HAMRAG

Visit our website for more club and area ham information at http://w9axd.org, or join us on Facebook at this **LINK**





RARA Mission Statement

A member association with common interest of public service to the community through the use of amateur radio.

Presidents Message

Hello Everyone,

Happy August to all. Our August meeting will be on Zoom, and the presentation will be put on by Kerry Tatlow, KD9MAP. Kerry will demonstrate a free online electronic circuit simulator: multisim.com. Multisim allows anybody with a web browser to construct circuits virtually on the screen, and to instrument and to test them as if they were real.

It uses an easy drag-and-drop GUI; think of it as like CAD, but for electronics instead of for 2D/3D modeling.

Today's electronics engineers use simulators like these as the first tool in a toolchain to develop a concept from spec to design to test to fabrication.

Kerry suggests that folks who wish to attend the presentation go to <u>multisim.com</u> ahead of time, set up a free account, and explore a while on their own. For a quick start, select some of the circuits from the prefab library, run them and see if they smoke. Thank you Kerry for putting on the presentation!

I hope to see everyone Friday night, Kurt Eversole—KE9N President



Local Net Information

- Mon 7:00pm RARA Info. Net & CW Lesson, 146.610 (-) offset, pl 114.8 8:00pm - McHenry Cnty. RACES Net, 146.835 (-) offset, pl 91.5
- **Tues** 7:00pm Health & Tech Net & CW Lesson, 146.610 (-) offset, pl 114.8 7:00pm - Rock County Public Service Net, 145.450 (-) offset, pl 123.0
- Wed 7:00pm Stephenson Cnty. ARES Net, 147.390(+)offset, pl 114.8 7:30pm - Greater Beloit Radio Net, 147.120 (+) offset, pl 123.0
- Thurs 7:00pm Health & Tech Net & CW Lesson, 146.610 (-) offset, pl 114.8 8:00pm - Stephenson Cnty. SATURN Net, 147.390 (+) offset, pl 114.8
 - Fri 8:00pm Friday Night Fun Net, KC9GCR, 146.610 (-) offset, pl 114.8
 - Sat 8:00pm Saturday Ragchew Net, 146.610 (-) offset, pl 114.8 9:00pm - Saturday Night Fun Net Milw., 146.910 (-) offset, pl 127.3
- Mon. thru Friday 8:00am to 9:00am Senile Net, 14.287 (HF USB)



Latest news and events on our web site: http://www.w9axd.org

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MEETING

FRIDAY

August 12th, 2022



Local Events and Information

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UPCOMING RARA EVENTS

August 12th, 2022 - General RARA Meeting 7:00 pm on Zoom August 24th - RARA Board Meeting 7:00 pm on Zoom

September 9th - General RARA Meeting September 21st - RARA Board Meeting 7:00 pm on Zoom

ARRL

QST Reviews Elecraft K4D HF/6M SDF Transceiver

ZachTek WSPR Desktop AFJ-212 Ma DX Engineering ISO-PLUS Ethernet Filters

Sail Away with

On the Air

RARA Facebook Page

If your one of the many people that have a Facebook account, then check out the Rockford Amateur Radio Association Facebook page. See what's going on at this LINK.

The August Issue of Digital QST is Now Available!

The August edition of *Digital QST* is now available for viewing on your desktop or laptop. Click here to open the issue. It is also available for reading on your Apple, Android, or Kindle Fire devices.

You must be a member of the ARRL to view this.

2022 RARA Officers and Board

Officers:

President - Kurt Eversole, KE9N, 815-389-2784, kurt.eversole@gmail.com Vice President - Tom Shouler, N9VJU, 815-633-0089, n9vju@comcast.net Secretary - Jeff Metters, KD9MEC, 815-670-5506, jeffmetters@gmail.com Treasurer –Jimmy Curtis, KC9GOL, 779-537-2233, jimhcurtis7818@yahoo.com

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The Arduino

The Arduino (r-dwe-no) (small microcontroller) By Larry Schubert AC9GO

I am sure if you look it up in a dictionary somewhere you will find that there is a better way to tell you how to pronounce it, but I never said I was a dictionary editor. What the Arduino is, is a small microcontroller that you can make do a number of things. Many of which are projects used in ham radio. I was exposed to this kit by my son on a recent trip to his home in North Carolina and the town of Greensboro. He had purchased the "Elegoo Arduino Uno Super Starter Kit" in hopes that I could use it to excite the grandkids (9 year old Issac and 11 year old Olivia). You never know what kids might be into, and this could be one of those things. The last time I saw them was over two years ago and I introduced them to a snap circuit electronics kit that turned lights on and off, made a small fan take off flying and some other things and we played with it for a short time. They got bored (I thought) and we went on to something else. It turned out that what I thought was mostly a flop was a hit with the kids. My son said they never stopped talking about it. Go figure.

