**:

Patience,

Energy,

Persistence,

Skill, and

Information. ← Today's topic.

#### Notice

What you are about to see contains lists of web sites and other products available on the Internet. Therefore, it may contain personal opinion, viewpoints, prejudices, and other subjective, unsubstantiated drivel with which you may disagree.

### Today's Program

- References
  - Books, web sites, videos, and other publications
- Near-Real-Time Information
  - DX bulletins and publications
  - Email reflectors
  - More web sites
- Real-Time Information
  - Packet cluster system
  - Chat

#### References

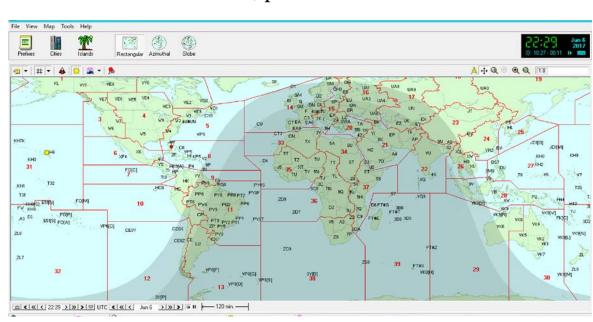
#### DX Atlas

"Electronic World atlas for Radio Amateurs. Scrollable World map with smooth zoom, DXCC territories, province/state prefixes, Grid Squares, CQ and ITU Zones in the rectangular, azimuthal and Globe projections, 3D relief, Gray Line, city and island index, unique hierarchical prefix database, local time with DST for all cities, islands and call areas, unique ionospheric maps."

Very useful for finding sunrise and sunset times for DX, plus 1001 other uses.

Indispensable.

http://www.dxatlas.com/

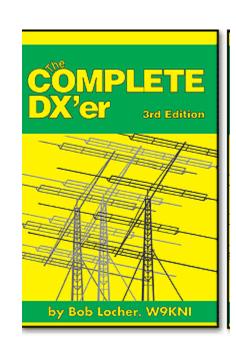


### The Complete DX'er

Locher proceeds to spill the beans about operating techniques [that are] dark mysteries to most operators. A more apt title for his book might have been "The Complete Operator," because most of what he has to say can apply to every time we turn our radios on ... Locher has put it all together in a readable fashion. His easy, conversational style never condescends to the reader ... "The Complete DX'er" leaves other tutorials behind: it not only advises what to do, it tells how to do it ... Sections on choosing a station and selecting antennas are particularly useful...

[The DX Bulletin]

Bob Locher, W9KNI, *The Complete DX'er*. 3<sup>rd</sup> ed. Geyserville, CA: Idiom Press. 2003. 223 pp. ISBN 0-9617577-0-1.



https://www.hamsupply.com/books/

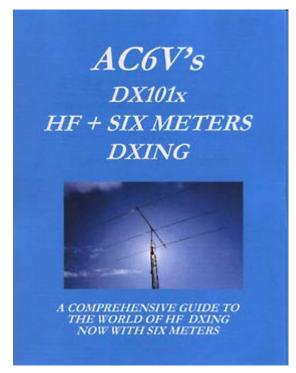
#### AC6V's DX101x

The book is the culmination of lots of time and effort, and the contents show it. Subjects covered include transceivers, and their specifications, antennas, Yagi beams, vertical antennas, cubical quads, computer equipment, antenna tuners, microphones, ESP hearing, foot switches, logging programs, grayline programs, beacons, the Big Gun myth, pileups, low band DXing, DX packet, awards ... the list is practically endless! And that's just the main part of the book. Also included are several appendices with subjects like prosigns, CW contesting equipment, SSB contesting, DXer phonetics, CQ zones, ITU zones, beacons, DX clubs, and much much more!

[World Radio Magazine]

Rodney R. Dinkins, AC6V, *AC6V's DX101x:HF + Six Meters Dxing Reference Guide*. Iola, KS: AC6V Publications. 2004. 236 pp. ISBN 1-43489-485-1.

