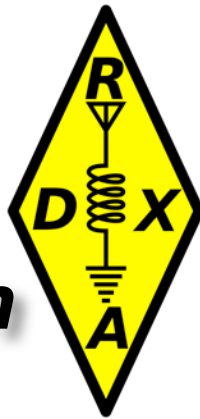


Rochester DX Association



May Presentation

Time Domain Reflectometry (TDR):
Radar for troubleshooting your cables.

Theory and practical tips using a \$10 kit and an oscilloscope to find cable length, velocity factor, distance to defect or anomaly, diagnose cable quality and attenuation, and more.

Presented By Raj Dewan, N2RD

Tuesday, May 17, 7:30pm
Monroe County EOC
1190 Scottsville Road

RDXA Needs Your Help

RDXA MEMBERS - HELP WANTED : With the conclusion of this RDXA "year", we have several appointed positions that have come available. Our "Awards Chairman" and "Calendar Chairperson" will be open. Many of us have held these positions in the past and are more than willing to help. Speak to any BOD member and we'll be glad to explain what's involved.

President's Letter

As the RDXA "year" winds down, there is still plenty to do and the nicer WX (well, in the 20's this morning) will surely have you working on station (antenna?) upgrades.

The club has been very active this year with outstanding contest participation, NYQP and the museum event. Meeting attendance has been way up and the holiday and awards banquets were very well attended indeed.

Meeting programs this year have been excellent and I've seen card checker extraordinaire Ed Gable (K2MP) sorting thru a few "stacks" here and there indicating even with the (very successful I might add) advent of LOTW, the lure of that "QSL card" still exists.

Speaking of "cards", we had an exceptional year of "rare ones" which generated lots of activity. Great to see some of our newer or re-energized DXers getting into the action. Thanks for sharing your operating experiences with those in attendance at general membership meetings this year. Those DXpeditions even coaxed a few folks to utilize long forgotten modes it seems.

The Board of Directors has recently passed it's first "budget" which gives the club financial direction and guidance for years to come. A presentation on the particulars will be given at the May general membership meeting.

Next year will be our 70th anniversary and the club will be holding an entire year of "special

event station" operations that will include all aspects of our hobby. Various "era specific" modes will be activated throughout the year allowing each and every member to participate. Look for additional information on that celebration soon.

Not to be forgotten, the 2016 RDXA Field Day will be held the last weekend of June at Webster Park. Vic and the organizing committee have combed thru years of data and discovered several very interesting operating habits that if adjusted, should garner us significantly more points, fascinating actually.

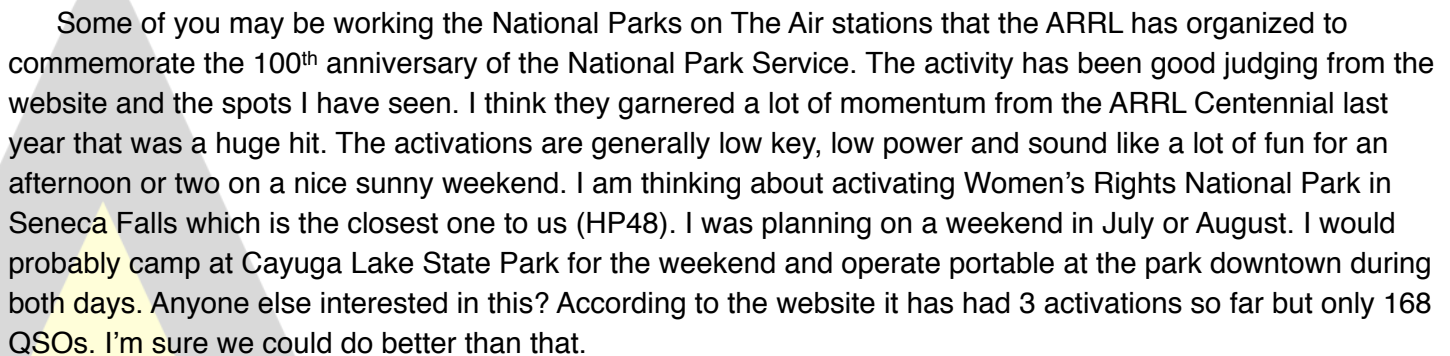
All are welcome to participate and with the proposed changes, operating opportunities will definitely increase. Each and every member is important whether stringing up antennas, putting up tents, hooking up rigs or "runnin' em", a total club effort.

I can't guarantee it but suspect weather like last year will NOT be seen.

I'd like to thank the Board of Directors, those who serve in other leadership positions and most importantly, the RDXA membership. We've had a great time this year and I'm looking VERY forward to the W2RDX/70 commemoration in 2017.

Best DX es 73,
Chris, K2CS





email me if you are interested.

Doug

Morning in Serbia...

Sent by Zoran , YT9M 50 miles southwest of his QTH in the western part of Serbia



ADMAR Recognized for Field Day Contribution

Personal recognition of Rich DiMarco, Jr. and ADMAR was a long overdue action that we finally made happen at last year's FD when he accepted our invitation to visit the site.

Glad we were able to locate the photo of him accepting the plaque that we were finally able to present.



Latest windstorm damage at N2BEG



In addition to this, my G5RV, OCF dipole and 160M inverted L all needed work. (Not to mention the limbs and branches that came down.) Apparently the last storm had some gusts in excess of 55mph out my way.

DX'ing 40 Years Ago

Ed Gable K2MP

It's the early 1970's as you sit down in front of your operating desk for an evening of DX'ing. If you've been on the bands for some time you might still have your faithful separate transmitter and receiver with 20 to 30 vacuum tubes warming up and the frequency stabilizing. Should only take about five minutes unless you have the receiver filter screwed down to an amazing 500 Hz bandwidth, then it's gonna take awhile. While waiting this is a good time to read the weekly "DX'ers Magazine" to see what new countries might be coming on the air. Need to make good use of this up to the minute DX information as the \$7.00 a year subscription is really steep. Just think, you say to yourself, someday we might be able chat with fellow RDXA members via some instantaneous computer network. No, that's pie in the sky stuff!