The Arduino Uno kit may take a little more time to inspire them, but it has grabbed me. Ok I'm just a big kid at heart. I guess I could be entering my second childhood. But I digress. This is one heck of a kit. It contains a good variety of resistors, leds, a triac a transistor or two, diodes, breadboards, a DC motor, a stepper motor, sensors including (infrared, and temperature), capacitors, cables, wires, ic's, an Arduino Uno controller, a disk with all the software you need and including the manual and there is more. That is what I remember after I looked at it a couple of weeks ago. I am going to have to get a kit for myself. The kit is called the Elegoo Arduino Uno Super Starter kit, and Amazon sells it for \$45.99 as I am writing this.

Now I hate to admit it, but while I was trying to show this kit to the grand kids, I started seeing some things for myself in this kit. They thought this looked like work, and though these kids have a lot of curiosity about a lot of things, they were up to having a fun time at grandma and grandpa's because school is out. Oh, they are doing a lot of things like reading and such, but electronics had not crossed their minds as of yet. I on the other hand spotted a stepper motor in the package, and thought wonder if I could learn enough to teach this little gem to read the swr on a mag loop and then step the motor up or down to adjust it for the frequency resonance. I've been thinking about building a loop, and this might be the answer to tuning it. After the kids went to bed, I did a little more research. That is when I discovered that You Tube had the answer. The kit comes with a lot of parts, including breadboards for making a circuit to try an idea, and You Tube has a program to show you how to adapt a program to your needs. Get Started in Electronics #1 - Elegoo Arduino Uno Super Starter Kit The URL is: <u>https://www.youtube.com/watch?v=A21eaw4V8_4</u> That is the name of the first lesson on the YouTube channel BV3D put on by a 3d printing expert Bryan Vines. He teaches all the lessons on his channel, and what better way to learn electronics and a little computer language. All I want to know is how to marry a couple of programs together, and I think this will do it.

Bryan uses his channel to go through the Elegoo lessons on the Arduino uno kit and the programming for the Arduino. In the very first lesson he shows how to load the software for the little controller, and make an LED on the board blink, and then he shows how you can make it blink faster and slower. Now I am not really interested in blinking an LED, but most things I've done with a computer puts something on a screen, and this is an output that can turn on something on another board if you want it to. Having spent half my life working on circuit boards, I know the parts, and I really don't want to get to mixed up in programming, but here is a controller that you can make do things that only costs a few dollars. Several months back I bought an Antuino. Basically, it is an antenna tuner. It came in a nice metal box, and it will check Antenna swr from 160m to the 440mhz and above. It also can check coax. It was on sale for just under \$100, and it works great for what I need, and it has an Arduino computer inside. Another thing I would like to put together is an Arduino Oscillo-scope which is one of the projects that I ran across while looking at this kit and the Arduino computers. As it turns out, this is one of the few microprocessors available these days, and they can do a lot for the price.

(continued on next page)

The Arduino

Elegoo, the people that make this kit also make 3D printers, and apparently there are a number of 3D printers the use the Arduino computer. You may have heard of the company that produced one of the first 3D printers and boasted that it could make most of the parts for another 3D printer or for spare parts. That is why Bryan Vines got involved with this Arduino kit. His YouTube channel is basically about 3D printing, but the things you can learn from the lessons in this kit are also useful. The other thing is learning electronics which one of the basic things in Ham radio and the tests.

If you are trying to learn electronics, or need a little controller for a project, you might want to check out this little gem or the Arduino kit. The disk that comes with it is set up to work with most Microsoft Windows, Linux, or Mac systems. It might be noted here that there are several versions of this microcontroller, and building a project might determine which one you need. There are also several libraries with software for the different versions. What this kit includes is a basic model, but it is surprising what you can do with it. By the way, if you are looking for something educational for the grand-kids put "tux of math" on your computer and start playing it before they come into the room. When they want to know what you're doing show it to them, and then show them how to play it. Start them at the beginning and let them build up. It is a free program available for Microsoft Windows, Mac OS-x, and Linux. The program involves math programs falling out of the sky, and your job is to answer them before they melt the Igloos below. To stop them you type in the answer, hit the space bar on the keyboard, and a laser shoots the problem down. Give it a try. You will enjoy it also.

