

## DX

- DX = distance
- To hams means foreign stations
- For BCB we'll settle for distance.

## **BCB** Propagation

- Day: ground wave, 100 mi. or so.
- Night: long distances via sky waves
  - Varies with:
    - Time of day
    - Season
    - 11 year sunspot cycle

## Layers of DX

- Strong Locals WOR, WABC, etc.
- Big-gun reagionals within 500 miles:
  - WBZ, Boston 1030
  - WWKB, (WKBW) Buffalo 1520
  - WWVA, Wheeling 1170
  - CHML, Hamilton, Ontario 900
- Farther
  - Chicago, Atlanta, Nashville: 700 mi.
- Farther still, maybe out to 2000 miles
  - lowa, Texas, New Orleans, etc.
  - Caribbean, Venezuela, Mexico

#### **Band Plan**

- 540-1700 KHz, 10KHz Spacing, ITU Region 2
- Clear Channels: 540, 640-780, 800-900, 940, 990-1140, 1160-1220, and 1500-1580
- Regional Channels: Generally 5-10KW
- Local Channels "The Grave Yard" 1230, 1240, 1340, 1400, 1450 and 1490 kHz.

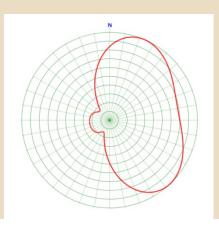
## The Need to Identify

Listening for KOA, Denver, CO – 1615 miles – "Clear Channel"

#### Within 300 miles of Freehold:

WYLF	AM	850kHz	ND1	Nighttime	PENN YAN	NY	0.05 kW	226mi
WKGE	AM	850kHz	DA1	Unlimited	JOHNSTOWN	PA	10kW	245 mi
WTAR	AM	850kHz	DA2	Nighttime	NORFOLK	VA	25 kW	254mi
WEEI	AM	850kHz	DA2	Nighttime	BOSTON	MA	50kW	211mi
WXPA	AM	850kHz	DAN	Nighttime	ENOLA	PA	3.4kW	143 mi

WEEI Night Pattern



# What can I hear?

#### NJARC DX CONTEST LOG

NAME: Al Klase

ADDRESS 22 Cherryville-Stanton Rd.

Flemington, NJ 08822

PHONE 908-782-4829

RECEIVER: Homebrew 1-tube Regen

ANTENNA: 100-ft "T"

CATEGORY: B

DATE	TIME	FREQ	LOG	CALL	LOCATION	DX	CON
1/24/2004	21:00	530	3		Turks & Caicos	1309	Radi
	21:03	570	(0)	CEMA	Santa Clara, CU	1273	R. R
	21:12	800		CKLW	Windsor, ON	473	
	21:30	840		WHAS	Louisville, KY	630	$\Box$
	22:05	890		WLS	Chicago	708	
	22:25	900	3.	CHML	Hamilton, ON	354	T
3	22:38	1110	8	WBT	Charlotte, NC	501	T
	22:57	870		WWL	New Orleans	1128	$\overline{}$
	23:57	750		WSB	Atlanta	717	
1/25/2004	1:35	650		WSM	Nashville	736	

#### NJARC DX CONTEST LOG

NAME: Al Klase

ADDRESS 22 Cherryville-Stanton Rd.

Flemington, NJ 08822

PHONE 908-782-4829

RECEIVER: Browning-Drake Regena

ANTENNA: 65-foot flat top

CATEGORY: C

DATE	TIME	FREQ	LOG	CALL	LOCATION	DX	COI
1/19/2007	19:15	570		CMEA	Santa Clara, CU	1273	R. R
	19:20	650		WSM	Nashville	736	
	19:27	720		WGN	Chicago	708	
	19:30	750		WSB	Atlanta	717	
	20:00	870		WWL	New Orleans	1128	
	21:08	600		CMKA	San German, CU	1347	R. R
	21:08	670		CMBC	Arroyo Arena, CU	1271	R. R
	22:00	530			Turks & Caicos	1309	Rad
	22:13	1000		WMVP	Chicago	708	$\top$
	22:58	780		WBBM	Chicago	708	
9	,						

