

SDR Anan 200D by Joe, W8DCQ

The Anan 200D is my third software defined radio. I got my feet wet a few years back with a Flex 1500; I was so impressed with the receiver performance I quickly upgraded to a Flex 5000A. The Anan, manufactured by Apache Labs, is a significant upgrade from my Flex 5000A. As you probably know, a software defined transceiver relies on a separate personal computer to do all the heavy lifting, having much more computing power than the internal DSP processor residing in the more conventional superhetrodyne architecture we have come accustomed to over the past 100 years. The most impressive part of any SDR is the “brick wall” receive filters that let absolutely nothing get into the receiver passband.

The Anan 200D has two separate analog to digital converters (ADC), one for each of the two receivers. The direct down conversion changes the RF signal at the antenna directly to digital data transmitted via an Ethernet cable to the PC which then does all the processing. By having two distinct ADC’s, the Anan 200D is capable of diversity reception. The transceiver uses the main antenna and the second receiver with a receive only antenna; by changing the phase and amplitude of the two received signals you can peak the signal you want to hear and completely null out the nearby undesirable signal regardless if it is the neighbors plasma TV or an adjacent ham station.

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Anan 200D’s Pan Adapter View



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**The GM Nets meet
daily Monday
through Saturday on
7.277.5 MHz at
17:00Z See you there!**

Would you like to help out
with Net Control Duties?
Contact our Net Manager
George, KB9VF
kb9vf@Comcast.net

Net Preamble & Closing



Net Control Stations:

George, KB9VF
Rick, WØPC
Verle, K8VW
Bill, WB9YUR
Denny, N8XLS
Phil, W9MPA
Bob, K8MPV
Charlie, WD9IQV
Scott, W1BIC
Wally, WB8M
Ed, K8DSS (Alternate)

Net Preamble

This is (your call), today's net control. This net is composed of employees and retirees of the General Motors Corporation .

This net meets daily on this frequency for the purpose of getting better acquainted, expanding our knowledge, and improving our operating techniques. We promote friendship among participants in many locations who have many talents and have or have had a variety of work assignments. Visitors are always welcome to check in and join our daily net. Please stay carefully tuned to net control at all times. This is (your call) (working for or retired from) (your) Division in (your city), (state). My home QTH is (where you live). My name is (your name) and we will now take check-ins, one at a time, please.

[When running the net, pause after about 4 to 5 station during the roundtable and ask for check-ins to allow folks to get on the list.](#)

Net Closing

Are there any late check-ins for the net? (pause for late check-ins). Is there any further business for the net? (pause for any further business) Having no further business, we will close the net at this time. This net is composed of General Motors employees, retirees, and visitors. We meet each day, Monday through Saturday, on or about this frequency, at (**1700z** or 1800z). Thank you for your participation and please return often. This is (your call) now closing the net. 73 and Good Afternoon.

The bands have been rough lately with the declining sun-spot cycle. We still get together daily so tune in and join us.

Net Control Schedule

September 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Notes:					1	2
Please note changes on the net schedule					N8XLS - Denny	WD9IQV - Charlie
3	4	5	6	7	8	9
	WB9YUR - Bill	WB8M - Wally	WØPC- Rick	KB9VF - Geo	K8MPV - Bob	K8VW - Verle
10	11	12	13	14	15	16
	W1BIC - Scott	W9PMA - Phil	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WB8M - Wally
17	18	19	20	21	22	23
	WØPC- Rick	KB9VF - Geo	K8VW - Verle	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil
24	25	26	27	28	29	30
	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WB8M - Wally	WØPC- Rick	KB9VF - Geo

Notes:

Minnie, KD8PAZ finally completed a 3,000 piece puzzle. It took a couple of months to get it all put together. It's hard to believe how many individual parts there really are. When Minnie is done with each puzzle, she coats them with a white glue that dries clear. That way, the picture is preserved forever. Thanks for the Pix Minnie



Do you like Fast Bass Boats?



When the fish are biting you got to get out there and catch them. The Lake of the Ozarks is 70 miles long and has more shoreline than California and Michigan. We have lots of nice fast fishing boats here.



Net Control Schedule

October 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
0	K8VW - Verle	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil	N8XLS - Denny	WD9IQV - Charlie
8	9	10	11	12	13	14
	WB9YUR - Bill	WB8M - Wally	WØPC- Rick	KB9VF - Geo	K8MPV - Bob	K8VW - Verle
15	16	17	18	19	20	21
	W1BIC - Scott	W9PMA - Phil	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WB8M - Wally
22	23	24	25	26	27	28
	WØPC- Rick	KB9VF - Geo	K8VW - Verle	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil
29	30	31	Notes:			
	N8XLS - Denny	WD9IQV - Charlie	Please note the changes to the net control schedule			

Sometimes it's just best to be thankful to be warm, dry and inside a safe place on a rainy day.