So, have fun with your Arduino kit if you get one, and let me know what you think. And if you have kids or grand-kids enjoy them as well.

73, Larry, AC9GO larry.schubert@gmail.com



Editors Note

If you would like to have something published, please call me or email me at <u>kurt.eversole@gmail.com</u>.

Cut-off for the September 2022 issue will be Friday, August 26, 2022 Kurt - KE9N, Editor

Hamfest Information

2022]	Radio	Expo
Northern	n Illinois' Larges	st Hamfest
Dealers! Sept Radios! Boor Computers! 8791 Electronics! Raffles! Talk-In Repeaters 146.760 – 107.2 CFMC	Sunday ember 25th, 2022 ne County Fairgrounds IL-76, Belvidere, IL 61008	Indoor Market 8am-3pm Flea Market 6am-3pm Breakfast - Lunch Bring The Family Hourly Drawings VEC Testing 9am-Noon RV's or Motor Homes Camping Water-Electric \$35
MAAdvance Tickets - \$8.00 – A	KING HAM RADIO FUN At the Gate - \$10.00 - Kids under 12 Fre	ee Tickets required with Tables
Name & Call Address	x \$8 = # of Tickets x \$15 = All tables	
City, State, Zip Phone Email For event questions: Call 773-614-47 Email wa9orc@gmail.com Flyer on website http://www.chicagof CFMC reserves the right to make a	\$10.00 - Inside Electric 33 Make Check payable to: Chicago FM Club 3619 S. 54TH CT. CICERO, IL. 60804 mclub.org any necessary changes required	Outside Electric Total

2022 W9DXCC Convention

The W9DXCC convention is held annually in the Chicagoland area. Sponsored by the Northern Illinois DX Association, this convention is one of the premier DX conventions in the country. Enjoy the day filled with quality programs, equipment vendors, QSL card checking, prizes, and socializing. Be sure to end the day by staying for the convention banquet.

2022 Convention Dates & Location

https://w9dxcc.com

Friday, September 16th, 2022 (DX & Contest Universities) Saturday, September 17th, 2022 (W9DXCC Convention & Banquet)

<u>Chicago Marriott Naperville</u> 1801 North Naper Boulevard Naperville, Illinois 60563



2022 Programs

The following programs have been confirmed for W9DXCC 2022. More are in the works, and will be added as they are confirmed.

3Y0J Bouvet Preview

Adrian Ciuperca (KO8SCA) will provide a preview of the January 2023 <u>3Y0J expedition</u> to Bouvet **Cycle 25 Propagation Outlook**

Carl Luetzelschwab (K9LA) will present on the the outlook of propagation as cycle 25 begins to ramp up.

ARRL Forum

Central Division Director Carl Luetzelschwab (K9LA), Kermit Carlson (W9XA) and others will provide an update as to the happenings at the ARRL.

Crozet Island Preview

Paul Granger (F6EXV) will give us a preview (via Zoom) of the <u>upcoming expedition to Crozet Island</u>. **Operating the CQWW DX Contest From all 40 CQ Zones**

Dick Norton (N6AA) will be providing us insight on the unique situation of having operated the CQWW DX contest from every CQ zone on the planet.

50th Anniversary of the NCDXF

Glen Johnson (W0GJ) will be providing a brief program on the 50th anniversary of the Northern California DX Foundation. The NCDXF will also have an exhibit table displaying their "rock collection" from various DXpeditions.

Radio Frequency Interference and the Radio Amateur (RFI Seminar)

EMI is a problem that affects hams and their neighbors alike. Ed Hare, W1RFI, ARRL Laboratory Manager and one of the editors of the ARRL *RFI Book*, has put together this 30-minute slide presentation to give an overview of politics, personalities and technical issues involved in EMI control. His presentation outlines the standard causes and cures for interference. The question -and-answer session that follows the formal slide presentation turns this into a real RFI work-shop.

Banquet Keynote Speaker

Tim Duffy, K3LR – Going forward for DXing Operations

Initial Setup of BlueDV with AMBE3000 Dongle

This approach to "going digital" offers advantages to the Ham:

Don't wait 5 years for the Sunspot cycle to fully recover the HF bands. Have fun now.

Get clear Digital sound with no hiss, QRM or lightning crashes.

Thousands of digital channels give you access to just about every country in the world.

No expensive Handie Talkie radios to buy or struggle to build their complicated code plugs.

