

The LongPath



A North Alabama DX Club Publication

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The LongPath
June, 2000

From the President's Desk

I subscribe to the ARRL newsletter via e-mail and I noticed several interesting items that I thought that I would pass along just in case you missed them. How many of you attended the DAYTON 2000: HAMVENTION-CONVENTION? I was not able to do so, but I understand that it attracted more than 30,000 visitors



is a very time consuming job. I want to thank the other contributors to the LongPath and want to encourage other members to e-mail inputs to Craig.

We have been having lots of fun at our monthly meetings as well as having interesting programs. Our program for the June 9 is VHF & UHF

the largest in its history. What did you folks think about of the Jim Haynie, W5JBP the new ARRL President's "The Big Project"—"his ham radio in the schools initiative that would offer a turn key curriculum in Amateur Radio as well as equipment for use in middle school classrooms" - which he plans to fund from corporate and foundation grants and plans to have in place by the end of 2001. There were no details on the program yet but it certainly seems to me to be good idea and a very positive move. In addition I noticed in the ARRL newsletter that "The ARRL-VEC received nearly 23,000 applications between April 15 and May 26."

I believe that the NADX Club is also making positive moves to attract more of our past members and new folks to our club. Craig Behrens, NM4T, has done a great job in setting up our programs as well as producing a first class "LongPath" each month. Craig is going to focus on the LongPath from now on, which

Propagation Modes & Operating Techniques. I want to request each of the members to ask a Ham friend, who has not been coming to the club meeting, to come to the meeting on June 13th at 7:00 PM at Ryan's Steak House on University near the Red Lobster. Remember visitors have a chance for a prize as do members and we have lots fun. So mark your calendar and join us!

Ed Clark K4KFH

June 13th Program

VHF/UHF Propagation & Operating Techniques

7PM At Ryan's Steak House,
1808 University Drive
Huntsville, AL

The Challenge of the Hunt

- *DX is working them all*
- *DX is All Modes*
- *DX is All Bands*
- *DX is All Power Levels*
- *DX is From Any Location*
- *DX is With Any Equipment*
- *DX is State-of-the Art*
- *DX is Classic Communications*
- *DX is for All to Enjoy!*

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Why Join the NADXC & How to Do It

New Hams, Hams-to-be and old salts alike should consider joining the NADXC, because there is no better way to have:

- 1) Great Fellowship—on a Global basis!
- 2) Fun, Fun, Fun and Surprises at the Monthly Meetings!
- 3) Special Monthly NADXC Challenges and Contests.
- 4) Access to State-of-the-Art Communications Equipment
- 5) Education and Skill Building Activities
- 6) Homebrew Activity Support from Experienced Experts.
- 7) Up-to-the-Minute Access to Pertinent Information.
- 8) Special Community Activities, Ham fest, Field Day, etc.
- 9) Helps you be an Ambassador to the World.
- 10) Helps you enjoy and share all aspects of the “King of Hobbies”-- a Hobby for a Life Time.

The NADXC 2000 Programs Calendar forecasts meeting activity plans for the year. But...we are flexible and open to any

additional ideas or program opportunities that you might have.

Please let you Program Chairman know. (He is very grateful for your help and guarantees that you'll have fun along the way.)



The calendar 2000 slate of club officers, directors and chairpersons are working hard to create a best-in-class club envi-

ronment for all of the NADXC membership. **Please get you dues in to us** and plan to attend the April 11th meeting—this

How to Join: *Come to a club meeting; or send in application by mail (form on www.NADXC.com); or call Bill Hull at (256)539-3444; or call Don Wolfe at (256)880-2765.*

June Program—VHF/UHF Operation

The Theme for our **June 9th** NADXC meeting is **VHF/UHF Propagation Modes & Operating Techniques.**

President **Ed** carefully leads us through a short business session, efficiently getting us to the night's special activities.

Door Prizes, QSL Card Checking, Announcements & Awards occur throughout the evening (and **unannounced surprises**).

To close out the **May/June NADXC Challenge—“Best VHF and UHF DX” Contest**, we will compare contest scores and share war stories.

Our Program will be on **“6-Meter and Up Communication Challenges.”** This should be particularly interesting to members who don't yet have VHF and UHF DX/Contesting experience since many of the techniques and propagation modes are so different from those of the Low bands.

Prior to closing, the rules for the **June/July NADXC Challenge—“Amateur Digital & Satellite Communications”** will be announced.

Plan on joining the fun!

Treasurer's Report—as of May 26, 2000

Membership dues received for 2000: Full = 42, Family = 5, Total = 47.

	<u>Club</u>	<u>Cluster Fund</u>	<u>Total</u>
Beginning Balance 04/02/2000	\$2,408.63	\$1,157.98	\$3,566.61
Income	\$105.00	\$40.00	\$145.00
Expenses	\$166.40	\$0.00	\$166.40
Ending Balance 03/14/00	\$2,347.23	\$1,197.98	\$3,545.21

DX is: Meeting new friends and old at the NADXC meeting

Minutes – NADXC Meeting – May 9th, 2000

The meeting of the North Alabama DX Club was held at Ryan's Family Steak House on University Drive, Huntsville, AL. The gathering was called to order at 7:00 p.m. by the president, **Ed Clark** – K4KFH.

A former member of the NADXC, **Bill Presley** – KD4GP, was present and paid his dues to rejoin the club. Three new visitors were present: **Jed Franklin** – WB4UAZ, **Peggy Bell** – KE4EGB, and **Steve Bell** – KD4TFN. Jed won the "visitor" door prize.

Old business:

- 1.) Members were updated on the tower construction plans of **Bill Christian** - K4IKR. He has agreed to limit the tower height 50 feet. One last part is on order and when received, the club will assemble a crew for the construction.
- 2.) Work continues with the effort to add audio DX spots to the DX Club's 147.30 voice repeater.
- 3.) **Mike Maples** reported he had collected \$435 from club members in support of Jim Smith – VK9NS and his Bhutan DXpedition to add to the \$250 voted to contribute from the club budget.
- 4.) An updated treasurer's report was given by **Don Wolfe**.
- 5.) No one had come forward to take over the LongPath from **Craig Behrens**, and he told the membership that he could not continue being the editor for that and be the Program Chairman. After considerable discussion, the membership in attendance voted to ask Craig to remain on as LongPath editor and president, **Ed Clark**, will work on finding a replacement as Program Chairman. A volunteer is needed for that position. Many thanks and congratulations were voiced



to Craig for the excellent job he has done in both positions.

New Business:

It was announced that **RT Systems** has officially closed, having been bought out by **AES**. There will no longer be a Ham Radio store in Huntsville, but AES has said it will honor RT System commitments, so those holding gift certificates won as door prizes at club meetings can use them at AES.

The meeting then ended and the floor was turned over to Craig Behrens – NM4T, Program Chairman. Craig first pre-

sented the door prizes for evening. Recently worked DX was discussed, with several having worked Jim Smith in Bhutan, one on RTTY. Discussion then turned to QRP and Homebrew projects. Several members brought in their handicrafts to show. John Morris had a foldout antenna mount that works great as a portable stand and ground plane for antennas such as mobile whips. Steve Bell described and passed around a couple of homebrew peripherals he had built, and Craig had a table full of QRP rigs, both kit and pre-fabricated, to show us.

You missed a great program and a lot of fun if you were not at the May meeting. We encourage past and present members who have not been attending this year mark your calendar for June 13th for the next NADXC club meeting and attend. See you then.

Respectfully submitted,
Don Wolfe

"DXpeditioning—Behind the Scenes"

A new book on DXpeditioning has recently been published. Called "DXpeditioning - Behind the Scenes" it has been written by members of the 9M0C Spratly team. It is not a story of the DXpedition but draws heavily on the experiences at 9M0C and on many other DXpeditions.