At this date it is also very possible that as a chap who likes to keep up with equipment changes you have a nice little transceiver taking up a smaller foot print on the table. The rig is probably Japanese and the model seen most is the Yaesu FT-101 series. 160 through 10 meters, 100 watts, SSB/CW and compatible AM... what could be better? Well, perhaps more power as the still to be answered question of where to put your paper route money, power or antenna, is still being argued. Dream time brings thoughts of Henry Radio and their just announced model 3K-A, humorously advertised in Amateur magazines as a military/commercial model capable of running 2000 continuous watts, key down RTTY, with a pair of 3-500's. Ouch.

OK what's new on the bands? Oh, here's a new prefix, S2 in Bangladesh, replacing West Pakistan. Let me pin that up on the cork board as needed for an all time new one. Oh, gee, I just made a new phrase, All Time New One or ATNO. Nah, that'll never catch on. Oh look, here's Louis, FO0RV on 20 CW from Papeete. He can't hide behind that call from me. I know that's Lou, G5RV, with that big signal. I wonder what kind of antenna he's using. Let's tune up a little higher... Wow, loud tonight is JD1ADK on Bonin Island and he's answering a call from Africa, I can't hear the African though. Now ADK is answering a HK0 and I can't hear him either. Oh, I got it, he's operating split and is listening up. I wonder if I should get on ADK's frequency and send UP UP so people know he's split. Nah, they'll figure it out. I wish my FT-101 could operate split. Gee, how 'bout one of those new Signal One CX7A transceivers, with two VFO's, that had a two page ad in QST. Bee's knees, I say.

"Screech, bang, pop" what the heck is that noise up the band a bit. Oh, it's K2CS making a blind call to a FT5W. Good luck with that! Boy I hope my S-meter isn't damaged as Chris really pegged it. 100 watts and wire... yea, right! Gee there's another beautiful CW signal. Smooth, nice fist, really nice sounding CW call. Funny flutter on the signal. Let's see if I can get it; N__EG/? There it's out of the noise now: N2BEG/Mobile on CW. Watch out for the tree. What's this, kind of weak but lots calling. Got it, OJ0SUF on Market reef at the new lighthouse location. Let me check the cork board. YES, I need it! So long I'm outta here. Dip the plate, touch the loading, Ooops, SWR a little high.....

Working DX

I was really anticipating the lineup of South Sandwich, VP8SGI, South Georgia, VP8STI and Heard Island, VK0EK DX expeditions. I prepared the propagation prediction charts for all 3 and started planning. I was not successful getting South Sandwich at all, worked South Georgia 8 times, and Heard Island only once. I was very close to calling K2MP at 11:30 on a Saturday night after seeing that he worked VK0EK on 20 SSB (I was going to ask where they were listening!) but I figured he wouldn't appreciate a call that late. I have to give the VK0EK guys lots of praise for creating the web site that showed the particulars of who and where they were working (as well as band and modes). Even more amazing was when I finally worked them on 30 CW – and I saw a pop-up message on my browser congratulating me for working them. Thankfully I reacted quickly enough to do a screen print – and saved the result to a .jpg file.

In retrospect it's kind of funny that the only time I got Heard Island is using 100 watts and the vertical antenna. There were quite a few times when I heard them strong enough to work them – but with a directional antenna and the amp – I couldn't log them more than once. One thing that did thwart my efforts was the intentional QRM – there were quite a few times I turned the radio off in disgust knowing full well that propagation was there – but I couldn't hear the other station due to the interference. Reading the reports from South Sandwich and South Georgia put things in perspective though – having to evacuate the island because an iceberg had broken off and was potentially going to block access to the beach? Wow. Guess it puts things in perspective just a smidge.

— Dave Wright, N2CK



2016 RDXA Field Day -- Where are we as of early May?

Vic K1PY and the 2016 Planning Team

As this write-up was progressing, and upon completing it, I knew it was going to be typical of my approach to RDXA's Field Day – Over the Top. I guess I just love the planning, the possibilities, our previous successes, the scope of it, and the details – and of course the data. So, please forgive my excitement, but I hope that at least some of the info herein may also get you excited at the prospects for our upcoming FD, and what new things we can each experience in contributing to our largest club undertaking.

It's *finally* starting to feel like Field Day weather, but even before that, we've been discussing and planning for this year's Field Day.

We embarked on more research than it seems we've done in previous years (I'm still surprised by this...), and it's yielded a new level of excitement amongst the planning team. If you were at the April membership meeting, you got a brief glimpse of what we've been looking at. Some of that is presented here, but much more has been added. So, here's some insight into what we're looking at to continually improve, and raise us to that next level. The answers might be in here if we look at it all correctly.

We'll look at these areas:

- Where are all the Q's?
- Where are we getting to?
- How many Q's and Points can one get?
- What are some ways **we** can get more of them?

Important: We are evaluating several areas of potential improvement, foremost among them are GOTA and antennas (there's *always* improvements in antennas!). But *this* discussion centers primarily on our **HF** performance, and some possible enhancements.

2016 RDXA Field Day

Where are all the Q's?

To see where all the Q's are **geographically**, check *Table 1 2014 FD Entries by ARRL SECTION*.

Table 1 2014 FD entries by ARRL section

2014 Entries by ARRL SECTION (from 2014 QST FD article)												
	1	2	3	4	5	6	7	8	9	0	TER	CAN
ME	19 NNY	10 WPA	40 VA	84 NM	25 SF	10 WWA	86 MI	88 WI	49 ND	11 PR	8 MAR	9
NH	28 WNY	41 EPA	72 KY	36 OK	32 SV	33 EWA	19 OH	119 IL	97 SD	11 VI	1 NL	2
VT	11 ENY	33 DE	9 TN	58 AR	32 EB	24 OR	42 WV	17 IN	53 MN	45 AK	9 QC	26
EMA	37 NLI	16 MDC	46 NC	82 MS	SCV	38 ID	19		IA	27 PAC	9 GTA	11
WMA	12 NNJ	42	SC	30 LA	22 SJV	29 MT	19		NE	12	ONE	29
CT	42 SNJ	21	GA	57 WTX	10 SB	17 WY	12		CO	57	ONN	2
RI	11		AL	44 NTX	71 LAX	45 NV	22		KS	35	ONS	28
			NFL	48 STX	64 ORG	44 UT	29		MO	62	MB	3
			WCF	24	SDG	21 AZ	69				SK	3
			SFL	27							AB	9
											BC	28
											NT	2
TOTAL LOGS x CALL AREA												
	160	163	167	490	256	261	317	224	199	260	27	152
PERCENT of ALL LOGS												
	6%	6%	6%	18%	10%	10%	12%	8%	7%	10%	1%	6%

Data reflects all 2676 submitted FD 2014 logs, and provides perspective on where the action is. As suspected, the most FD stations by call area (18%) are in 4-land. I'm a bit surprised that the next largest representation is from 7-land – 12%! Fives (10%), sixes (10%), and zeroes (10%, another surprise) round out the larger double-digit contributors.