No expensive lithium HT batteries to buy and replace or any expensive battery chargers.

No need to buy hotspots or learn the Pi-Star programming language.

No need to run a separate computer to change talk groups or rooms using Pi-Star.

No expensive towers, various antennas, lightning arrestors, or ground systems to install.

No need to hire expensive tower climbers or risk your life to install and maintain your antennas. **Resources: (The author has no commercial ties to the following firms.)**

Northwest Digital Radio dongle: <u>http://nwdigitalradio.com/product/thumbdv/</u>

Free "BlueDV" software: https://software.pa7lim.nl/

To start in digital, you must have a DMR ID number and register that number with the Brandmeister Network. You must also complete both stages of registration to access D-Star.

Turn on your computer's "Device Manager" before you plug in the AMBE3000 dongle in a USB port.

Open the "PORTS" list and plug in the dongle to see which COM port number is being assigned. In the BlueDV app under "Menu" open the "**Setup**" page. See the sample page at the end of this document.

Enter the COM PORT number in the appropriate locations and the other required information. Click on SAVE at the bottom of the page.

On the BlueDV startup page, click on the **SERIAL** and **DMR** buttons to turn on the DMR mode.

If the Status line says "Can not open COM port", review the "**Setup**" page to make sure that the "AMBE" area has the "Serial Port" block assigned to the same COM port.

In the box on the right, click on "BM Lookup".

In the "Search Talkgroup" box, type in the Talk Group number, for example "999". Click on the line of text that appears as "9990 Parrot". To the right of the number, move the slider over to the "P" for private when using this DMR Parrot.

A new box will display. Set the mic level for DMR from -15. Run a few tests on Parrot.

After getting microphone and speaker levels set in DMR, click on the "9990" box and type in

3100. Set the slider back to "G" for Group Call.

Below the "3100" box it will display "BM US Nationwide Bridge".

You must do a short PTT to get the talk group to become active.

Request a radio check on this nationwide channel.

To do an audio test on Fusion, simply search for the word "parrot" in the list. On D-Star, select a room like "REF0001" and change it to the letter "E" for an echo test.

..... How it works.



At the top of the screen you will see "**Menu**" and "**Update**". Click on the "Update" button to reveal the "Update DSTAR hosts", "Update call database", and "Update DMR masters". Click each of these so the databases in the app are current. It will take a few seconds for each one to download. You will want to click the "Update call database" on a regular basis as many hams are joining and getting their new DMR ID numbers assigned. If you begin to see DMR numbers appearing without names and callsigns, you need to update the call database.



While the **SERIAL** button and the three digital **Mode Buttons** are available on the left, turning on a Mode does not make it immediately active. For example, if you select Fusion, you will need to go to the top line and choose a room from the drop-down list of Fusion rooms. In this example, it is "America Link". Then click on the blue **"Link"** button above. If you were linked to another room, you must **UNLINK first** before linking to a new room.

On the right side of the window below, you will see three simulated **Green LEDs**. In this example, it indicates that Fusion is active. To select another mode for transmission that is on but not active, click on the **LED Label** ABOVE the simulated LED and it will switch and the LED will turn green on as long as any active QSO has ended on the previously active mode. The green LED also marks the mode that will transmit if you press your spacebar or you click the button to the left of the "**AMBE3000**" graphic.

The "Last Heard" list, shown here, will display the most recent **signals received** based on your settings in the app. If you have a QRZ account, double click on a ham's call sign **anywhere it is displayed** in the BlueDV app and his Contact Page will appear.

	Lastheard	AMBE BM	lookup APF	RS chat
	Time	Call	Name	Mode
	11/23 AM	W4WYD	Barry	FUSION
	11-23 AM	KM4SHM	Unknown	FUSION
0	11:23 AM	M1DYU	Unknown	FUSION
	11:23 AM	W4WYD	Barry	FUSION
	11:23 AM	W4WYD	Barry	FUSION
	11:24 AM	W4WYD	Barry	FUSION
	11.24 AM	MIDYU	Unknown	FUSION
	11:24 AM	W4WYD	Barry	FUSION
	11.25 AM	MIDYU	Unknown	FUSION
	11.25 AM	MIDYU	Unknown	FUSION
	11:26 AM	W4WYD	Barry	FUSION
RX	11:27 AM	MIDYU	Unknown	FUSION
	11.27 AM	W4WYD	Barry	FUSION
	DMR D	STAR FUSIO	N	AMRE3000

If you have more than one mode active, it is best to display the "Last Heard" window so you can quickly determine which mode you heard last before you attempt to transmit. The most recent transmission will be positioned at the bottom of the list. Remember, to turn on the Green LED the label above the LED for that mode must be clicked before you will be able to transmit within that mode.