Wayne Mills, N7NG in his review commented: "The well-crafted "DXpeditioning - Behind the Scenes" offers a comprehensive view of virtually all aspects of a major expedition for the traveler and the DXer alike. From early planning through QSLing, this book offers a variety of thoughts and suggestions on every facet of the DXpedition. It is by far, the most complete "how-to" reference available."

Chapter summaries can be found at www.nevada.co.uk/book-DX.html and the book can be ordered here. (16.95 GBP + P&P) It will also be on sale in the 59(9) DX Report hospitality suite at the Dayton Crowne Plaza - room 325 – after 8pm on Friday and Saturday 19/20 March (\$28) and at the RSGB stand at the Hamvention.

All the surpluses from sales of this book will be used as part of the funding for a major DXpedition probably in March 2001.

Neville Cheadle, G3NUG
Joint Editor

2-Bits Worth—Should Members Contribute

From: Larry Word
Sent: Sunday, May 28, 2000 11:00 PM
Subject: 3B6 DXpedition

Good Evening Mr. Clark,
My name is Larry Word, NF6S, and I'm working with the Swiss 3B62000 Agalega DXpedition group. My main charter is to raise funds and equipment within the USA.

I had previously mailed a request to your Club, however, I possibly mailed it to the wrong address. The address in my address database does not match up with yours. Hi Hi.

This e-mail is to let you know that our DXpedition proposal is in the mail to your Club and the 3B6 Team would deeply appreciate your donating this this worthy effort. The Expedition is during the Month of October 2000.

My E-mail address is above and if there is anything I can do, or any question your club membership might have. Feel free to contact me. Additionally visit our web site, www.agalega2000.ch You can see a lot of in the web page.

Many thanks for reading this e-mail and hope to hear from you in the near future. The very best to your clubs membership from the 3B62000 DXpedition Group.
Regards,

Larry Word NF6S
larri@home.com

Thanks for the information including the web site and I will take it up with the club at our June meeting and will let you know by e-mail the result.

Ed Clark—K4KFH

Tom Russell replies:
K4KFH forwarded your request for support for your October 2000 DXpedition to 3B6 to members of the North Alabama DX Club.

I have one comment and a question.

I expect you are aware that a major operation was conducted from 3B7RF (which counts the same as 3B6) in May 1998 and they were quite active on all bands. I worked them on 7 bands, missing 160 and 10 meters.

Do you plan a SERIOUS effort on 160 M, preferably on CW?

This would include a GOOD antenna, preferably a top loaded vertical of some sort with lots of radials

(30 or more) and Beverages for the major continents, not to mention an amplifier for 160M as well. Note that low dipoles and base loaded or radial-less verticals are NOT effective DX antennas for 160M.

de Tom N4KG

Hi Tom,
Funny you should mention the 160M portion of our planning. We are going to have a Titanic 160M vertical. This vertical will be placed about a 1/4 wave length from the Ocean Shore. The vertical will pick up a little gain in that configuration.

All bands will be facilitated through the long path for the USA. Last trip to 3b7 provided a very difficult operation through the European path. So there will be a 2 ele 40M Beam, 4 square array for 40m, 4 square array for 80M and on these bands the long path will be the focus. So we have developed a astronomical gray line for initial LP opening and then we will run Mini-prop with the absorption dialed in to pick up on the optimum times for LP to USA. There was an very large amount of operators on the west coast who never worked the 3B7, including myself. Hi Hi.

So the antenna line up is: 9 Yagis. for all bands 40-6M; 4 Square for 80; 4 Square for 40; Full size titanic vertical for 160M. Since this vertical is very near salt water the need for 30 radials is a little much. Hi Hi.
There is also a Satellite set up planed for P4D going up soon.

There will be three or four beverages and several large loops for listening on the low bands.

Might be a little much for you to comprehend all that's going on but its on the big side.

The 3B6 team is also working a OH2BH surprise.-- Enough there. Your clubs consideration would be most appreciated. I have mailed our package to you this date.

Regards,
Larry NF6S

Hi Larry,

Thanks for the expanded information on your planned trip to 3B6. Sounds like you're hoping for separate country status :-)

Understand about LP. That should benefit the guys in W6/7 but I guarantee you, Short Path is the only route on 160 & 80 from the Eastern and Central time zones. The path is quite reliable and predictable on 80, 40, 30 meters, peaking AFTER Sunrise in

(Continued on page 13)

DAYTON 2000: HAMVENTION-CONVENTION 2000 A HIT!

Amateur Radio's upbeat mood spilled over into Dayton Hamvention 2000, which hosted the ARRL National Convention. Early indications were that the three-day event, which ended Sunday, attracted more than 30,000 visitors for the first time in its history.

"This appears to be the largest Hamvention in history," Great Lakes ARRL Director George Race, WB8BGY, announced last Saturday. Hamvention General Chairman Jim Graver, KB8PSO, said this week that the official Hamvention attendance had not yet been determined. Hamvention weather cooperated for the most part with partly sunny to overcast skies and generally cool temperatures.

Sales counters were busy. Several dealers reported running out of popular items well before the end of Hamvention.

Hamvention banquet speaker Riley Hollingsworth, K4ZDH, exhorted his audience to work toward making the Amateur Radio Service the finest radio service ever. Hollingsworth, who's the FCC's special counsel for amateur radio enforcement, reiterated that the Commission is in the enforcement business to stay.

"To work with you in restoring the Amateur Radio Service to its rightful place in the American communications infrastructure is the greatest privilege of my professional and personal life," Hollingsworth told the banquet audience.

Jim Haynie, W5JBP, attended Dayton Hamvention for the first time in his role as the League's new president. "These are extremely exciting times for Amateur Radio," he told those attending the ARRL Forum Saturday. "I hope y'all are as excited about our future as much as I am, because if you are, we can do nothing but win."

Haynie discussed the broad parameters of "The Big Project"--his ham radio in the schools initiative that would offer a turn-key curriculum in Amateur Radio as well as equipment for use in middle school classrooms. Haynie said he plans to have the program, funded by corporate and foundation grants, in place by the end of 2001.

ARRL Executive Vice President David Sumner, K1ZZ, flew in from Istanbul, Turkey, just to attend the League's National Convention. Sumner has been on the International Amateur Radio Union team representing Amateur Radio interests at the World Radiocommunication Conference 2000.

During his "Vision for Amateur Radio's Future" on Saturday, Sumner noted that Amateur Radio's demographic peaks in the late 40s or early 50s. "This is the 'baby boom' moving through

the system," he said. "The point of entry for Amateur Radio today is not principally teenage, as it perhaps was 30 or 35 years ago." Sumner said today's technology has opened Amateur Radio's once "unique window on the world" to many outside the hobby, especially those on the Internet. That trend will continue, he predicted, as telecommunication costs drop. In the future, the population that got into ham radio as a cheap personal communication service will no longer be attracted to the hobby, he said. "The effect of that is that the licensing figures likely will go down."

He predicted a precipitous drop in the number of Amateur Radio licensees in the US starting in 2001, when many licenses of those who had entered the hobby a decade earlier as a part of the initial flurry of code-free Technicians expire. But he doesn't see that as a major negative for ham radio--just indicative of a shift in focus of the participants.

Sumner said he's seen a higher regard for disaster communications capabilities of Amateur radio at WRC-2000 than he'd seen at other recent conferences. "A low-technology solution to disaster communications is not a bad thing, it's a good thing," he said. "All you need is two hams and it will work." Sumner said if a proposed "harmonized" worldwide allocation at 7 MHz ever is approved at a future World Radiocommunication Conference, it will not be because of DXing or contesting but because of disaster communications capability.

Sumner said Amateur Radio will continue to have a role in scientific investigations. And he said personal achievement and accomplishment will continue to provide an incentive to be a part of Amateur Radio in the future. "Lest we forget," he said, "it's supposed to be fun."