Johnny,
W4XKE



(Continued from page 1, SDR Anan 200D) The other Anan only feature is the “Pure Signal” algorithm which samples the outgoing transmitted signal and through a closed loop, corrects the inherent non-linearity and feeds it back to the finals resulting in an IMD figure close to -60dB. That’s impressive! If you are running a linear amplifier, you can use an external sampler and feed the amplifiers signal back into the pure signal algorithm and also correct the non-linearity that inhabits all “linear” amplifiers. Some of the other features include a 10 band receive audio equalizer and a 10 band transmit audio equalizer to customize the audio and match the characteristics of your voice and the microphone you are using. Since all the filtering is digital, you can adjust the transmit bandwidth to about anything you want. You are not limited by 2.4kc or 2.7 kc mechanical or crystal transmit filters; I have my transmit filter set at 100 – 3300 cycles which sounds full bodied without being overly broad. The adjustment possibilities are almost endless and I am still learning. My analog, superhetrodyne rigs are all on the block. SDR’s are the future. Check out the new Icom 7300 for a bargain price of \$1350. You will never own a superhetrodyne rig again. And don’t forget the wonderful pan-adapter display provided by all SDR’s. 73, Joe (W8DCQ)



To the left is the Two Tone Test with “Pure Signal Engaged”
Below left is the same Two Tone Test but without “Pure Signal Engaged”



Net Control Schedule

November 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Notes: <b style="color: red;">Please note the changes to the net control schedule			1	2	3	4
			WB9YUR - Bill	WB8M - Wally	WØPC- Rick	KB9VF - Geo
5	6	7	8	9	10	11
	K8VW - Verle	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil	N8XLS - Denny	WD9IQV - Charlie
12	13	14	15	16	17	18
	WB9YUR - Bill	WB8M - Wally	WØPC- Rick	KB9VF - Geo	K8MPV - Bob	K8VW - Verle
19	20	21	22	23	24	25
	W1BIC - Scott	W9PMA - Phi	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WB8M - Wally
26	27	28	29	30	Notes:	
	WØPC- Rick	K8VW - Verle	KB9VF - Geo	K8MPV - Bob		

Introducing Scott, W1BIC, one of our newer 40 meter GM Net members. He used to try and check-in with his old Kenwood TS-480 running Remote Rig and a cell phone. Now Scott is often heard checking into our net using "Remotehams." Pictured is Scott sitting up on a roof-top at Greektown Detroit (8/9/17) while working our net. The cell phone in Scott's hand has the Android application running that permits him to check-in from anywhere there is an Internet connection. We can't control our band conditions but we can select which "Remotehams" station we use to join our net. Scott has an new Icom IC-7300 that runs the Remotehams Server program in Gaylord, MI. Recently, he found where the receiver noise was coming from and got that fixed. A low noise floor sure helps with the lousy band condx. QST magazine ran a nice article on RemoteHams. Go to the ARRL home page and do a search for "Remotehams" and you will see the article: [Remote Control Your HF Rig via the Internet](#) by Alfred T Yerger II WA2EHI. It's really easy to do especially if you can already do the digital modes like PSK-31 or JT-65. It uses the same equipment. You can change bands and modes remotely including the PTT function. Try it sometime. CU on the Net, 73



Great Lakes HamCon



Michigan International Speedway

Brooklyn, Michigan

Breaking News: ARRL President, Rick Roderick,

K5UR to attend Great Lakes HamCon!

Indoor Commercial Vendors	Forums
Huge Paved Flea Market	Workshops
Free Parking in Infield	Camping
Unique Location	Door Prizes
KB6NU's One-Day Tech Class	VE Testing
Food Concessions	Fox Hunt
Mobility Scooters Available	Two days of fun!

GLHamCon Online Apparel Store now open!!

<https://glhamcon.qbstores.com>

We will NOT run out of indoor space (adding however many event tents that it takes) and we have an unlimited paved area for Flea Market spaces. Of course, best spaces sell first!

www.glhamcon.org

Info@glhamcon.org

Net Control Schedule

December 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Notes:					1	2
Please note the changes to the net control schedule					W1BIC - Scott	W9PMA - Phil
3	4	5	6	7	8	9
	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WØPC- Rick	KB9VF - Geo	K8VW - Verle
10	11	12	13	14	15	16
	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill
17	18	19	20	21	22	23
	WØPC- Rick	K8VW - Verle	KB9VF - Geo	K8MPV - Bob	W1BIC - Scott	W9PMA - Phil
24	25	26	27	28	29	30
0	N8XLS - Denny	WD9IQV - Charlie	WB9YUR - Bill	WØPC- Rick	KB9VF - Geo	K8VW - Verle
31	Notes:					





**Amateur
Radio
Club**

www.gmarc.org

GM Amateur Radio Club Membership Application

Membership in the GM Amateur Radio Club is open to anyone interested in amateur radio

New Member [] Renewal [] Heritage []

Present Call Sign _____ ARRL member yes/ no _____

Name _____

I would like to be called _____ (This will be used for the First Name on your ID Badge)

Mailing address _____

City _____ State _____ Zip _____

County _____ Home Phone # _____

Cell phone # _____ Work Phone # _____

E-mail address _____

If you are/were a GM employee - Work location _____

Yearly dues are: January 1 -- December 31

[] \$20.00 Individual [] \$30.00 Family [] Heritage \$10 (first year free)

Please make checks payable to: **GM Amateur Radio Club or GMARC**

Note: Please enclose a passport photo (for your membership id)

Mail to: **GMARC**
Bobby Corr - N8CY
45601 Fox Ln w apt 106
Shelby Township, MI 48317-5054

Note from the Editor: Many of our old Firebird ARC have also joined the GMARC as "Heritage" members. Nets are on WW8GM/R (443.075 MHz) linked to Echolink via WW8GM-R Monday's @ 8 PM EST or 0:00 Z