## 2009

NAME: Al Klase

ADDRESS: 19 Bentley Ave., Jersey City

PHONE 908-892-5465

RECEIVER: R-390

ANTENNA: Skywaves Shielded Lo

CATEGORY: E

DATE	TIME	FREQ	LOG	CALL	LOCATION	DX	
1/23/2009	19:06	1540		KXEL	Waterloo, IA	950	
	19:07	1040		WHO	Des Moines	1014	
	19:08	1200		WOAI	San Antonio	1558	
	19:10	1120		KMOX	St. Louis	860	
	19:14	750		YVKS	Caracas, VE	2097	"eri
	19:16	790		CMBB	Guanabacoa, CU	1279	Rac
	20:00	850		KOA	Denver	1615	
	21:00	890		WLS	Chicago		
	21:05	870		WWL	New Orleans	1128	
	22:01	750		WSB	Atlanta	717	
1/24/2009	0:10	555		ZIZ	St. Kitts	1726	BB

# Where do I Start?

# **Go Digital**



#### Resources on

njarc.ar88.net

#### **AM DX Station List - NYC**

DIFF.	FREQ	LOG	CALL	LOCATION	DX	Comme
*	560		WFIL	Philadelphia	49	
*	570		WMCA	NYC		Radio Reloj underneath
3	600		CMKA	San German, CU	1347	R. Rebelde // 670 Spanish
*	640		WWJZ	Mt. Holly, NJ	11112	
2	650		WSM	Nashville	736	"Grand Ole Opry" country
*	660		WFAN	NYC		sports
3	670		CMBC	Arroyo Arena, CU	1271	R. Rebelde // 600 Spanish
2	670		WSCR	Chicago	708	"The Score" CBS
2	700		WLW	Cincinnati, OH	550	
*	710		WOR	NYC		
2	720		WGN	Chicago	720	
1	740		CFZM	Toronto	352	"Zoomer Radio" - Oldies
3	750		YVKS	Caracas, VE	2097	"eree cee erre" Spanish
2	750		WSB	Atlanta	717	
1	760		WJR	Detroit	482	news/talk
*	770		WABC	NYC		
2	780		WBBM	Chicago	708	

Radio Reloj Cuban Time Station Frequencies

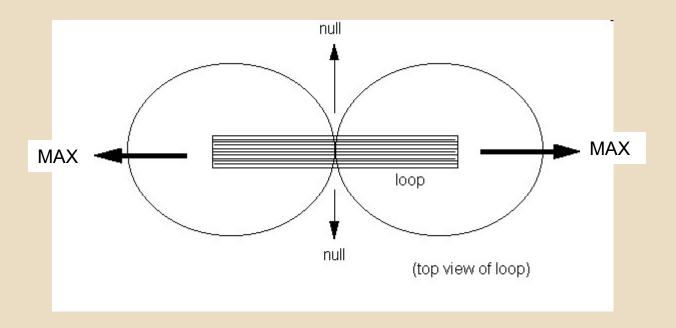
570, 610, 760, 790, 830, 930, 940, 950

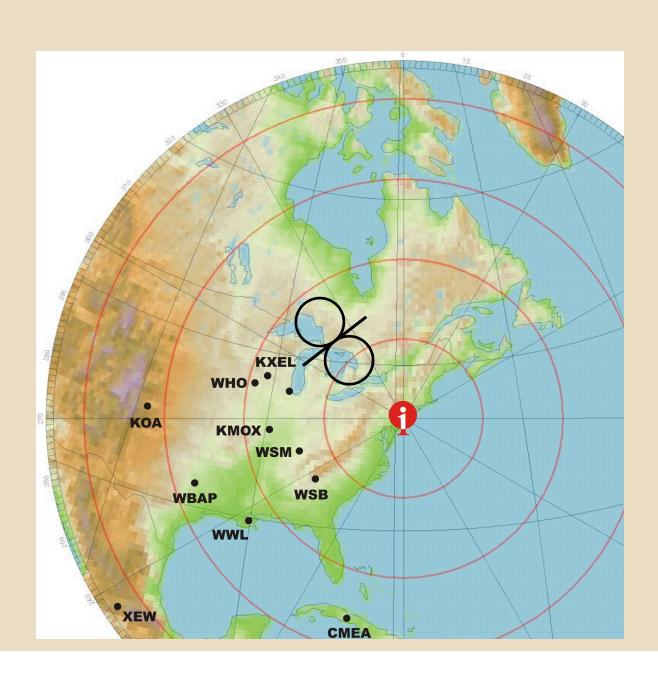
Tick on the second, beep on the minute, then RR in Morse "DIT-DAH-DIT DIT-DAH-DIT"

## **Loop Antennas**

- Figure-eight pattern two nulls 180 degrees apart.
- BCB only an extra knob to tune
- Sensitive receivers only.
- Good in a noisy environment.
- Small and easy to make.
- Does DX tricks.