At Dayton Hamvention, Yaesu introduced its **Model V FT-1000MP HF transceiver**, which features 200 W output and several improvements over the original MP platform. The radio could be on the market by month's end. Kenwood also had a developmental all-band, all-mode transceiver on display. Elecraft debuted its K1 transceiver kit, a two-band, low-power unit aimed at backpackers and travelers. Ten Tec introduced its Pegasus FP (for "front panel") HF transceiver, a desktop version of its popular PC-controlled Pegasus. A new player, Mobat Communication--a partnership of Motorola and Bartal--introduced its MICOM H transceiver, a computer-programmable DSP-based HF radio.

DAYTON 2000: FCC FEELING RESTRUCTURING'S IMPACT

The impact of restructuring is being felt at the FCC. During the

well-attended Dayton Hamvention FCC Forum, Bill Cross, W3TN, of the Wireless Telecommunications Bureau announced that the Commission already had processed nearly 9200 license upgrades as of May 19--six times the normal flow of applications.

"It appears Advanced class licensees are upgrading in significant numbers," he said. "So are the Technician Plus class licensees." He recommended that experienced amateurs help newcomers to bridge the gap between their new license classes and their sometimes less-than-fully developed operating skills.

"Just like you, newly minted Generals and Extras want to comply with the rules," Cross said. "Just like you, they have invested a lot in getting that signal on the air, although it may be on the wrong frequency. And just like you, a correction that starts with 'you idiot' isn't going to get the result you want."

Cross defended the FCC's action lowering the Morse code requirement to 5 WPM. He also credited the National Conference of Volunteer Examiner Coordinators' Question Pool Committee with "an amazing job" of revising the question pools in very short order. "They aren't easy questions," he said. "These exams are not 'dumbed down' by any stretch of the imagination. If anything, they're more difficult because the easy questions are gone."

Cross also said the FCC has a copy of its pre-April 15 database to keep track of which Technicians have HF privileges as a result of having taken a Morse code exam in the past.

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth also addressed the FCC Forum. "Nothing about restructuring bothers me from an enforcement standpoint," he said. "We have a basically good set of rules" that the FCC is willing to enforce. While insisting he did not want to trample on anyone's First Amendment rights, Hollingsworth urged amateurs to present a good face to the nonamateur community by maintaining a high level of on-the-air decorum. "We're being listened to all the time," he said. "So we have to think about what kind of impression we're making."

DAYTON 2000: PUBLIC SERVICE ROLE, LEADERSHIP CITED

Speaking at the ARRL "Public Service Wants You!" forum at Dayton Hamvention, ARRL Vice President Kay Craigie, WT3P, challenged Amateur Radio's public service leaders to "be the kind of leaders whom we would want to follow." Craigie also told those attending that amateurs who participate in public service are "helping to earn the frequencies we have the privilege of using."

Craigie said that while hams have a responsibility under Part 97

to get involved in public service, personal time often is in short supply these days. "Often both parents in a family are working very long hours," she said. "That impacts how much time you have to do anything outside of work including Amateur Radio." Because of this, she said, public service leaders need to rethink their recruiting methods.

Fellowship is "a powerful motivation" to get involved in public service, Craigie said. Beyond that, she said, public service can be interesting, exciting, and challenging. "It's a challenge and a feeling of satisfaction, and you know that something you've done made a difference in the survival of your community," she said. "It feels good to help other people." And, she pointed out, it's good public relations for Amateur Radio.

Craigie advised a positive attitude and recommended patience with beginners who volunteer. "We weren't born knowing all this stuff," she said. "Somebody had to teach us. We had to be willing to learn." Among other things, she said, public service leaders have to spell out duties and their expectations.

ARRL Field and Educational Services Manager Rosalie White, K1STO, cited the potential for involving younger amateurs in public service activity. One suggestion she offered was to get youth organizations--such as Scout groups and their leaders--involved.

White shared the observations of Kansas Section Manager Orlan Cook, W0OYH, who noted that restructuring has generated a bonanza of new HF operators. "With restructuring, we have many, many new HF operators, and we need to welcome them into our nets and into our ARES groups," Cook said in remarks read at the forum by White. "Go after the new HFers, become their Elmers, and make them more skilled communicators--share your vision."

Wisconsin Section Manager Don Michalski, W9IXG, agreed. "Get the new hams that are coming out of the chute prepared for public service," he said. Michalski cited SKYWARN as a worthy public service activity that has mutual benefits. SKYWARN offers "a reason to have to use the radio--besides having a good time," he said. "They're actually providing a service."

All agreed that recognition in terms of certificates or even such things as coffee mugs and T-shirts were motivators to participate. Michalski said hams need to know they are "needed, wanted, and appreciated" for taking part in public service.

Former Western New York Section Manager and National Traffic System veteran Bill Thompson, W2MTA, told the forum that the NTS is "a great place for training for message-handling activities." (**Account from ARRL**)

Mark-V FT-1000MP

From: k6se@juno.com <k6se@juno.com>

Date: Friday, May 19, 2000 23:40

Briefly, here's what Yaesu's "New Product News" brochure says about the five main changes included in the Mark-V FT-1000MP (the notes are mine):

1) 200 watts PEP Transmitter Output:

- Conservatively-designed 200 W MOSFET Final Amplifier
- Beefed up high-speed automatic antenna tuner
- Revolutionary heat sink design for contest and DXpedition environments

Note: The new MP uses an outboard power supply which provides 30 volts DC for the final MOSFETs and 13.8 vdc for the rest of the transceiver circuitry.

2) Class-A PA Operation:

- The first amateur transceiver to provide class-A operation, providing uniquely-pure signal quality.

Note: Class-A operation can be switched on/off with a new front panel button named "Class-A".

3) IDBT: Interlocked Digital Bandwidth Tracking System:

- A unique and formidable interference-fighting system, whereby the bandwidth of the DSP filter is automatically locked to be the same as the net bandwidth of the analog IF filters. Engaging the IDBT, the operator experiences a sudden sharpening of the shape factor of the receiver's filter system. With IDBT, the DSP filter is automatically programmed to match any custom bandwidth you set by using the IF WIDTH and IF SHIFT controls, and the DSP filter then contributes a filtering slope which resembles a sheer cliff. Additionally, the potential for AGC "pumping" caused by different analog and digital bandwidths is eliminated.

4) VRF: Variable RF Front-end Filter:

- Yaesu's engineers have developed the VRF module, a high-Q input "preselector" filter ahead of all active devices in the front end, including the main bandpass filters. The VRF circuit provides narrow-band selectivity which prevents unwanted signal voltage from hitting the input side of the bandpass filter switching diodes, where 2nd-order IMD is most often created in an HF receiver.

5) Enhanced Ergonomics: Multi-function Shuttle Jog Dial:

- The shuttle jog tuning ring now includes the activation switches for the VRF and IDBT features, so the operator does

not have to move his hand position to activate these important circuits during contest or pile-up situations.

Note: From a picture in the brochure, it's obvious that Yaesu has completely rearranged the right side of the front panel. Most noticeable is that the EDSP noise reduction and contour knobs are missing – a single

manual notch control knob is in their place. Rather than being concentric, the shift and width controls are now separate. There are three "bandwidth" on/off pushbuttons where the "notch", "nb1" and "nb2"

pushbuttons are on the present MP. There is now only one "tuner" pushbutton, and a single "nb" pushbutton where the other tuner button was - the nb level control is missing. It's hard to read in the photo, but there appears to be one light-type pushbutton where the "edsp" pushbutton was located, and its label appears to be "contour". The memory channel tuning knob is now labeled "VRF/MEM CH" -- apparently the knob is also used to manually peak the VRF circuits.

I heard the price tag on the new MP will be about \$4000 US.

And. . .

I talked to a rep at the Yaesu booth in Dayton today. Also got a close-up look at the Mark-V FT-1000MP.

The rep said the new model is in production and will hit the marketplace in about 2 months. The street price, including power supply will be about US \$3500. The present MP will continue to be marketed for at

Least the next 6 months and perhaps for 2 years or more. The new model is intended to be a replacement for the FT-1000D (Not for the MP).