Doing some grouping, we get a better perspective, as shown in *Table 2 Percent of all logs from combined areas*:

Table 2 Percent of all logs from combined areas Roughly, two thirds of all QSOs come from the southwest of us. No secret there – we've been pointing beams that way forever! But nice to see the data – which provided some surprises.

Of course, we also know that the bands and times needed to maximize these areas differ. So how can we determine how well we're covering the call areas where the Q's are, at least by **band**?

I'm sure many will recognize the perennial mega-FD station **W3AO**. They're the guys we shared the stage with at the *Dayton Contest Forum* after our 2008 #1 3A win, and the ones that are always in a 20+ transmitter class. (They were an example of a "big" effort, and we spoke for the "smaller groups!") They're referenced here as a not unreasonable proxy that perhaps demonstrates the "maximum" amount of contacts attainable on each band by an east coast station. The logic is that they (presumably) are full time on every band, *and* the club is PVRC, one of the largest and most successful regional contest clubs. So let's see how many Q's they get. (The only band/mode breakdown I could find is from 2008, but it still should support the point). See *W3AO 23A PVRC 2008*

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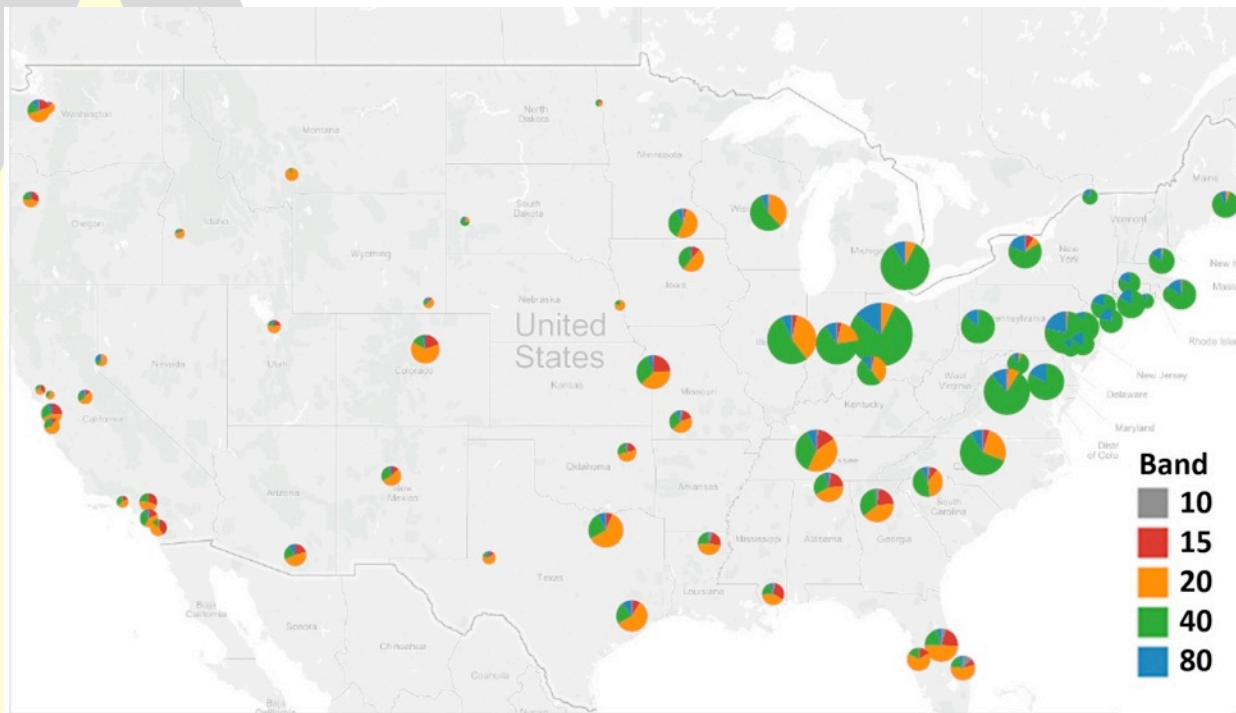
The \$\$\$ bands are obviously 40 and 20, both modes. The notes incorporated in the graphic compare 80 with 40 and 20, and purport that the combination of available contacts on 40 and 20 combined is four times greater than on 80 (without delving into the reasons why). It appears to be demonstrated. Keep this in mind, as it's the basis for later speculation. However, 80 is still the #3 contributor, followed by 15.

So, now we know where the most contacts are both **geographically** and **band-wise**. Which of course, begs the question...

Where have we been able to get to?

To graphically see where we've been able to make contacts, *Figure 1 2014 FD contact distribution by section (TU Raj N2RD)*, shows our coverage (both modes combined).

Figure 1 2014 FD contact distribution by section -- U.S. map



40 (green) and 20 (orange) definitely show up! Neat as it is, this graphic shows only roughly how many stations are in each section (by circle area).

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Well, thanks to Excel, *Table3 2014 RDXA FD contact distribution x band and call area* gives us the numbers for each call area, showing where we've been able to reach, both geographically and band-wise. (The % ALL LOGS column at the right duplicates the Table 2 data for each call area for ease of reference.) (*Note that 2014 data is used for most examples because 2015 results for all stations were skewed by the impact of weather (as anyone at FD will strongly tell you!)*).