# Directional Loop Antenna





# Silly Loop Tricks 750 KHz

**WSB** Atlanta

**YVKS Caracas** 



#### THE OBJECT:

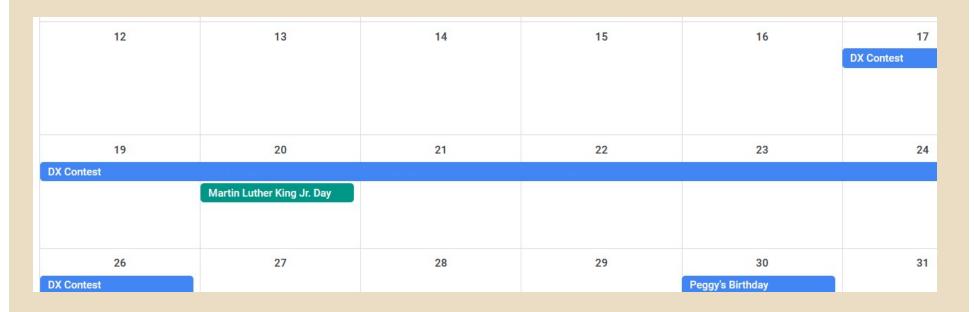
To use vintage radios receivers to receive broadcast-band signals from the greatest possible distance. Performance will be judged by the total mileage for your ten best loggings during a 24-hour session. You will be competing against competitors using similar receivers.

#### **ELIGIBILITY:**

The contest is open only to members in good standing of the New Jersey Antique Radio Club.

#### **CONTEST PERIOD:**

The contest period will be from 12:00 Noon, local time at receiving location, Friday, January 17, 2014 through 12:00 Noon, Sunday, January 26, 2020.



#### **SESSIONS:**

Contestants may submit logs for any two 24-consecutive-hour sessions (noon to noon) during the contest period. You may use only one receiver during a session. That means you may not "bird dog" the simple radio with a more complex radio. You may submit logs for two different receivers. They need not be in the same category.

#### **FREQUENCIES:**

The Broadcast Band, as defined for the contest, will be from 530 to 1600 kilocycles.

No stations on the new extended band, 1610 to1710 kilocycles, will be counted since many early radios did not cover those frequencies.

#### **RECEIVER CATEGORIES:**

- A Crystal radios
- **B Primitive tube receivers (homebrew also) -1 to 2 tubes plus power supply**
- C 1920's Battery sets (homebrew also) -batteries or modern power supply is OK
- D Other tube radios sold for home entertainment.
- E Amateur, commercial, and military tube-type communications receivers.
- F-Any radio of your choosing.
- G "Light-Weight": Any radio weighing less than one pound (454 grams).

ANTENNAS: Anything you like.

**SCORING:** Distances to stations will be calculated by the committee, and will be based on great circle distances from Freehold, New Jersey for listening posts within a 100-mile radius of Freehold. We will calculate mileage for other entries based on actual listening location. In all cases, please indicate your ten best loggings to make our job easier.

See: Distances (.pdf) on the Contest Page

**SPECIAL AWARDS** will be given for the best performances by first-time contestants.

## Logs:

- Submit a log for each of your contest sessions (maximum of two). Each log header should include contestant's name, address, phone number, category, and description of receiver and antenna. Please include you listening address if it is different from you mailing address.
- Make a log entry for each station you claim to have heard. Each entry should include time, frequency, call letters, location, and optional comments.
- Logs must be postmarked not later than midnight February 3, 2014. Logs may be submitted as email attachments.
- Submit logs to: Tom Provost, 19 Ivanhoe Dr., Robbinsville, NJ 08691, tprovost@pppl.gov

#### **SCORING:**

Distances to stations will be calculated by the committee and will be based on great circle distances from Freehold, New Jersey for listening posts within a 100-mile radius of Freehold. We will calculate mileage for other entries based on actual listening location. In all cases, please indicate your ten best loggings to make our job easier.