All of the features of the present MP are retained in the new model, although some different button-pushing is used to activate some of those features (like filter selection, noise blankers and NB level, contour, noise reduction, etc.)

Yesterday I said the space occupied by the EDSP switch was now a contour switch, which was wrong -- it is the notch on/off switch on the new model. The contour switch (and other buttons supporting the new features) now occupies the space used for filter selection on the present model.

Needless to say, present MPs cannot be upgraded to the Mark-V. 73, de Earl, K6SE

The Holy Grail of DXing

---- Original Message ----

From: Scott Hotchkiss <w4pj@bellsouth.net>
Sent: Friday, May 12, 2000 2:26 PM
Subject: [DXR] The Holy Grail of DXing. 7O1A, 7O1AAA, P5, etc.

I want my 7O1YGF card. I worked their station in Yemen.

I worked Zorro and the guys 7O1A and the President of Yemen called them during the DXpedition to congratulate them on the fine job they were doing. I got their card and value it.

To make the all-important requirement of DXing an endorsement by an American Clubs whimsical standards, devalues the measure of DXers worldwide.

I enjoy my DXCC totals, BUT...I DON'T BELIEVE THE DXCC IS THE BE-ALL END-ALL OF DXING!!!

I have great admiration for the guys who activate the rare ones, and find it impossible to believe the 7O1YGF operators were not there with the blessings of their hosts. I kind-of think, if they were "pirates", they would have been detained, arrested, incarcerated or otherwise made to pay for their transgressions.

To me, the holy grail of DXing - is to work the DX, talk with the DX, make friends with the DX. I believe I have made a good start over the last 10 years and hope to continue to make friends worldwide in the DXing community.

---REGARDLESS OF WHAT THE DXCC DESK SAYS !!!---

de (Scott) W 4 P J

From: "W. David Paperman" <wpaperman@electrotex.com>
Date: Fri, 12 May 2000 07:36:52 -0500

Actually, I would rather see any operation that took place in any country in which it was demonstrated that the operators were present in that country at the time of the operation and that the operation was KNOWN to the authorities be accredited UNLESS the authorities CLEARLY responsible for approving amateur radio operation in that country filed a FORMAL objection or complaint clearly stating that a) the operators / expedition were not authorized to operate and / or b) amateur radio operation is not authorized in the country at the present time or was not authorized at the time the operation in question took place.

As has been pointed out paper work can be very difficult to obtain even though the permission to operate was granted. This is again a case where circumstantial evidence (and common sense) should prevail.

Those who have read the recently published National Geographic article on 7O which, in part described its highly fragmented political structure will realize how impossible it is to state with any certainty that any one group or individual in the central government has the sole authority to say yes or no.

Again, unless disputed, let circumstantial evidence prevail.

I would still like to hear the entire story!

Dave, W5WP

From: "Charles Harpole" <k4vud@hotmail.com>
Date: Fri, 12 May 2000 05:09:20 PDT

Anyone who knows anything about the varieties of government structures (and lack of same) around the world knows that in some countries, IT JUST AINT'T AS NEAT as in the "Western" countries. It is often possible, over the years, to cite one country or another where there are (or were) legitimate

yet competing authorities within any one country who could give good ham radio operating permission. Some of these locales did not/do not issue licenses as such, just permission to operate (usually for a fixed time limit). I challenge any body... DXCC Desk or otherwise...to decide who is an ultimate authority to issue op permission in some countries (in the past or the present). Americans, especially, are so spoiled by the neat organized structure of the USA. But, Americans need to get out of their comfy recliner chairs and GO abroad and actually experience the vague nature of reality in other countries. If a person is issued a visa, has a passport stamp showing entry with the correct dates, was not arrested or otherwise negatively affected by the country of operation, got someone's permission in some kind of position of authority, worked stations (any number), then that person's operations should be ok'ed by DXCC. Otherwise, DXCC has to strap on ESP headsets to "know" --at that time--who or what "is really in authority" to give ham op permission. I want to see the ESP headset!!

73, Charly, K4VUD

PS, who are we, in "lofty" USA, to tell other sovereign countries how to run their internal affairs in regard to granting ham op permissions?

On the other hand...

From: "Leith Jennings" <leejen@paradise.net.nz>

Date: Fri, 12 May 2000 18:53:24 +1200

Quite true Scott.

It's hard to be objective when you are chasing 300 and it's easy to be critical when you have 50 in the bag. DXing is about making friends, enjoying the hunt and enjoying the ride when life turns to porridge!

I see comments on this reflector about changing the rules or creating a two year DXCC entity policy. Fortunately, rules are rules and they are they for a purpose. That's the way society functions and that's the way the DXCC desk functions. One of the primary rules of DXCC is that the governing authority of the country must issue a valid license. It's a simple rule and if you bend it or break it for one DXCC entity, then you must be able to do it for all DXCC entities. Pandora's box is open!

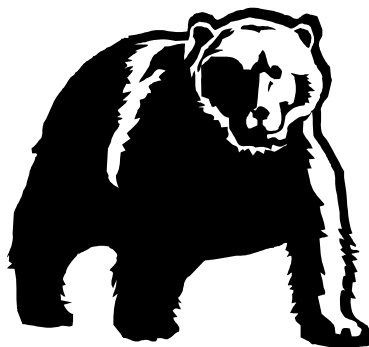
I'm a simple person and in my opinion, the collective wisdom of

Die Hard DXer

The Die Hard DX'er!" By: Clinton Herbert -- AB7RG.

THE DXPEDITION:

5:00 AM - Fellow DX'ers arrive. Crawl out of nice warm bed.
 5:30 AM - Toss all gear into truck.
 5:45 AM - Get gear out of neighbors truck, and put it in yours.
 6:00 AM - Get speeding ticket while hurrying to get to the mountains.
 7:15 AM - Get to "The Site", near top of mountain.
 7:16 AM - Start unloading gear.
 7:20 AM - Get poked in eye with 20M vertical by fellow DX'er.
 7:50 AM - Arrive at hospital to get eye patched up.
 8:30 AM - Get another speeding ticket while heading up to mountains.
 8:45 AM - Arrive back at site. Unload antennas yourself this time.
 9:45 AM - Hike up to mountain top. Pass out from exhaustion.
 9:50 AM - Wake up to smelling salt, and laughter from fellow DX'ers.
 10:00 AM - Put up antennas, and set up rigs.
 10:15 AM - Fire up rig, call CQ for half an hour; no replies.
 10:46 AM - Hook up coax to rig...
 10:48 AM - Realize that finals are wasted in main rig.
 10:50 AM - Hook up back-up rig, this time with coax.
 11:00 AM - Yell CQ, rare VP8 comes back; antenna falls down...
 11:15 AM - Wake up to smelling salt, fellow DX'ers shaking



all the DXers before me who set up the rules for DXCC over many years know what they are doing. DXCC is like the English language. It is always an evolving, living breathing document. And that's a good thing. It means that it can be changed, when and if required.

Sure, it's a disappointment for the 701 guys and the thousands of amateurs that thought they had a "new one". But that's life and it's not always fair. But you gotta respect the integrity of DXCC. That's why it is so highly sought after. It takes a lifetime of working to finally get "get them all" if one ever does that. It doesn't automatically get you a ticket to DXCC heaven when you die. But trying to work them all sure helps you make a lot of friends. And it sure livens up an otherwise dull day at the office when you finally work that elusive P5!!

DX IS!

73,

Lee, ZL2AL ex ZL9CI - ZL8RI - ZL7AA - ZM7A

heads.

11:30 AM - Guy antennas.

12:05 PM - See long list of QSO's made by fellow DX'ers.

12:06 PM - Notice rare VP8 in logbook.

12:07 PM - Beat fellow DX'er over head with logbook.

12:09 PM - Restrained by rest of DXpedition team.

12:30 PM - Back to rig for another attempt.

12:35 PM - Nearby lightning strike kills receive. Notice wet pants...

12:36 PM - Look for shelter.

12:38 PM - Find cave!