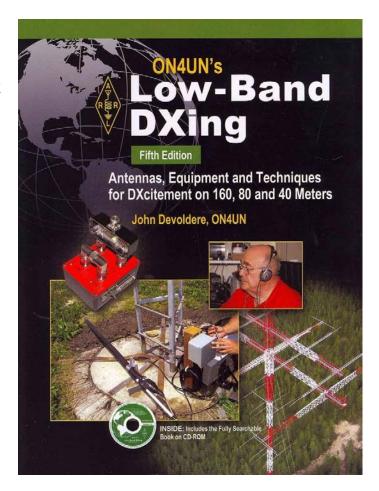
http://www.ac6v.com/DXSAMPLE.htm



### ON4UN's Low-Band DXing

Antennas, Equipment and Techniques for DXcitement on 160, 80 and 40 Meters ... "Not a book – the Bible for low-band operation."

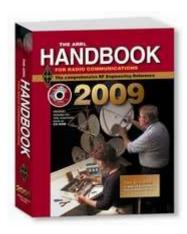
John Devoldere, ON4UN, *Low-Band DXing*. 5<sup>th</sup> ed. Newington, CT: American Radio Relay League. 2010. 672 pp. ISBN 978-0-87259-856-0.

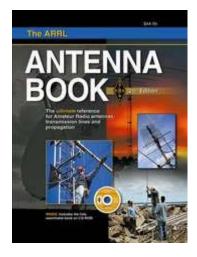


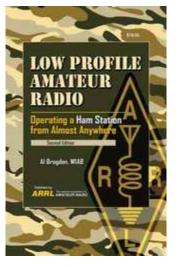
#### ARRL Bookshelf

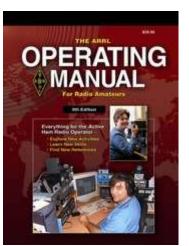
#### http://www.arrl.org/catalog/ :

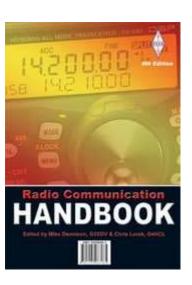
- ARRL Handbook
- ARRL Antenna Book
- Low Profile Amateur Radio
- ARRL Operating Manual
- RSGB Radio Communication Handbook
- Etc.











### The DX Magazine

Published: Bi-monthly

•Publisher: N4AA, CQ DX Editor



•Subscription: Yes

•Web site: <a href="http://www.dxpub.com/">http://www.dxpub.com/</a>

•Personal Comment: Snail mail. DXpedition articles. Color, with photos and advertisements.

#### Bookmarks-General

- <a href="http://www.qsl.net/k4fk/">http://www.qsl.net/k4fk/</a>
  - South Florida DX Association web site
- <a href="http://www.arrl.org/dxcc">http://www.arrl.org/dxcc</a>
  - Main DXCC web site
- <a href="http://www.rsgbiota.org/">http://www.rsgbiota.org/</a>
  - Main Radio Society of Great Britain Islands On The Air site.
  - See also <a href="http://www.islandchaser.com/">http://www.islandchaser.com/</a>
    - IOTA fan site

#### Bookmarks-Reference

- http://www.ac6v.com/prefixes.htm
  - Part of AC6V's massive ham radio site (*which see*), a detailed listing of all callsign prefixes assigned to the amateur bands
- <a href="http://www.hamatlas.eu/">http://www.hamatlas.eu/</a>
  - SP6NVK's massive Internet atlas of all DXCC entities
- <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a>
  - The CIA's World Factbook
    - Just what you'd expect...comprehensive and detailed.
- http://sunrisesunset.com/
  - Sunrise and sunset times world-wide.

# Bookmarks-QSLing

- <a href="http://www.qrz.com/">http://www.qrz.com/</a>
  - The "go-to" site to find station information, QSL routes, etc.
- <a href="http://www.ik3qar.it/manager/">http://www.ik3qar.it/manager/</a>
  - Extensive list of QSL managers.
- <a href="http://hamcall.net/call">http://hamcall.net/call</a>
  - "World's largest QSL database," by Buckmaster, the former Callbook.
- Incoming QSL bureau: <a href="http://www.arrl.org/incoming-qsl-service">http://www.arrl.org/incoming-qsl-service</a>
  - Single-letter prefixes: <a href="http://www.cdxa.org/w4qsl-bureau/index.php">http://www.cdxa.org/w4qsl-bureau/index.php</a>
  - Two-letter prefixes: <a href="http://www.qsl.net/sterling/QSLBuro4/QSLBuro4.html">http://www.qsl.net/sterling/QSLBuro4/QSLBuro4.html</a>
- Outgoing QSL bureau: <a href="http://www.arrl.org/outgoing-qsl-service">http://www.arrl.org/outgoing-qsl-service</a>
- <a href="http://www.columbia.edu/~fdc/postal/">http://www.columbia.edu/~fdc/postal/</a>
  - Frank's Compulsive Guide to Postal addresses
  - An indispensable guide to addressing foreign mail
- ...much more in the QSL class!