Special Rule #1: A contestant may claim only one of the Cuban time stations, Radio Reloj, regardless of how may are actually heard. All will be scored as 1279 miles (Havana).

## The Seven P's

- Proper
- Prior
- Planning
- Prevents
- Piss
- Poor
- Performance

# Good DX!

## Waltons Zenith 2004

DATE	TIME	FREQ	LOG	CALL	LOCATION	DX	COMMENTS
1/28/2004	19:02	570		CMEA	Santa Clara, CU	1273	R. Reloj
	19:36	750		YVKS	Caracas, VE	2097	RCR
	19:38	750		WSB	Atlanta	-	
	19:53	870		WWL	New Orleans	1128	
	20:24	1120		KMOX	St. Loius	-	
	20:31	650		WSM	Nashville	1	
	21:35	530			Turks & Caises	1300	Radiovision Crist.
	21:40	600		CMKA	San German, CU	1347	R. Rebelde // 670
	21:40	670		CMBC	Arroyo Arena, CU	1271	R. Rebelde // 600
	22:36	850		CMGB	Trinadad, CU	1307	R. Reloj
	22:53	830		CIVIFB	Cienfuegos, CU	1279	R. Reioj
1/29/2004	0:18	555		717 212	St. Kitte & Nevie	1726	BBC News
	0:25	850		KOA	Denver	1615	
					Total:	14352	



#### NJARC DX CONTEST LOG

NAME: Al Klase

ADDRESS: 22 Cherryville-Stanton Rd.

Flemington, NJ 08822

PHONE 908-782-4829

RECEIVER: Skywaves Contest Crystal S

ANTENNA: 65-Ft. 3-Wire Flat top at 30 I

CATEGORY: 1

DATE	TIME	FREQ	LOG	CALL	LOCATION	COM
2/19/2001	01:45Z	1000		WMVP	CHICAGO	708 Mi.*
2/19/2001	02:03Z	670		WMAQ	CHICAGO	708 Mi.*
2/19/2001	02:58Z	720		WGN	CHICAGO	708 Mi.*
2/19/2001	03:07Z	760		WJR	DETROIT	482 Mi.
2/19/2001	03:10Z	750		WSB	ATLANTA	717 Mi.*
2/19/2001	03:17Z	650		WSM	NASHVILLE	736 Mi.*
2/19/2001	03:22Z	840		WHAS	LOUISVILLE	630 Mi.
2/19/2001	04:30Z	890		WLS	CHICAGO	708 Mi.*
2/19/2001	04:38Z	1110		WBT	CHARLOTTE	501 Mi.
2/19/2001	05:03Z	530		RVC	SOUTH CAICOS	1309 Mi.* RADIO\
2/19/2001	05:25Z	570		R. RELOJ	CUBA	1279 Mi.* TIME S
2/19/2001	06:00Z	870		WWL	NEW ORLEANS	1128 Mi.*

#### 2006 NJARC DX CONTEST LOG

NAME: Al Klase

ADDRESS 22 Cherryville-Stanton Rd.

Flemington, NJ 08822

PHONE 908-782-4829

RECEIVER: Skywaves HP-002 Xtal \$

ANTENNA: 65-Ft. 3-wire flat-top at 3

CATEGORY: A

DATE	TIME	FREQ	LOG	CALL	LOCATION	DX	CO
1/20/2006	19:45	940		CBM	Montreal	364	$oldsymbol{\Box}$
1/20/2006	19:46	900	51	CHML	Hamilton, ON		П
1/20/2006	20:00	670	29	WMAQ	Chicago	708	П
1/20/2006	20:10	1000	59	WMVP	Chicago	708	$oldsymbol{\Box}$
1/20/2006	21:05	570	15	R. Reloj	Cuba	1279	$oldsymbol{\Box}$
1/20/2006	21:33	1370	81	WXXI	Rochester		$oldsymbol{\Box}$
1/20/2006	21:42	1520	86	WKBW	Buffalo		$oldsymbol{\Box}$
1/20/2006	21:49	1100	66	WTAM	Cleveland	397	$oldsymbol{\Box}$
1/20/2006	21:51	1140		WRAV	Richmond		$oldsymbol{\Box}$
1/20/2006	22:04	720		WGN	Chicago	708	$oldsymbol{\Box}$
1/20/2006	22:40	650		WSM	Nashville	736	$\mathbf{T}$
1/20/2006	22:44	760		WJR	Detroit	482	