12:41 PM - Watch antenna get struck by lightning while hiding in cave.

12:42 PM - Wish it was fellow DX'er's antenna, or him that was struck...

12:45 PM - Realize you're not alone in cave...

12:46 PM - Pick up really big rock...

12:47 PM - Mauled by large angry bear.

12:50 PM - Get pulled out of cave by fellow DX'ers.

1:05 PM - Finally get talked into receiving medical treatment.

1:30 PM - Arrive back at hospital.

1:55 PM - Receive series of painful rabies shots, and multiple stitches.

2:30 PM - Get out of hospital and return home.

2:35 PM - "Explain" stitches and eye patch to wife.

3:00 PM - Realize gear is still up on mountain, with bear.

3:01 PM - Wish fellow DX'ers were still up on mountain, with bear...

3:03 PM - Consider taking up drinking.

7:00 PM - Get phone call from DX'er buddies.

7:05 PM - Agree to go on DXpedition again tomorrow...

ARRL DX Bulletin—ARLD023

This week's bulletin was made possible with information provided by Tedd, KB8NW, the OPDX Bulletin, The Daily DX, 425DXnews and Contest Corral from QST. Thanks to all.

WESTERN MALAYSIA, 9M2. Keith, GM4YXI, will be active as 9M2/GM4YXI from some West Malaysian islands during the weekends between June 3 and 18. The first operation is scheduled to take place from Pulau Babi Besar (AS-046) from June 3 to 4, and possibly from Pulau Ketam (AS-074) on June 10 to 11 and 17 to 18. Operation will be on 20, 15, 12 and 10 meters, CW and SSB only.

CHINA, BY. Fred, WF6Z, plans to operate with special call BT0QGL from the base camp in Xingiang Province after June 4 and as late as August 15. QSL via K6EXO.

CUBA, CO. Special event station CO0CNR will be active on 40 through 6 meters on June 3 and 4, during the first Cuban National Radioamateur Convention.

FALKLAND ISLANDS, VP8. Dave, VP8DBN, has been found on 28455 kHz between 1745 and 1900Z. QSL via G7BSP.

JAPAN, J. Special event station 8M2000 will be active from June 2 to 4 and June 10 to 11. Activity will be on 40, 30, 20, 17,

15, 12, 10 and 6 meters, SSB and CW. QSL via the JARL Bureau.

NETHERLANDS ANTILLES, PJ. Bill, K5YG, will be active as PJ4/K5YG from Bonaire, June 4 to 9. His main modes of operation will be RTTY and PSK31 on 20 and 10 meters. QSL via K5YG.

UNTAET, 4W6. Antonio, 4W6GH, has been active using RTTY on 14081 kHz from 1200 to 1500Z. QSL via CT1EGH.

MADAGASCAR, 5R8. Ake, 5R8FU, has been active on 14227 kHz just before 1130Z. QSL via SM0DJZ.

SINGAPORE, 9V. Rin, 9V1BG, has been worked on RTTY on 14090 kHz, at 1400Z.

GLORIOSO, FR/G. Henri, FR5ZQ/G, has been worked on 21010 kHz using CW. He has also been spotted on 14273 kHz around 1300Z.

AZERBAIJAN, 4K. Boris, 4K9C, has been active on 14012 kHz just before 1500Z.

GABON, TR. Check 17 meters CW daily from 1900 to 2100Z for Jean-Claude, signing TR8XX.

6-Meters and QRP

Date: Mon, 1 May 2000 16:57:46 -0400
From: "Prof. Arnaldo Coro Antich" <inforhc@mail.infocom.etcasa.cu>

Hi amigo !!!

GOOD QUESTION, which I am answering to you, but also sending to the QRP-L as the 50 megaHertz or 6 meter MAGIC BAND, is the IDEAL ENVIRONMENT for QRP, due to the fact that IONOSPHERIC ABSORPTION around 50 mHZ is extremely LOW !!! So here is Arnie Coro's advice to those interested in working 6 meters DX mostly via SPORADIC E, but that also applies for F2 propagation, if you disregard the part about "short skip".

HOW TO FIND WHEN 6 METERS IS "" OPEN ""
By Arnie Coro, CO2KK

Do what everyone seems to do..., after a long period of learning...save time and use the ""know-how"" acquired by us long time 6 meter operators (I made my first QSO on 6 meters way

back in 1959 ... 16 November to be exact, via F2, with someone in Pomona, California, using AM mode and a 10 watt homebrew rig that whipped all TV's in several blocks around my QTH ... but well that's another story HI HI ...)

This is the HOW TO ...

1. Monitor 50.125 kHz if you have a rig that does not scan frequencies. The 50.125 is the most popular calling frequency in North America. Eventually you will like to call CQ DX there from time to time... to make your contribution to the RF activity... if NO ONE CALLS CQ, it is difficult to know when the band is open !!!! and 50.125 is the number one frequency to call CQ, with a second CQ a good idea on 50.110 kHz.

2. If your receiver has memories, and the memories can be scanned, then you program the following frequencies

1. 50.125 kHz (calling 1 of North America)
2. 50.110 kHz (DX transcontinental calling)

(Continued on page 11)



3. 50.200 kHz (also used as calling freq in North America)
 4. ??? you must find a list of 6 meter band beacons , and proceed to program their frequencies on your memories... For example, there is a beacon in Mexico City... let's say it is 50.070 kHz so you program this one on memory 4, and proceed to program other beacon's frequencies to as many memories as your rig can scan...

If your rig has the ability to scan a segment of 6, say from 50.00 to 50.200 kHz, then by all means use that scanning mode... (wish I had one that will do this , as my old analog SB110A by Benton Harbor's Heathkit can only sit down and wait on 50.125 kHz and it is nice that it is alive after more than 30 + years of service !!!

NOW... if you happen to have an OLD SCANNER... then you can program memories of the scanner to well known 40 to 50 megaHertz frequencies that will show up a rising MUF (maximum useable frequency) as it moves UP !!!

Then , you can add MONITORING TV CHANNELS 2 or 3 or 4, whichever has the weakest signal at your location... Use old but , in good condition, TV set, connected to a wide band antenna (my VHF TTFD, published in the now defunct CQ-VHF is the "" ideal"" antenna for this purpose... I keep an old Russian TV (black and white) monitoring TV ch 2... when the local channel 2 is on the air, I look for the Venetian blinds co-channel stations beating with the local visual carrier, and when it is not on the air, then you pick up at least horizontal sync when the band starts to open... The TV receiving antenna is oriented so that the local or near local channel 2 generates the weakest possible signal.... that's the way that you will maximize

your chances of seeing the Venetian blinds from the TV stations that are coming to the antenna via Sporadic E

Ch 2 TV audio on 59.75 Mhz is an excellent indicator of 6 meter openings... if you find one of those Rat Shack radios that pick up TV audio ... See, there are many options

F2 layer propagation indicators are a bit more sophisticated... this involves monitoring TV stations outside the Americas that use 48 Mhz or 49 Mhz video carriers, and their monitoring has developed in a "science by itself", that is out of the coverage of this very modest contribution to the "witchcraft... of finding out when 6 meters is open".

Last but not least... the other amateur bands are a good way of learning about the state of the ionosphere... i.e SHORT SKIP on 20, 17, 15 , 12 or 10 meters is a surefire indicator of SPORADIC E clouds ready to make 6 meters work !!!

Hope this helps, and encourages you Mr. Stark and other milestones of QRP to start enjoying 6 meters...

AND... why not... EH !!! why not have one or two of our designer GURUS... yes the GURUS are ours, as we own them as part of the QRP-L) and then have NORCAL or NJQRP or ??? design a KIT ... YES !!! A SIX METER CW TRANSCEIVER... say 5 watts... with sensitive receiver... It could be put to very good use during the upcoming F2 propagation peak expected to start by late August or early September.... SO, there is not much time LEFT !!!