# **DXpedition Videos**

- To get a feel for what it's <u>really</u> like on those great DXpeditions to the back of beyond
  - 9V1YC: <a href="https://vimeo.com/user36455730/videos">https://vimeo.com/user36455730/videos</a>
  - K4UEE: <a href="http://www.k4uee.com/dvd">http://www.k4uee.com/dvd</a>
  - NCDXA: <a href="https://www.ncdxf.org/pages/video-library.html">https://www.ncdxf.org/pages/video-library.html</a>
  - Many others . . .

#### "Near-Real-Time" Information

- DX Bulletins
- Email Reflectors
- Web Sites

#### **DX** Bulletins

The best way to hear of rare DX operations, learn of last-minute changes to operating plans, and just know what's going on in the DX world in general, is by subscribing to DX bulletins.

There are a few major ones and lots of regional ones; some free, some subscription-based; some daily, some weekly.

### The Daily DX

- Published: Daily
- Publisher: W3UR, QST DX Editor
- Subscription: Yes
- Web site: <a href="http://www.dailydx.com">http://www.dailydx.com</a>
- Personal Comment: The *crème de la crème* of DX bulletins. Daily news updates make a difference. Breaking news sent via separate email. Has a Twitter account for up-to-the-minute news Tweets. Also has *The Weekly DX*, a weekly summary.

#### QRZ DX

- Published: Weekly
- Publisher: N4AA, CQ DX Editor
- Subscription: Yes
- Web site: <a href="http://www.dxpub.com/">http://www.dxpub.com/</a>
- Personal Comment: PDF format sent as a link in an email. Color, with photos and advertisements.

#### 425 DX News

- Published: Weekly
- Publishers: I1JQJ and IK1ADH
- Subscription: Free
- Web site: <a href="http://www.425dxn.org/">http://www.425dxn.org/</a>
- Personal Comment: Has detailed companion calendar, emailed separately. Available in English, Italian, Japanese, Portuguese, Russian, and Spanish editions...

#### DXNL

- Published: Weekly
- Publisher: DARC "DX and HF-Contesting" Committee, DL7MAE
- Subscription: Free
- Web site: <a href="http://www.darc.de/der-club/referate/dx/dx/dxnl/">http://www.darc.de/der-club/referate/dx/dx/dxnl/</a>
- Personal Comment: Excellent IOTA news; also available in German.

#### Ohio Penn DX (OPDX)

- Published: Weekly
- Publisher: KB8NW
- Subscription: Free
- Web site:
  <a href="http://hamnet.org/mailman/listinfo/opdx">http://hamnet.org/mailman/listinfo/opdx</a>
- Personal Comment: Good IOTA, SOTA, CASHOTA, and lighthouse news. Has weekly DXCC entity activity report.

#### **Email Reflectors**

- Email reflectors can be a great way to ask questions to a group of (self-selected) subject matter experts
  - Caveat Lector, of course
- DX-QSL mailing list
  - <a href="http://mailman.qth.net/mailman/listinfo/dx-qsl">http://mailman.qth.net/mailman/listinfo/dx-qsl</a>
- http://lists.contesting.com/
  - TowerTalk, Topband, RTTY, etc.
  - Read the archives!