Table 3 2014 RDXA FD contact distribution x band and call area

2014 Contact Distribution									
Mode	All								
Count of Area	Column Labels								
Row Labels	10	15	20	40	80	Grand Total	% of W2RDX QSOs	% ALL LOGS	call area
0		52	160	74	40	326	8%	10	0
1			5	233	92	330	8%	6	1
2	1	7	6	166	139	319	8%	6	2
3			2	222	144	368	9%	6	3
4	19	103	334	368	140	964	23%	18	4
5	4	55	199	87	28	373	9%	10	5
6		41	78	43	9	171	4%	10	6
7		28	93	29	18	168	4%	12	7
8			39	364	147	550	13%	8	8
9		13	137	199	93	442	11%	7	9
DX		5	3	3	1	12			
ECan		1	4	81	50	136			
WCan		2	10	1	2	15			
Grand Total	24	307	1070	1870	903	4174			

Band data is *combined* PH and CW. As we know (but now have data), 4's are good for us, and we're obviously working the areas close to us. Not displayed in Table 3, but using its data and referring to table 2, the "southwest" call areas (the 62% of all stations) are providing us with 80% of our QSOs. Sixteen percent is from 6, 7, and 0-land, with 0's predominating (nearly equal to 6 + 7). The rest is VE. Proportionally, the percentage of our contacts from each area versus the percentage of available stations in those areas tracks fairly well. The exceptions are 6's and 7's (we're better than I thought with 0's). With 6 and 7 accounting for 22% of all stations, our getting a combined 8% of the contacts is the largest tracking disparity in our results.

So that's 1) where the contacts are, and 2) where we've been able to get to. Another question is, out of all available contacts, how many is it even possible to get?

2016 RDXA Field Day

How many contacts are there? How many is it possible to get?

QST's *Important Field Day Statistics (2014)* provides the “big picture” answer to the first question. [FWIW, taking the average of contacts per station, you get 478 per station. I couldn't get the info to compute the median.]

But let's look again at W3AO (Table 4) for info “somewhat” representative of the **real world maximums** contact-wise.

Looking at the current bands of interest, 80, 40, and 20, you get the following target numbers:

- CW 80/40/20 “max” is 600/1100/1200 (2900)
- PH 80/40/20 “max” is 1000/1900/2000 (4900)
- Toss in another 1000 for 15 (both modes)
- Therefore, the **HF** east coast max is 7900 Q's
- Remember, that's **full time** on **each** band.

[Just to answer the burning question, our 2014 numbers vs W3AO are shown in a summary at the end.]

So, this provides some perspective. How can we derive some numbers closer to home (3A)? How about looking at **rate**?

2016 RDXA Field Day

Table 5 MAX QSO & Points ESTIMATES x RATE shows a listing of 24-hour average rates and what the results would be for a 3A FD setup like ours (2 CW, 1 PH).

Years of experience indicate that Field Day won't yield DX contest-level rates, but some of the levels in the table might be achievable under perfect conditions.

Table 5 MAX QSO & Points ESTIMATES x RATE

MAX QSO & Points ESTIMATES

Estimates on MAX number of QSOs and corresponding PTS									
Class 3A -- 2 CW + 1 PH									
	MODE	RATE	#		QSOs	Mult	POINTS	TOT QSOs	PTS
			HRS	STNs					
	PH	80	24	1	1920	2	3840		
	CW	80	24	2	3840	4	15360	5,760	19,200
	PH	70	24	1	1680	2	3360		
	CW	70	24	2	3360	4	13440	5,040	16,800
	PH	65	24	1	1560	2	3120		
	CW	65	24	2	3120	4	12480	4,680	15,600
	PH	60	24	1	1440	2	2880		
	CW	60	24	2	2880	4	11520	4,320	14,400
NOTE: We matched the 60/hr QSO numbers in 2008 (our Dayton year)									
PH rates higher than CW (w CW = 60):									
	PH	80	24	1	1920	2	3840		
	CW	60	24	2	2880	4	11520	4,800	15,360
	PH	75	24	1	1800	2	3600		
	CW	60	24	2	2880	4	11520	4,680	15,120
	PH	70	24	1	1680	2	3360		
	CW	60	24	2	2880	4	11520	4,560	14,880
	PH	65	24	1	1560	2	3120		
	CW	60	24	2	2880	4	11520	4,440	14,640

Pick your rate combinations, but we're likely getting closer to the "reality" of the FD contact world somewhere in this table.

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Finally, our closest approach to reality is probably what **actual Top 10 3A stations** are accomplishing. *Table 6 ARRL FD 3A Top 5 data 2011 to 2015* lists the Top 5 3A total contacts and score, and provides the yearly average for the Top 5, and then the average for just the #1 stations over those years.

Table 6 ARRL FD 3A Top 5 2011-2015

ARRL FD 3A Top 5 results 2011 to 2015						AVG	AVG
YEAR	POS	CALL	QSOs*	POINTS**	LOC	QSO	PTS
2015	1	K4JJ	4,195	14,536	GA		
2015	2	N4C	4,031	14,120	NC		
2015	3	K9OR	3,566	13,252	IL		
2015	4	W2RDX	3,464	12,154	WNY		
2015	5	W00JY	2,903	10,504	SD	3,632	12,913
2014	1	W2RDX	4,068	14,340	WNY		
2014	2	K9OR	3,552	13,112	IL		
2014	3	N4C	4,000	12,912	NC		
2014	4	NS1RA	3,453	12,338	EMA		
2014	5	K4JJ	3,585	12,300	GA	3,732	13,000
2013	1	W2RDX	3,530	13,438	WNY		
2013	2	K4FQU	3,717	11,798	NC		
2013	3	K9OR	2,984	11,552	IL		
2013	4	NS1RA	3,080	11,336	EMA		
2013	5	N4N	2,995	11,020	GA	3,261	11,829
2012	1	K9OR	3,421	12,066	IL		
2012	2	W0BM	3,273	11,622	MN		
2012	3	W0EF	2,822	10,198	MN		
2012	4	N8SL	2,900	9,990	MI		
2012	5	W1EE	2,961	9,940	CT	3,075	10,763
2011	1	W9CA	6,374	23,014	IL		
2011	2	W9MVA	4,531	14,962	WI		
2011	3	K9OR	3,239	11,976	IL		
2011	4	W8TNO	4,016	11,652	MI		
2011	5	N4OX	3,870	11,430	NFL	4,406	14,607
AVERAGE ALL TOP 5 2011-2015							
				QSOs		3,621	
				POINTS			12,622
AVERAGE #1 2011-2015							
				QSOs		4,318	
				POINTS			13,123

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BIG POINTS:

- Remember, we had “instructional” Field Days in 2011 and 12
- Our discussion to this point has focused on the primary HF bands (the 3 HF stations) -- the QSO totals in the table are for **ALL contacts – HF, GOTA, and VHF**
- The points in Table 4 were just HF QSO points – the points in the Top 5 table are for GOTA and VHF contacts, plus BONUS points, which can be 1500 to 3000
- W2RDX** is at the top for two of the recent years!!!