72 and DX,
 Arnie Coro—CO2KK

Know Your Aluminum

From: Tom Hellem <redpines@cybrzn.com>
 Date: Thursday, May 11, 2000 6:02 PM
 Subject: [TowerTalk] Grading of Aluminum

Gentlemen:

Can someone tell me what is the difference between 6061-T6 and 6063-T832 grades of aluminum? Texas Towers advertises both grades and says they have equal yield strengths of 40,000 psi. We are considering the construction of a beam antenna.

Can anyone recommend a handbook or manual which explains all the different grades of aluminum and maybe also tells what the manufacturers produce and all the various sizes of tubing,

channel, angle, etc. It seems to me there must be some sort of reference manual out there.

Thanks to all.
 Tom KOSN
 Porterfield, WI

From: "K0FF" <K0FF@ARRL.NET>
 Date: Thu, 11 May 2000 17:32:23 -0500

6061 and 6063 refer to the alloys that the metal is made from, Very small amounts of other metals (antimony, magnesium) are added to dead soft pure aluminum, and their crystal structure embrittles and strengthens the base metal. The T# refers to the heat treating that the alloyed material receives at the mill. The heat treating causes physical characteristics to change drastically, and is only good until the sample is subjected to further heat cycles, or mechanical stress. The 6061-T6 is strong, but not very flexible. Good for booms and mounting plates. since it is so hard, it can't be easily drawn, to size, but

DX is: Hearing the exploits of the new DXer you brought in to the ranks

Ham Aide In Action—The Los Alamos Wall of Fire

Date: Fri, 12 May 2000 20:21:38 -0600

From: jaywa5whn@juno.com

You have less than 30 minutes to load a vehicle, what would you take with you?

I had heard KK5YY {Jerry} call on the 145.19 repeater {Pajarito Mountain} on Tuesday morning, advising of an immediate evacuation of Los Alamos. {it seems like a week already}. Immediately, W5PDO {Los Alamos EOC} was activated.

Just to give you an idea of the day prior to the evacuation, there was a continuous low frequency rumble from the engines of low slow slurry bomber after slurry bomber flying north towards Los Alamos from Kirtland AFB in Albuquerque. Most of the residents of Los Alamos were aware of what was coming, a wall of fire.

The slurry bombers could not fly due to the wind shear near the mountains from Tuesday to present.

The State EOC {Santa Fe} was activated by NG5S, plus a few others on site. Hams were spread out between the Hospital in Los Alamos to the Santa Fe EOC. All traffic was on VHF, 145.19 Mhz repeater, the 146.82 MHz repeater, 146.52 MHz simplex. H & W traffic was out of the question during the first 48

hours. However, there is a url set up. If you know the names of your friends & family, and they have registered at any one of the Red Cross shelters, they will be listed with status & contact information. I don't remember the exact url, but if you view the following, it's listed: <http://www.kobtv.com/>, <http://www.abqjournal.com/>

Since there were no fatalities, H & W was given the lowest priority.

PNM had shut off the natural gas lines to the city of Los Alamos. Power poles were burning.

The NM National Guard was activated. In the first 8 hours of the evacuation, telephone lines were overloaded, cell phone sites were marginal. Everyone was trying to call everyone else. Prefixes beginning with 667, 662, 455, 476, et al were gone in area code 505 due to not enough bandwidth. The fast busy signal was your answer if you had tried to call into Los Alamos County.

The local TV Stations {KRQE, KOAT, KOB} & 2 radio stations are to be applauded for doing an excellent job of getting the fire information out to the public. They had stayed on the air the entire time, with no interruptions except for station id. One of the hams is a helo pilot for KRQE.

The Cities of Taos, Santa Fe, Angel Fire & Pojoaque {pronounced Po-wock-ee} had set up shelters .

If any of you have ever driven the road from Pojoaque to Los Alamos, on SR 502, it consists of 4 lanes at the bottom & 2 lanes at the top with narrow sharp turns overlooking several cliffs. There were no fatalities.

Everyone had exited in an orderly fashion, except for 1 fender bender. In the first 4 hours, over 15,000 people were evacuated.



The Santa Clara pueblo is home to the US Forest Service "Hot Shots". This unit consists of smoke jumpers & line fire fighters in the employ of the US Forest Service. The Santa Clara pueblo is less than 20 miles east of Los Alamos. Every one of the "Hot Shots" fire fighters had driven to the hill {Los Alamos} to help. They had just arrived home from other fires.

Firefighters from the Forest Fire, just south of Ruidoso, NM had diverted to Los Alamos. That's nearly a one way 300 miles trip. They were dog tired.

If there ever was a curse on the State of New Mexico, it's the wind.

Remember the 145.19 repeater on Pajarito Mountain? I will be darned if I know why and maybe KB5RX can explain it to me, but the fire had over run the facility, and the repeater is still working. Amazing.

The evacuation of White Rock was really eerie. It was dark, and all you could see up the hill was a line of headlights heading west on SR 502 from White Rock to Pojoaque. When I had heard the call on .19 to evacuate White Rock, I knew the City of Los Alamos was not going to survive the Wall of Fire.

The City of Los Alamos {7,000 ft. asl} is line of site to most of Albuquerque. The distance is approximately 75 miles as the crow flies. VHF communications was the best choice. There was some HF traffic on 3,939 KHz, but it was immediately shifted to

the 145.19 repeater.

The supply collection sites were assembled within a few hours, there was a convoy of trucks heading north loaded with water, baby supplies, toiletries, dog & cat food, etc. from Albuquerque. Fed-X, UPS, plus a few other large capacity long haul commercial company's trucks were being loaded. Intel in Rio Rancho had set up a collection site, and truck after truck was being loaded. Intel had immediately donated \$100K to the local Red Cross to help with the fire victims. Company after company were doing the very same thing, without reservation. The public had responded within a few hours. The Red Cross, The Cities of Gold Casino, the National Guard Armory, the University of New Mexico had set up shelters. Horse trailers were towed to a site just below the hill {Los Alamos} to recover any stranded horses or cattle. Motels & Hotels were setting aside rooms at reduced rates, and others had blocks of rooms for the fire victims, at no cost. Animal shelters from Taos to Albuquerque were taking in pets from the burned out areas. Surrounding Cities had dispatched fire crews & tankers to assist the City of Los Alamos, again, without hesitation. The perimeter was surrounded with fire fighters & their gear. What they carried on their back was what they faced the "Wall of Fire" with.

A call had gone out for hams equipped with APRS. They would be the spotters. Their job was to watch for hot embers flying over head.

The smoke was so thick, you could not see the City. Soot was dropping out of the air like sand pebbles. When you could see the fire, it was white or a slight brownish color to it. You knew when it hit the houses, because the flames would brighten & you would see dark black smoke.

The best comment overheard on the .19 repeater, "Is there anything more we can do for you?" The response was "Yes, send an ocean & we could use some sleep."

Los Alamos is nestled on the east slope of an old Volcano called the Valle Grande, surrounded by tall ponderosa pines, junipers & spruces. That City no longer exists.

(Continued from page 4)

3B6. I have often listened to 3B8CF working into N.A. until 45 minutes after his sunrise and still 559 on 80M. It is also possible to work into N.A. around 3B6 sunset (and after), but the Sunrise peak is MUCH stronger.

Forget computer propagation predictions for 160 and 80M. The PEAKS do NOT show up using simplistic models. Your BEST guide is sunrise / sunset charts and an understanding that those bands may well peak after the sun is just above the

We used to watch the people in North Carolina or Florida after a hurricane wondering how they could survive walls of water, or the people in Quebec who suffered for months through an ice storm with no power. Now we know.

The statistics speak for themselves;

1. No fatalities
2. over 20,000 acres burned
3. Over 1/2 of the City of Los Alamos is gone {over 400+ homes}
4. Over 18,000 people were evacuated & accounted for
5. one fender bender on SR 502
6. over 3,000 fire fighters were on site
7. over 45,000 lbs of supplies were on site in less than 24 hours. {mostly drinking water}
8. over 40 Hams were directly involved within 4 hours {Some of them have not left their stations for over 72 hours now}
9. It's not over yet.