# Clublog

- Useful site in many ways
  - Invented Online QSL Request Service (OQRS), so one doesn't have to send GS through the mail for QSL cards
  - Very useful statistics:
    - Propagation
    - DXpedition QSOs by band, continent, mode, etc.
  - http://www.clublog.org

# Bookmarks-DXpeditions

- http://www.ng3k.com/Misc/adxo.html
  - NG3K's Announced DX operations site
- http://www.dailydx.com/Calendar.htm
  - Free resource from *The Daily DX*
- http://www.n0hr.com/wk34/index.htm
  - Upcoming DXpedition maps
- <a href="https://dxnews.com/">https://dxnews.com/</a>
  - "More than just DX news"
- Individual DXpedition websites
  - News (schedule changes, band activity, etc.)
  - Propagation forecasts,
  - QSL route
  - Pilot station email addresses
  - Etc.

### Bookmarks-Propagation

- <a href="http://www.voacap.com/p2p/index.html">http://www.voacap.com/p2p/index.html</a>
  - Worldwide HF propagation
- http://www.swpc.noaa.gov/communities/space-weather-enthusiasts
  - Nearly all propagation indices
- <a href="http://www.spaceweather.com/">http://www.spaceweather.com/</a>
  - More of what the sun is up to
- <a href="http://lasp.colorado.edu/space\_weather/dsttemerin/dsttemerin.html">http://lasp.colorado.edu/space\_weather/dsttemerin/dsttemerin.html</a>
  - Dst index (useful for 160m)
- <a href="http://en.blitzortung.org/live\_lightning\_maps.php">http://en.blitzortung.org/live\_lightning\_maps.php</a>
  - Worldwide lightning map, in real time

#### **Pilots**

- Most "major" DXpeditions have "pilot stations", that provide an email back channel to the DX
  - "Please stay on 160m through my SR," "Strong signal on 10m from 1130-1230z," for example
  - Try not to bother them with "Am I in the log?"
    queries, though

#### "Real-Time" Information

- The Packet Cluster System
- Chat
- Reverse Beacon Network (RBN)
- DXA

### Background

- "Back in the day," DXers relied on phone trees to spread the word of rare DX activity
  - Late night phone calls → annoyed spouses!
- Later (late 1960s), 2m FM repeaters were used
  - Spots were neither filter-able nor archive-able
  - Still used today (SFDXA: 147.330/.930 PL 103.5)
- In the early 1980s, 2m packet appeared
  - Dick Newell, AK1A, of Pavilion Software wrote
    "PacketCluster" for the Yankee Clipper Contest Club
  - "Clusters" of stations exchanging formatted data
  - Data was filter-able and archive-able
  - But still local, and mostly in urban areas

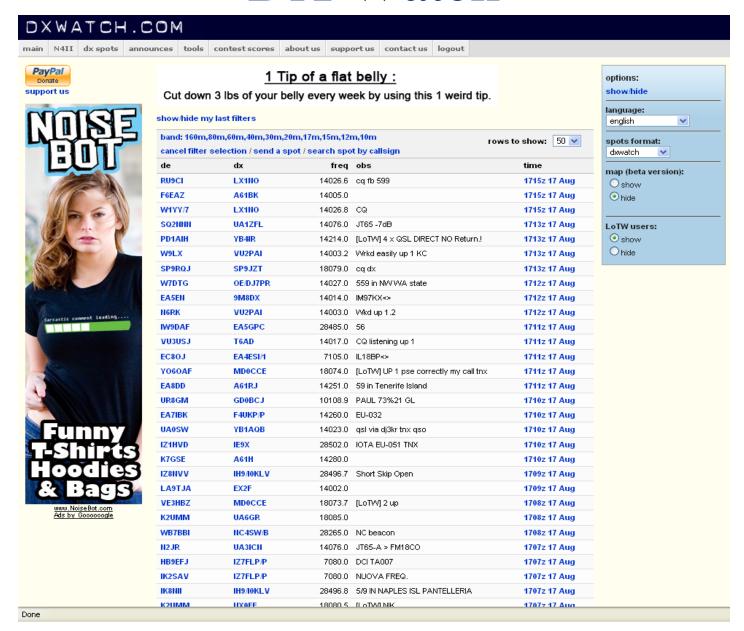
# Today's Web-based Cluster System

- DXers send "spots" of DX stations heard to a web site, where they are displayed for all to see (and, hopefully, work)
- Web sites (usually) exchange spots received, for the benefit of all
- Differences include user interface, "bells and whistles" (DX entity ID, links to QRZ.com, maps, etc.)