So, putting aside the “big points” for this discussion, the **5-year Top 5 averages** are

- QSOs: 3,621
- PTS: 12,622

I don't want to diminish those numbers by calling them “routine,” but that's very familiar territory for RDXA. So what are the **average #1 values**?

- QSOs: 4,318
- PTS: 13,123

To compare these to how we've been competing recently, these **are RDXA's numbers for 2013, 14, and 15:**

	2013	2014	2015 (bad wx year)
QSOs	3,529	4,153	3,464
POINTS	13,854 (#1)	14,772 (#1)	12,538 (#4)

So, #1 for two of the last three years, what are we concerned about?! Well, first, you always want to be the best you can be, and we've shown that we're able to compete at the top levels. What's the tactful way to say this (as a competitor) – Yes, we're competitive, but not dominant.

Why say it that way? Look at the **W9CA 3A numbers** in the tables below. The fact that they could accomplish results at that level make us want to see what's possible for us, and how to go about it. **W3AO** is listed as a reference. Also, watch for **W1NVT** and other **2A** info – they'll be talked about next.

2015, 14, 13, and 12 – W9CA backed away from serious 3A competition

2011: #1 3A, #2 OVERALL – (We had a low key 2A event)

1	W3AO	38,764	25A	12,158	2	KE3Q	MDC	90	Potomac Valley RC & Columbia ARA
2	W9CA	23,014	3A	6,374	2	N9KK	IL	25	CorTek Radio Assn

2010: OVERALL

1	W3AO	33,452	24A	10,585	2	KE3Q	MDC	60	Potomac Valley RC and Columbia ARA
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2016 RDXA Field Day

2	W9CA	19,748	3A	5,182	2	N9BX	IL	30	CorTek Radio Association
5	W2RD X	16,510	3A	4,042	2	W2AN	WNY	42	Rochester DX Assn
10	W1NV T	14,230	2A	4,565	2	W1PU	VT	29	Radio Amateurs of Northern VT

2009: OVERALL – They JUST beat us by 400

1	W3AO	30,888	20A	9,693	2	KE3Q	MDC	60	Potomac Valley RC & Columbia ARA
4	W9CA	18,996	3A	5,085	2	N9CC	IL	25	Cortek RA
5	W2RD X	18,614	3A	4,783	2	W2AN	WNY	58	Rochester DX Assn
14	W1MOO	14,306	2A	4,211	2	W1ARF	VT	18	
16	N1FD	14,080	8A	4,445	2	KB1RGENH		40	Nashua Area RC
18	W1NVT	13,294	2A	4,411	2	W1PU	VT	32	Radio Amateurs of Northern VT

2008: OVERALL – We JUST beat THEM by 400. That got us an invitation to the Dayton Contest Forum

1	W3AO	33,664	23A	10,709	2	KE3Q	MDC	60	Potomac Valley RC/Columbia ARA
4	W2RD X	17,978	3A	5,092	2	W2AN	WNY	40	Rochester DX Assn
5	W9CA	17,552	3A	4,786	2	K9RN	IL	20	CorTek RA
10	W1NV T	14,754	2A	4,779	2	W1PU	VT	29	Radio Amateurs of Northern Vermont

2007: OVERALL

1	W3AO	27,150	19A	8,147	2	KE3Q	MDC	45	Potomac Valley RC and Columbia ARA
3	W9CA	19,288	3A	5,079	2	N9BR	IL	25	CorTek Radio Assn
12	W2RD X	13,360	3A	3,836	2	W2AN	WNY	19	Rochester DX Assn
19	W1NV T	12,368	2A	3,968	2	W1PU	VT	29	Radio Amateurs of Northern VT

2006: OVERALL

1	W3AO	31,144	22A	9,504	2	KE3Q	MDC	40	Potomac Valley RC and Columbia ARA
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2016 RDXA Field Day

6	W9CA	18,14 2	3A	4,94 6	2	N9GY	IL	22	CorTek RA
7	N1FD	17,64 6	13A	5,16 2	2		NH	30	
15	W1NV T	13,85 8	2A	4,64 3	2	W1PU	VT	22	Radio Amateurs of Northern Vermont
21	W2RD X	12,54 6	3A	3,26 1	2	W2AN	WNY	19	Rochester (NY) DX Assn

2005: OVERALL

12	W9CA	13,15 4	2A	3,50 1	2	N9BR	IL	25	CorTek RA
17	W6KB	12,05 8	2A	3,93 6	2	N6CT	SF	27	Redwood Empire DX Assn
25	W2RD X	11,24 6	3A	2,98 3	2	W2AN	WNY	37	Rochester DX Assn
26	W1NV T	11,13 0	2A	3,62 9	2	W1PU	VT	23	Radio Amateurs of Northern Vermont

Now those are some numbers! You can see how both clubs have grown since 2005. In general, though, while they were competing, they were our nemesis, and the motivation for our back-breaking over-the-top efforts in 2009 and 2010 (that we've decided to never repeat in the manner we attempted).

(BTW, I put N1FD in a couple times as a sentimental nod, because I was co-founder of that club when I lived in NH.)

Now there are a couple things to mention:

- The one apparent to all at the outset is W9CA's **location, location, location**. Can't fight that.
- They repeatedly reported **500 CW GOTA contacts!** (2000 pts, plus bonuses) We know how difficult it is to break 200 phone contacts, so, well, let's just say they're extremely "organized"
- These were good sunspot years (of course, that would help us as well...)

Given all that, you still have to say that these are some laudable results. And there was nothing, besides GOTA, that stood out as something we could emulate. (The point of this entire exercise.)

Now did you notice **W1NVT**? This is a **2A** station, and you have to appreciate their numbers, compared to our **3A** station. See *Table 7 W1NVT 2A vs W2RDX 3A*. Except for our extraordinary years of '08-'10, the first column group shows that their 2 stn efforts matched our 3 stn efforts. **How do they DO this?!!**

Looking more closely at modes, the ratio of our CW 2 stn QSO numbers averages 1.7/1. The immediate thought is why isn't it 2:1? But then a little reflection suggests the "law" of diminishing returns. I pursued this further, but will spare you the data that illustrates it (gasp!). Basically, as the number of stations increase, the QSOs/scores per station diminish. The 1A and 2A classes derive the most per station, and it goes down rapidly as the number of stations increases. So our 2 CW stations are doing just fine.