Relief operators have been heading north from Albuquerque 3 or 4 at a time, checking in on the .19 repeater & receiving their assignments. The same holds true for the operators from Taos, and the surrounding areas. Everyone is packing their own gear because you don't know where you will be assigned & what will be needed.

There are currently 4 major forest fires in New Mexico. Various communities are being evacuated {Sapillo, communities north of Las Vegas, NM, Sacramento, Weed, plus others down in southern NM just south of Cloudcroft}. All have hams involved.

That one request looks good right now. Send an ocean.

So you don't get the wrong impression, I was an observer, I was listening & could see the line of headlights coming down SR 502 & the line of fire, plus the smoke. Everything else was described to the rest of us on the VHF ham frequencies. I did not know about the TV & radio coverage until I had returned home.

...Jay, WA5WHN in windy, smoking New Mexico

horizon.

On 160M, I have heard Indian Ocean stations peak anywhere from an hour before to just after Sunrise in 3B9 and FR. 160 is much less predictable than 80, 40, and 30. You just have to be there during all possible openings and hope for the best. Believe the vertical you are referring to is Titanex from Germany.

On 40 and 30M, any time from an hour before Sunset to an

The Infamous G5RV

Date: Sun, 14 May 2000 15:24:43 EDT
 From: Rick McKee <kc8aon@juno.com>
 Subject: [70185] For all the newly upgraded folks who need antenna info !

G5RV Formula - a simple multiband antenna ! By: Rick McKee, KC8AON, Willow Wood, Ohio

Most people think that the famous G5RV antenna was designed as a multi-band antenna, but in fact, it was actually designed as a three - half waves in phase antenna for 14 Mhz by Louis Varney, G5RV. Mr.

Varney's version used open wire (600 ohm) feed line all the way to the transmatch instead of the short section of 450 ohm window line and 70 feet of 75 ohm coax that most of us know today. Mr. Varney also found out that his antenna would work other bands as well with a fair amount of efficiency with the use of the transmatch. As designed, the G5RV exhibits a low SWR on 14 Mhz of around 1.8:1 into a 75 ohm load, but the SWR varies significantly on the other bands, so the transmatch must be used when using it on bands that it was not designed for. To figure the length of the G5RV antenna as we know it today using the short section of twin lead and coax combo, we simply use 2 simple mathematical formulas. This type of antenna can be designed for any frequency, so the conventional dimensions will be different for different bands. To figure the "flat top" (dipole) length, we use the formula: $1428 / F \text{ Mhz} = \text{Length in feet}$, and the formula of the matching is: $468 / F \text{ Mhz} \times \text{velocity of the twin lead} = \text{Length in feet}$. So, to figure a conventional G5RV, we

divide 1428 by 14 Mhz, which equals 102 feet. This is the total length of the flat top section, and since it is fed at the center, this makes each half 51 feet long. Now for the matching section, we will use 450 ohm window line with a velocity factor of 98% for the equations, so, 468 divided by 14 Mhz equals 33.43 feet, multiplied by 98% = 32.76 feet. So we now have a 102 foot dipole fed at the center with a 32.76 foot long section of 450 ohm window line, now just connect 70 feet of 75 ohm coax between the 450 ohm line and tuner, and you are ready to go on the air. To demonstrate the difference in size for different bands, we will now figure one for 15 meters as an example. So, 1428 divided by 21 Mhz = 68 feet, this is the flat top, so we divide it by 2 to find the center and this makes each side 34 feet long. For the matching section, we divide 468 by 21 Mhz = 22.29 feet multiplied by 98% = 21.84 feet of 450 ohm window line, we now attach 70 feet of 75 ohm coax and have a fair match on 15 meters. Notice that the 15 meter version is almost the same size as a conventional coax fed dipole which is about 66 feet long, so this 15 meter antenna will work very well from 40 meters on up when using a transmatch. Of course, you can do as Mr. Varney did and run the 450 ohm window line all the way to the balanced output of your tuner eliminating even more loss and giving your efficiency a big boost ! The G5RV, is not the answer to everyone's antenna problems, but when space limitations dictate a compromise, it sure can save the day ! And remember, when you have space limitations, there is absolutely no need to be stuck on one band - you simply learn to improvise !
 73.....KC8AON

Cable TV Antenna (Also From: KC8AON)

THIS GUY GETS THE DUMMY LOAD AWARD !

To Mr. (name omitted) District Manager for Alabama Radio Shack 3300 N. Pace Blvd Pensacola, FL. 32505 Dear Sir,
 This letter is complain about the problems I have having with the ham radio model number 19-1101 I had got from your company Radio Shack. I had this shipped special to me from your store 1096 Eastdale Mall Montgomery Alabama. I was got this because I think that i would get transmitt furthur that I did with the TRC 217 40 channel walkie talkie. The problem that had first was when I was going to hook this radio HTX-1000 to the antenna the conektor on the radio was wrong it wouldn't attach to my cable. I was able to hook it finally by making a small change in the connektor. As soon as I tried to use it there was no sound coming at all. This happened for two days and I never did get to talk to any body the whole two days. That day the cable company came knocking my door and said there was something causing problems at my house and disconnected my radio from the cable line. you knew when I brought the Radio that I was

going to use that for my antenne. You didn't tell me not to why not? Next time I decided to put the HTX-1000 in my automobile I thought I would see how it worked their. I hooked it to my CB-antenna and at least I could hear people. But what happens now is no one wants to talk to me because they says you have to have a licencs to talk to them. Why? I dont have to have a licencs to talk on my CB. They'll talk to me there. Anyhow it don't matter much anymore because somebody done took the radio HTX-1000 from my automobile. What I would like for you Radio Shack to do is refund my money because I don't have the radio anymore and its not my fault i dont and I think you should give me back my money. Also the cable company here says that I hurt something in there line and want to be paid fix it. It will cost \$27482.98 to fix the equipment they say was damaged because you didn't tell me not to hook it to the cable. Please remit to me the check for \$27758.53 for damages due. To save this matter from going to court the check must be in my hand by June first or I will turn this over to my attorneys of law.
 Thank you, (name withheld)

rather is extruded, so that the final dimensions are somewhat intolerant. Therefore the sizes don't telescope well or at all. Neither can the piece be curved, bent or the ends be swedged (reduced to accept another size inside). 6061-T6 is always simply cut off square on the end. The plates are very strong and well suited for boom-to-mast brackets. Hit a slab of it and it tinks like a bell.

The 6063-T832 is much more ductile and can be drawn over a mandrel during manufacturing, and holds precise dimensions. To me it's much softer (what is yield strength anyway), and can be bent, curved and the ends squeezed down without cracking. Great for elements for these reasons. Hit this and it thuds.

Airplanes are made of a sandwich of 6061-T6 inside of very thin sheets of pure aluminum. The 6061 gives it its great strength, and the pure aluminum coating keeps the corrosion away. The sandwich is squeezed together mechanically to form a single piece of metal, and is what they refer to as Dur-Al. See the ARRL Handbook and the ARRL publication "Physical Design of Yagi Antennas". Somewhere I've got copies of my articles about Aluminum alloys, and Stainless Steel varieties. If I can locate them, I'll post them here some day.

Have fun, Antenna Construction is one of the last avenues open far Ham homebrewing.

Geo>K0FF

From: TexasRF@aol.com

Date: Sat, 13 May 2000 11:20:59 EDT

Here is what my aluminum manufacturing company tells me about 6061-T6 vs. 6063-T832:

6063-T832 material was developed initially for the furniture manufacturing industry. They needed a strong alloy with a very smooth and shiny finish to make their products hold up well and look good with a minimum of added processing steps.