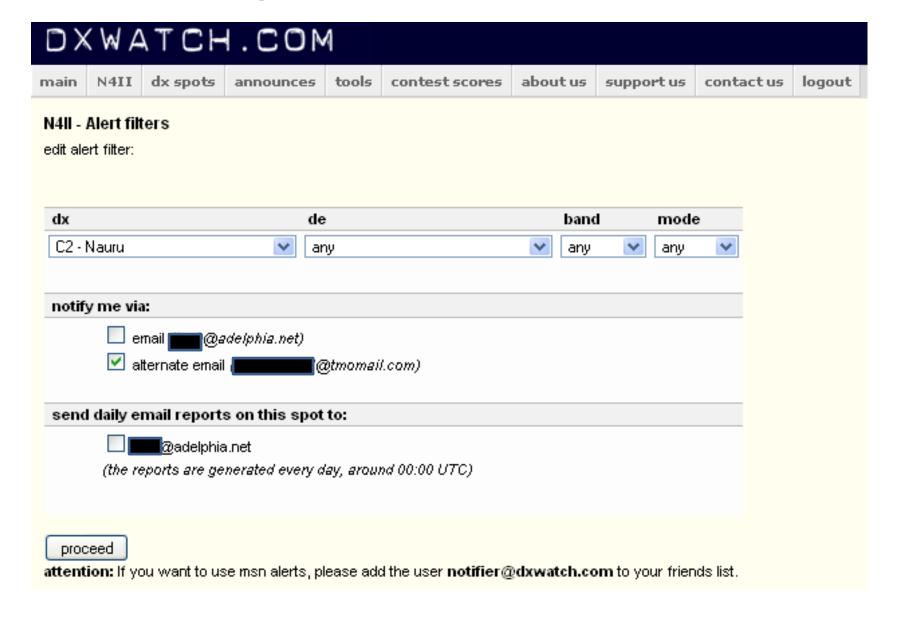
#### Two of My Faves

- DX Watch (<a href="http://www.dxwatch.com">http://www.dxwatch.com</a> )
  - Progressive use of new features
  - Text alerts sent to your cell phone
- DX Summit (<a href="http://www.dxsummit.fi/">http://www.dxsummit.fi/</a> )
  - The "original"; recently received a facelift
  - Easier search of old, archived spots
- →Spots are also integrated into almost all electronic logging programs
  - Automatic checking of spots for needed DX