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Where they outperform us by a large margin is on phone. We average barely 2/3's of their QSOs in a 1-on-1 match!

Table 7 W1NVT 2A vs W2RDX 3A CW/PH ratios

W1NVT 2A (1cw/1ph) vs W2RDX 3A (2cw/1ph)								
W1NVT SCORE	YEAR	W2RDX SCORE	W1NVT CW	W2RDX CW	CW delta	W1NVT PH	W2RDX PH	PH delta
12,202	2015	12,538	1341	1838	1.37	2334	1626	0.70
14,016	2014	14,772	1256	2237	1.78	3292	1916	0.58
13,876	2013	13,854	1316	2174	1.65	3231	1355	0.42
14,230	2010	17,176	1435	3083	2.15	3130	954	0.30
13,294	2009	19,232	1141	3249	2.85	3270	1534	0.47
14,754	2008	18,608	1553	2782	1.79	3226	2310	0.72
12,328	2007	13,630	1271	2109	1.66	2697	1727	0.64
13,858	2006	12,752	1260	1937	1.54	3382	1324	0.39
11,130	2005	11,446	1081	1715	1.59	2548	1268	0.50
11,360	2004	13,462	1100	1773	1.61	2680	2171	0.81
10,250	2003	10,252	957	1443	1.51	2411	1519	0.63
10,092	2001	12,726	1042	1609	1.54	2262	2374	1.05
10,294	2000	12,760	1233	1426	1.16	2130	2808	1.32
12,194	1999	12,878	1209	1925	1.59	1815	1975	1.09
10,748	1998	10,416	1100	1795	1.63	2674	979	0.37
			18295	31095	1.70	41082	25840	0.63
Note 1	Phone stn was BOTH MODES							
Note 2	Above is only time our two CW stations worked twice as many as their ONE							

So we **had** to see what they do that we might be able to take advantage of.

What are some ways we can get more QSOs and points?

What have we seen so far? Among other things, but to the point we're pursuing:

- We do well **geographically** except for 6's and 7's (antennas, bands)
- 40 and 20 have 4x the Q's of 80 (W3AO example)
- We are regularly near the top in our class, but there are more Q's and points to be gotten (W9CA results; with a brief comment on the importance of GOTA)
- Our greatest opportunity for improvement on HF is phone (W1NVT disparity)

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The easiest of the above to check is our time on the bands, and the number of hours allocated between 80, 40, and 20. *Table 8 2014 Band-Mode x Hours* provides the clearest picture (generally repeated over a number of years).

Table 8 2014 Band-Mode x Hours

2014 Band-Mode x Hours*												
DATE	TIME Z/est	CW 3.5	CW 7	CW 14	CW21	PH 3.5	PH 7	PH 14	PH 21	PH 28	TOT	ACCUM
6/28/2014	18/14	-	51	41	32	-	-	83	-	-	207	207
6/28/2014	19/15	-	46	31	33	-	4	75	-	-	189	396
6/28/2014	20/16	-	43	35	18	-	13	79	-	-	188	584
6/28/2014	21/17	-	48	74	-	-	23	70	-	-	215	799
6/28/2014	22/18	-	51	69	1	-	74	3	-	-	198	997
6/28/2014	23/19	-	67	37	8	-	44	61	-	-	217	1214
6/29/2014	00/20	14	69	33	2	-	121	1	-	-	240	1454
6/29/2014	01/21	67	61	-	-	-	125	-	-	-	253	1707
6/29/2014	02/22	68	60	-	-	-	72	-	-	-	200	1907
6/29/2014	03/23	61	56	-	-	93	-	-	-	-	210	2117
6/29/2014	04/00	40	41	-	-	88	-	-	-	-	169	2286
6/29/2014	05/01	36	53	-	-	86	-	-	-	-	175	2461
6/29/2014	06/02	24	49	19	-	44	-	-	-	-	136	2597
6/29/2014	07/03	36	43	3	-	39	-	-	-	-	121	2718
6/29/2014	08/04	30	30	1	-	51	-	-	-	-	112	2830
6/29/2014	09/05	33	21	-	-	50	-	-	-	-	104	2934
6/29/2014	10/06	13	36	12	-	8	56	-	-	-	125	3059
6/29/2014	11/07	9	37	26	1	16	51	-	-	-	140	3199
6/29/2014	12/08	-	41	51	-	-	83	-	1	-	176	3375
6/29/2014	13/09	-	36	53	14	-	67	-	11	-	181	3556
6/29/2014	14/10	-	38	57	5	-	15	-	59	-	174	3730
6/29/2014	15/11	-	27	56	14	-	-	-	33	20	150	3880
6/29/2014	16/12	-	9	59	22	-	7	-	21	4	122	4002
6/29/2014	17/13	-	-	42	32	-	108	-	-	-	182	4184
TOTALS		431	1013	699	182	475	863	372	125	24	4184	

Remember that 40M CW has always been pretty much a 24-hour band. At this time, this chart is here simply to provide an example of the respective hours we spend on each band, and to look at our “new-found” insight on 80. Looking at 80 over the years is rather surprising (almost “shocking”), except we were all there to experience it. Still, did it seem to be as it is depicted in Table 9?

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Table 9 W2RDX Band/Mode Hours - How long on each

W2RDX BAND/MODE HOURS (How long on each band/mode)													
YEAR	CW					PHONE					TOT	% HRS on 80	
	80	40	20	15	10	80	40	20	15	10		CW	PH
2004	Hours	11	24	11	2	11	7	6			72	46%	46%
	QSOs	441	853	365	84	737	593	415			3488	1.02	1.37
	Rate/hr	40	36	33	42	67	85	69			48		
2005	Hours	12	24	9	3	12	6	6			72	50%	50%
	QSOs	438	756	447	52	438	218	142			2491	1.14	0.82
	Rate/hr	37	32	50	17	37	36	24			35		
2006	Hours	12	24	12		10	9	5			72	50%	42%
	QSOs	474	961	473		468	282	169			2827	1.00	0.96
	Rate/hr	40	40	39		47	31	34			39		
2007	Hours	14.5	24	9.5		9.5	5.5	9			72	60%	40%
	QSOs	658	1079	314		551	396	591			3589	0.48	1.79
	Rate/hr	45	45	33		58	72	66			50		
2014	Hours	10	24	12	2	7	9.5	4.5	3		72	42%	29%
	QSOs	431	1013	699	182	475	863	372	125	24	4184	2.04	2.91
	Rate/hr	43	42	58	91	68	91	83	42		58	(2 on 15)	(3 on 15)
2015	Hours	8	24	13	3	8	11	4.5	0.5		72	33%	33%
	QSOs	320	976	322	168	311	795	235	43		3184	1.58	3.31
	Rate/hr	40	41	25	56	39	72	52	86		44	(3 on 15)	(more 40)

How much time should we spend on 80 for what is at most 25% of all available contacts?