The product starts as a normal 6063 alloy ingot which has a typical yield strength of about 28,000 psi. The process involves drawing and redrawing the tubing to achieve the desired bright and smooth finish. This drawing process work hardens the material to a final yield strength of typically 40,000 psi. Incidentally, there is another little known material called 6063-T834 with a final yield strength of about 44,000 psi. I assume this involves

(Continued from page 13)

hour or two after Sunrise in 3B6 will be open with good signals. LP should also be possible at least into the Central time zone starting at OUR sunrise and moving west following the sun.

Your 2L40 should work well if placed at least 50 ft high. Anything less, and I would expect the 4 SQR to be best.

If the verticals are on the ground, I expect you will still need 30

an added drawing step but this is a total guess on my part. It adds about 5% to the total cost for this material.

6061-T6 is a totally different process that uses a higher yield strength base material to begin with and less work hardening steps in production. The finish is often quite ugly especially when "oil quenching" (whatever that is) is used in the production process. The 6061-T6 is all marked as to alloy, lot numbers, etc for tracking purposes. The cost of 6061-T6 drawn tubing is significantly higher than 6063-T832.

Extruded tubing is a whole different process yet. We can get 6061-T6 extrusions for only pennies per pound more than 6063 extrusions. There is no 6063-T832 process for extruded products that I am aware of, only 6063 which has a typical yield of 28,000 psi as mentioned above. This is not what we want to use for antenna construction, and incidentally is what you are getting at Home Depot, Lowes and other places that sell tubing in 8 ft lengths.

Almost all commercial amateur antenna manufacturers are using 6063-T832 because it is less expensive, looks good and has excellent strength. Force12 and Tenadyne are the holdouts using 6061-T6 for reasons unknown to me. In the case of Force12 some of their parts use wall thicknesses less than .058 inch and this probably is available only in a 6061-T6 alloy. Higher wind speed ratings can take full advantage of the .058 wall thickness and the sizes all telescope nicely with a good fit and little "slop" between pieces. This is important in the case .058 is too thin and 2 or more sizes are pushed together for extra strength. Designs for nearly any wind speed can be accommodated by using this technique.

The ARRL Antenna and Big Handbook both need updating to reflect the currently available and commonly used tubing materials. Perhaps someone in the ARRL loop will see this note and look into the matter.

Hope this info is helpful. Please call us if you need aluminum tubing or have questions about the sizes we carry at 1 800 272 3467.

Thanks/73,
Gerald Williamson, K5GW/Texas Towers

radials to reduce the near field losses. For elevated radials, I believe N6BT likes them to be at least 0.05 WL above ground (7 ft on 40M, 14 ft on 80M, 28 ft on 160M).

Although I am a serious All Band DXer (9BDXCC>2800), I LIVE for the Low Bands :-)

73 / GL,
Tom N4KG

Neat Internet Stuff

If you go to <http://www.polyphaser.com/> and select Technical Info you will learn everything you want to know about proper grounding and lightning protection.

Subject: [DXR] Clipperton 2000 website update
Very interesting goodies have been added to the Clipperton 2000 Website.

CLIPPERTON 2000 - THE STORY by Mike Goode, N9NS and a very fine selection of pictures made by the team.

All available at Clipperton 2000 : <http://www.qsl.net/clipperton2000>

73 @lex—PA1AW

Date: Tue, 16 May 2000 16:16:35 -0500
Subject: [70356] DX reference program in VB

Just threw a new program up on the QRP cheeseheads web page. Its a nice little program in which you enter a callsign and it returns the associated DX country. It is written in Visual Basic and is called DXChecker .exe . It is a spin off from a larger program I am writing but thought some of you budding DX hunters may enjoy it. I'll get the source up there in the next few days so you DOS bound Quick Basic programmers can use it too.

<http://www.qsl.net/nq9rp/computerhamming.html>

Brian—AE9K

Ground Rod Installation Trick

From: Bill Coleman AA4LR <aa4lr@radio.org>
Date: Fri, 12 May 2000 15:07:13 -0400
Subject: Re: [TowerTalk] Re: I'll bite, how does it work

One problem with any ground rod driving method using water is that the ground may not be in solid contact with the rod, and this can reduce ground conductivity somewhat. This is especially true of connecting a hose to a hollow pipe and pushing it into the ground.

Driving a ground rod with a sledgehammer isn't very fun, but does produce good results. My biggest problem was breaking handles when I would miss with the hammer.

My solution was to build a ground rod driver. I used a 1" steel water pipe nipple with couplers on both ends. One end is closed with a solid plug. I cannabalized a dumbbell weight set for 15 lbs of weights and the weight collars. So, now I have a 15 lb hammer with a 1 foot drop that never misses. You can even use it while standing on a short ladder.

It only takes a few minutes to drive a 10 foot ground rod to within 1 foot of the ground. I drive it the rest of the way with a sledgehammer.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@radio.org

DX CONTESTS for the Coming Month Include:

QRP TACTical Contest (TAC=area code)
(CW), 80-10M
Jun 3, 1800Z to 2359Z
Exchange: RST plus Area Code; DX sends RST plus prefix or Area code
See page 104, June QST

ANARTS WW RTTY/Digital Contest
(RTTY/DIGITAL), 80-10M
Jun. 10, 0000Z to June 1, 2359Z
Exchange: RST plus CQ zone and time
(UTC)
See page 104, June QST

All Asian DX Contest (CW), 160-10M
June 17, 0000Z to June 18, 2400Z



Exchange: RST plus age (YLs = 00)
See page 104, June QST or page 118 June
CQ

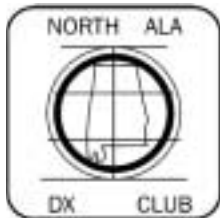
OTHERS: _____
Portugal Day Cont. (SSB), 0000-2400Z,
June 10
Top of Europe WW grid contest (SSB),
1200Z, June 10 - 1200Z June 11
Marconi Memeorial Contest, June 24 - 25
Venezuela DX Contest (SSB), July 1 - 2
IARU HF Championship, July 8 - 9

Dates & times often change or are mis-
printed in the journals; beware.
Chuck, N4NM

A North Alabama DX Club Publication

Craig Behrens, NM4T—LongPath Editor
520 Browns Ferry Road
Madison, AL 35758

Craigwb@HiWaay.net



Mailing Address Line 1
Mailing Address Line 2
Mailing Address Line 3
Mailing Address Line 4
Mailing Address Line 5

Ed Clark, K4KFH—President

E.E.k4kfh@worldnet.att.net

Don Wolfe—Secretary/Treasurer:

Dwolfe@mitre.org

Bill Hull, W4GBF—Membership Chairman:

Wmghull@msn.com

We're on the Web
www.NADXC.org

Editor's Soap Box

Today's many modes of communication makes it easier than ever to find out almost anything you want about any subject—especially Amateur Radio. Having ready access to a number of Internet List Servers that automatically send me on-going conversations between radio hobbyists from around the world makes finding public domain articles (e-mails) of merit that should be shared with our membership a manageable job. I hope you have found the articles that make it into the LongPath to be informative, useful and thought provoking. Most of all, I hope you find the LongPath to be a fun read.

We have a small cadre of regulars who contribute columns that cover club business: President's comments, meeting minutes, treasurer's report, etc. We also have occasional articles show up from a few of our key members. Sometimes they address a special club issue, a technical project, or an operating event. In any event, they help get the LongPath off to a good start.

Each issue asks (begs) for your help and offers you several ways to throw tidbits my way. Won't you please give it a try? (see my contact info above). I'd be glad to help with the article if desired. The LongPath would be so much more special if I only had room for articles from our membership—Radio Active members who share their expertise and adventures.

So, as with any editor, I hope that you wait with great expectation for your monthly LongPath to make it to your mail box. I hope that you find the contents a welcomed reprieve from your many responsibilities. And most of all...I hope that part of your fun comes from seeing your words in print.

73, Craig—NM4T

Sneak Peak!

Our meeting on July 11th will have "Amateur Digital & Satellite Communications" as our theme.

We will have door prize opportunities, absolutely great fellowship and a great program.

Be sure to mark your calendars. And, bring a friend to share in the merriment!