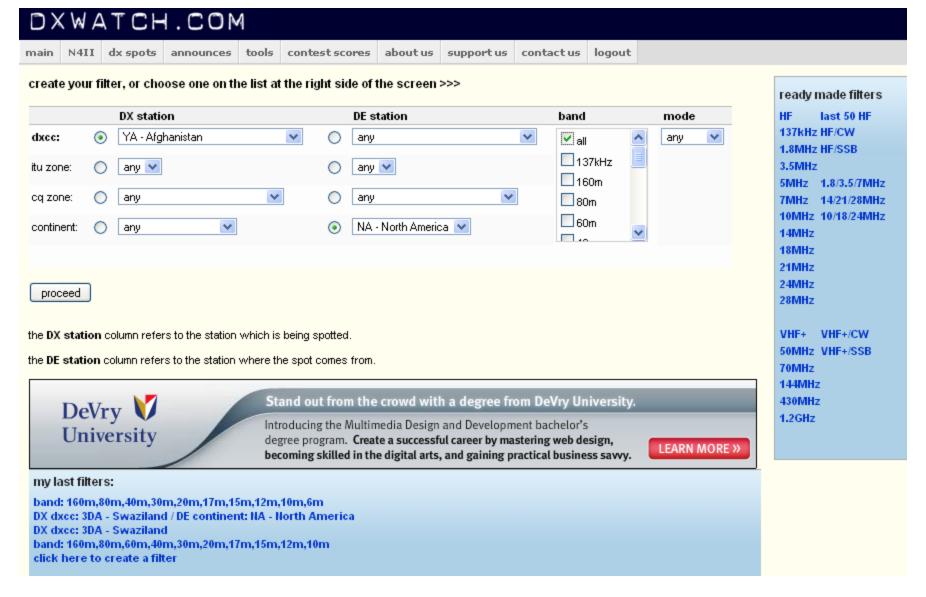
#### DX Watch



#### Cell Phone Alerts



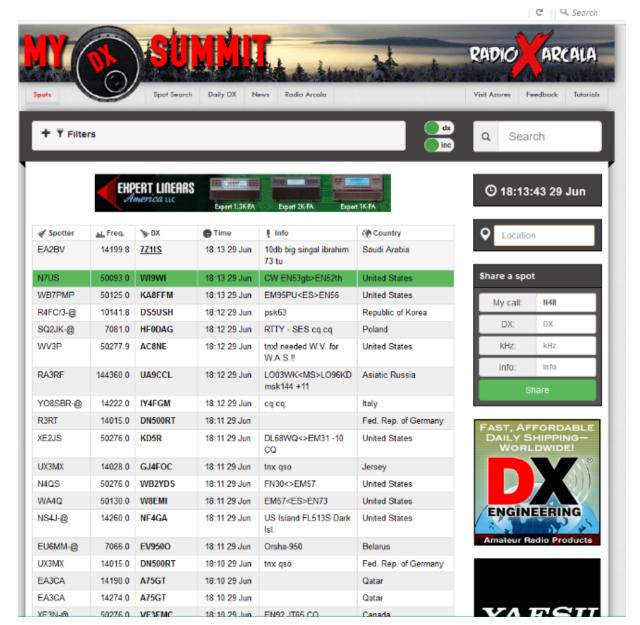
# Spot Filtering



#### Filter Result

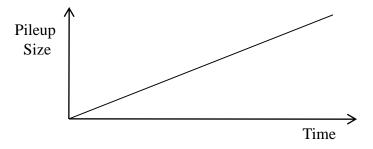


# DX Summit Spot Page

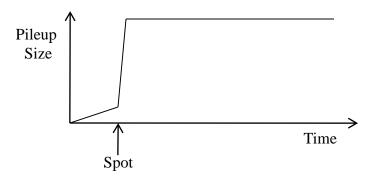


# Law of Unintended Consequences

Before cluster web sites, pileups grew
 "organically," as people tuned across them and found the DX:



– With cluster web sites, pileup growth changed:



# Cluster Etiquette 1

- Don't self-spot
  - Let others have the joy of discovering your CQ
  - Exception: Rare digital modes, e.g., Olivia
- Don't spot your entire log
  - Save your spots for "interesting" DX
    - DL, F, G, VE, etc. usually not "interesting"
      - Exceptions: IOTA, SOTA, CASHOTA, and Special Event stations; unusual bands
  - But it's OK to spot DX that's nearby, if it's rare somewhere else
    - JAs appreciate our spots of Caribbean DX

# Cluster Etiquette 2

- Try to spot "new" stations, not those already spotted eleven times in the last ten minutes
  - Exception: If you're the first on your continent or entity to spot the DX
    - To help those filtering spots by spotting entity
  - I prefer to spot DX CQs, myself
- Remember that the system is a "spotting" system, not a "QSO announcement" system
  - You don't have to work 'em to spot 'em!

#### Reverse Beacon Network

- Automated DX spotting, using CW Skimmer or similar software, for CW and RTTY
  - Digital modes to follow
- Lets you find DX before it is spotted
- Especially useful if you are waiting for a DXpedition to start, or move to a band you want
- <a href="http://reversebeacon.net">http://reversebeacon.net</a>

#### Chat

- Chat can be useful as a "back channel" between DXers (and sometimes DX)
- Many choices
  - <a href="http://www.on4kst.info/chat/start.php">http://www.on4kst.info/chat/start.php</a>
    - Low-band (160, 80 & 40m) DX; also 6m DX
  - <a href="http://n8fq.org/sked/">http://n8fq.org/sked/</a>
    - Schedule-making; LoTW board most active

### Chat Etiquette

- Don't "help" a QSO in progress
  - If the info can't be correctly received over-the-air,
    it's not a QSO.
- Coordinating schedules, however, is fine, useful, and fair game.
  - Great for getting new band/entity points for DXCC Challenge, as well as those last states for WAS, "Triple Play", etc.
  - Don't let it be a crutch, though; there's no substitute for time in the chair, listening

# Questions?