Note: The ratios under the percentages in the yellow columns are number of contacts on all other bands to contacts on 80 (for the 80/20 CW station, its 20 + 15 + 10 divided by 80)

Sometimes it's like the nose on your face – you just don't notice it, but it's always been there. But wow, this still seems surprising. (Again, the 3 "big" years and the couple "relaxed" years played by different rules – we'll refer to that in the summary.) This chart has been typical, but does show some recent trends, namely, a somewhat lesser focus on 80. Changes from pink to green highlights indicate the positive results.

This looks like we've (finally) intuitively evolved towards what our data analysis has indicated – allocating the hours proportionally to where the available QSO's are will pay off. In fact, let's look at 2014 in more detail in Table 10, 2014 Band-Mode Hours.

Table 10 2014 Band-Mode Hours

Still a lot of hours on 80, but some productive rates. On phone, 80 is one third of our time, not the one half that it was. Why'd we leave 20 phone?!!

Also, phone's rates and Q-count are holding their own compared to CW, which is a nice development that we want to keep going, and improve even further!

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Finally, this brings us to address what else we might be able to do to continue and further this trend. And to revisit our new-found friends in 1-land, W1NVT.

What exactly can we learn from them?

Straight from their Web site, we have a few screen shots that will give us some insights.

The first surprise is that they have two rigs at each station! Mono-banders for 20 and 15 don't hurt either. And they don't short-change GOTA.

So what's with two rigs? This shot from their photo gallery gives us a clue:

One station runs, while the other S&Ps! I wrote them to ask how this went for them, and how they did it, and both quickly responded, at length. But the gist of their method is from Jim N2EA:

"The method that Brian and I used for two-op run and search stations was simple. One of us ran. The other guy tuned, looking for stations we hadn't worked. Each of us had computer access to the log, so the search station could readily identify a new prospect. When he did, he simply tapped the run op on the shoulder... Hand signals followed, along the lines of "go", or "wait one." When search was done with his station, the run op blasted out a CQ again, asap, to hold the freq."

Simple enough. Also, both were quick to point out that ARRL rules *specifically prohibit* the use of lock-out mechanisms, which I verified. Hence, their method.

It's also worth noting that some other photos showed an N1MM band map on their monitors, hinting at other probable methods.

Another graphic indicates they don't just sit on a band and CQ – it looks like band-hopping is built into their strategy. Note the dead of night approach.

And after quite a bit of searching, I found a band-mode breakdown that's also quite interesting, so I juxtaposed it with ours (2015 is all that was available).

Most surprising was their relative sparsity of 40M contacts, especially on phone. But you can't argue with the 20 and 15 results. And they *did* beat us by 400 Q's on phone. We're going to look more closely at this in light of our own lower band capabilities, and try to find the best balance.

Also worth noting: 431 Q's on GOTA. (GOTA is the sleeping giant point-wise. We haven't forgotten.)

Are these guys worth looking closely at? Well, check the **#1 2A** list – they do well.

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What to make of all this?

As we learned from those aforementioned “big years,” we need to approach Field Day using our brains, not our backs. So, it seemed apropos to take a more concerted review of what we’ve been doing, with some success, but viewing it within a larger scope – what else is out there. So we dug into the data.

New info prompted gathering other info, and this article attempts to place this accumulated data in some sort of perspective. And that’s where we currently are as of early May.

Planning will proceed, taking into account what has been outlined here, and adding it to our years of experience in coming up with perhaps a new or modified strategy or two for enhancing our FD efforts.

The W1NVT information has created the most buzz so far. Something like it may also be a way of capitalizing on the other data – adjusting our geographic coverage, modifying hours devoted to bands, elevating GOTA. It’s not revolutionary, but more an additional twist at what can be done. But boy, it’s just cool stuff, and the feeling is that it’s going to add to our overall fun quotient.

Stay tuned!

CQ FD W2RDX 3A WNY

P.S. And here are the promised numbers comparing W3AO and W2RDX in 2014

W3AO/W2RDX 2014 80/40/20/15 summaries (all values rounded)

	CW			CW total	PH			PH TOTAL		OVERALL
	80	40	20		80	40	20		15 CW +PH	
W3AO	600	1100	1200	2900 (3 stns)	1000	1900	2000	4900 (3 stns)	1000	8800
W2RDX	400	960	650	2000 (2 stns)	450	750	350	1550 (1 stn)	300	3850

A Tale of Customer Service...

(not radio related, but I'm sure EVERYONE can relate?)

N2BEG

So back in early February last year I was informed by my son that we needed ink for our printer. After a week of forgetting to take care of this I finally visited my local Wally World to get some ink. I opted on breaking the bank and getting the XL cartridges. So for a mere \$83 I had all four ink cartridges for my \$150 printer. Thanks HP.

Upon getting home and eventually installing the cartridges I was informed by the printer that one of my new ink cartridges was "not compatible" with the printer. (It didn't tell me which one either) I checked them all out and looked everything over, all had the correct number. What gives? Upon closer inspection I noticed the yellow cartridge looked different on the bottom. I double checked the box, yup still the correct number. WTH?? After an hour of internet research I discover that apparently HP had "upgraded" the cartridge design at some point and I got an "old" design that is incompatible with the new design. Who does this and then keeps the same exact part number? Seriously? I removed the offending cartridge and gathered up the packaging to exchange it for one that worked. Back to Wally World I go..

I went to the service desk and explained to the person there what happened and was immediately informed that since the box was open they could not exchange it. I had to call HP and get it replaced by them directly. Awesome. Back home I go.

Not sure how many brave souls out there have ever tried calling Hewlett Packard for telephone support. My advice is don't bother. (That's actually their advice also.) After several minutes on hold the automated message says how backed up they are due to high call volumes and to go to the website for "instant" help. After about 10 minutes of waiting to nice music I heeded their suggestion and go to the web... The fine employees at Hewlett Packard pride themselves on their awesome customer service. I think they learned that from the folks at Time Warner. Well, they try. I went through the maze of support options on the website, none of which really

suited my particular issue. I then found the box to "identify your product". I typed in the number of my ink cartridge which returned a nice picture of the offending little gem. I told it yes, that was the product I needed help with which launched a full page of more boxes to fill out. Yea, I was on my way...

So I filled in a dozen or so boxes and hit submit and was immediately greeted by the little spinning wheel of thought... several seconds go by and nothing happens. Then I notice a little line of text that had appeared that said "your product is no longer supported" Period. No click here for help, try this or do that, just you are done. By now I'm starting to get more than a little irritated. I frantically search for some kind of way to try to get someone to respond to my somewhat simple (I thought) problem. I settled on the "contact support" email button. I composed and sent an email explaining my issue and sent it on its way. I got an immediate automatic response again saying how busy they were supporting their customers and that I should hear back within 48 hours.

So I wait. At this point I think a week has lapsed since my ill fated purchase. Sure enough, a day and a half later I get my email from HP customer service. They inform me that I need a case number in order for them to help me and they send me a link to the same page I originally filled out to find out my ink cartridge was no longer supported! I hastily write back explaining the situation yet again and get another automated reply saying wait 2 days for an answer. Well, I will spare you the boring details on the month long exchange of emails with three different support personnel who told me I must have filled out the form wrong, put in my printer model incorrectly, etc. and I still didn't have an ink cartridge, case number or any hope of obtaining one anytime soon.

I forgot to mention at the bottom of every email was a link to a survey asking me to rate my support experience... save that for later...

A Tale of Customer Service... (Cont'd)

After four or five additional emails I get a link to a "support escalation" website. After filling out that form and waiting another 2 days, I finally get a response from a person with authority to handle getting me a working ink cartridge. Another email exchange with the printer serial number (that I must have sent them 5 times already) and there is hope. The next day I get an email stating my request was approved and that a cartridge will be **overnighted** to me. A day later I get the notice that it shipped. I receive it the next day (at no charge!!). Total time wasted: Just shy of 7 weeks. Two phone calls, about 15 emails involving 4 people were exchanged, 2 support websites visited. All to get a single replacement ink cartridge. Now, let me fill out that survey....

In contrast to this monumental travesty to customer service, I had purchased a brake caliper for my son's car last October from JC Whitney. (Yes they are still in business) He limps by all winter with the one that was intermittently dragging. We finally changed it last week. On Sunday morning I go to my work bench and see the box there. I realized I paid a core charge for that way back when. I go look it up, its \$61!! I figure it's long gone, but figure I would ask anyway. I go to their website. (Mind you its 830AM on Sunday) I see the "chat" button and click it. I figured I would get the try again Monday message, but it said it was connecting me to an agent... I was

impressed. Two minutes later I'm conversing about my issue with a nice customer service agent who hears me out and looks up my order. She finds everything in order except they normally only take cores back within 60 days of purchase. Her only question was why did it take so long? I explained that we didn't need it right away, it was winter and I my garage was not heated so we just changed it last weekend once it finally got warm. She said "let me see what I can do". In another minute I got an email with instructions for returning the core, and authorizing my core charge refund once it was received. I then got a shipping label and instructions. Total time invested: About 10 minutes. I was very impressed with how a single person in a good sized company could effectively handle this on a Sunday morning without any delay or further complications.

So, back to HP. I finally filled out a scathing survey and fired it off. Other than the confirmation and canned thank you message (for being a loyal HP customer!), I received no response. I'm sure they are far too busy taking care of other customers and improving customer service to bother with survey follow-ups or empowering their employees. Suffice to say my next printer (or anything else) will not be an HP product. Are all big companies the same? Seems like they are all heading there...



Duracell Batteries:

I wanted to pass this safety item along. This flashlight was found at work last week in this condition. It was used the week before and worked fine so it's not a matter of old batteries left for a long time as we have all seen. The batteries are a mix of new and old style Duracell Procell batteries (all with current date codes that actually came in the same order.) We have reached out to Duracell but have received no reply as of yet. An online search has revealed that there are many recent instances of Duracell batteries leaking, mostly their traditional alkaline cells that used to be the best out there (and they claim are the "most trusted"!?) My advice, check all your battery appliances if you use Duracells!

N2BEG



April 2016 Top 25 Most Wanted

I'm sure this will change once recent DXpeditions are taken into account but here is the Clublog 2016 April "Top 25".

Rank	Prefix	Entity Name
1.	P5	DPRK (NORTH KOREA)
2.	3Y/B	BOUVET ISLAND
3.	FT5/W	CROZET ISLAND
4.	FT/J	JUAN DE NOVA, EUROPA
5.	VK0H	HEARD ISLAND
6.	KH1	BAKER HOWLAND ISLANDS
7.	BS7H	SCARBOROUGH REEF
8.	BV9P	PRATAS ISLAND
9.	CE0X	SAN FELIX ISLANDS
10.	KH3	JOHNSTON ISLAND
11.	KH7K	KURE ISLAND
12.	VK0M	MACQUARIE ISLAND
13.	VP8S	SOUTH SANDWICH ISLANDS
14.	FT5/X	KERGUELEN ISLAND
15.	SV/A	MOUNT ATHOS
16.	FT/G	GLORIOSO ISLAND
17.	KH5	PALMYRA & JARVIS ISLANDS
18.	3Y/P	PETER 1 ISLAND
19.	YV0	AVES ISLAND
20.	VP8G	SOUTH GEORGIA ISLAND
21.	T31	CENTRAL KIRIBATI
22.	ZS8	PRINCE EDWARD & MARION ISLANDS
23.	EZ	TURKMENISTAN
24.	KH4	MIDWAY ISLAND
25.	JD/M	MINAMI TORISHIMA

Rochester DX Association

Club Station — W2RDX

Club Website — <http://www.rdxa.com>

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All those with an interest in amateur radio and DXing and contesting are cordially invited to any meeting and to join RDXA. Meetings are held at 19:30 Local time on the 3rd Tuesday of each month, September through June.

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