The three "Status Blocks" below the main window, DMR, D-Star and Fusion, indicate the current condition of the mode. For example, the D-Star block below says, "Linked to REF030 C" and the ham's call sign is "MM3TWA". The DMR block shows "Logged Out". The pink color means this ham, MM3TWA, is currently transmitting. If the MM3TWA and the other side of his QSO remain active without much of a pause in between transmissions, the app will not switch to one of the other modes without clicking in the Status Block or LED Label. If all three modes are active, double clicking in the Status Box will allow listening to that mode at the current time. If another mode becomes active, however, the app will switch to that mode.



When using both DStar and Fusion modes you will use the line above the main window and click the "Link" and "Unlink" buttons when switching "rooms". To switch when in these two modes, press the "Unlink" first, then select the new room from the dropdown lists and press "Link" again.

FUSION V	America Link ~	Link Unlink • YSF •
SERIAL	Frequency DMR master	Firmware AMBE3000R Dest TG

The DStar rooms include letters that identify a "Module" being used. For example, REF030 C uses the "C" module which indicates the repeaters are tied into 2 meters. The "B" Module is tied to 70 cm repeaters and "G" is tied to a computer Gateway instead of an RF repeater.

Some repeaters are active on multiple Modules, others are tied to only one. If you hear a QSO on DStar but you do not get a reply to your call, it may be that they are on a different Module than you are. The Setup Page can be set to "B" for 2 meter repeaters, which is currently the most common, and then enter the "Default Reflector" you monitor such as REF030 C.

Search cal	AMERICA			Lastheard help	AMBE BI	M lookup	APRS chat	10
Call	Name	DMR id					S AMBE3000	400
					[~	G	
Search Tai	lkgroup amer				~~~		Fusion Chin	
TG	Name		^	bang	10.2	3 enk	rusion Gain	10
93	North America			vor		1 mie	-	-15
31656	America-Link			VOA U	up c ·	1 Inc	DOTADO	10
31697	Russian Americans	,	~	D	MRGain		DSTAR Gain	
04.000	Click to selec	t!		mic		8 spk -15 mic	· ·	-5 5
		No.	1000					_

To change Talk Groups in the DMR mode, several options are available. First, click on the tab **"BM Lookup"** for Brandmeister lookup. In the box titled **"Search Talkgroup"** simply type in the name or talk group number if you know it. If you start to type the name, it will begin to display the names that begin with those letters.

Here you see the letters for "America" were typed and after "amer" was entered, a list of Talk Groups that had the word America appeared.

Simply double-click the name you want from the scrollable list and the "Search Talkgroup" window will make that talk group active. If there is no activity, you may need to key the PTT to activate the room.

The **"AMBE**" tab can be clicked to open the audio adjustment screen. Note that each mode has both **"Speaker**" and **"Microphone**" sliders that can be adjusted. For example, both the DMR and Fusion microphone settings in this example are set to minus 15 units.

Before transmitting on DMR, open the 9990 talk group to "echo test" your microphone setting to make sure it is not set too high, a common complaint. This can also be done on Fusion on the "Parrot" room and in DStar at REF001 set to "E" for echo testing. If you update your BlurDV app, reset these adjustments. If you run any other application that adjusts audio on your computer, be sure to recheck your settings when you return to the BlueDV application. The **Signal Meter** at the top of the screen can give you a quick view of your current microphone levels. It should peak **no higher than about 9** on the meter.

On the **Setup Page** below, you can establish the default rooms for two of the three modes. Once the BlueDV app is turned on, those D-Star and Fusion rooms will be connected initially. The last DMR "talk group" setting will be retained when the app is restarted. All of the rooms can be changed by using the procedures previously described when desired.

At the top of the DMR column you will notice that the characters "zero and one" have been added to identify a "DMR ID Hotspot" currently in use within this ham's shack. If you have other hotspots in operation you can avoid conflicts on Brandmeister by identifying each hotspot by numbering them individually. Make sure the "DMR ID Simple" is just the original DMR number without any added numbers.

A change at Brandmeister in 2020, requires you to create a new "Master Password" for your hotspots. It should not be "passw0rd" as shown below in this graphic.

Click **SAVE** in the lower left corner to retain the changes made on the Setup page.

eneral			DMR			AMBE		
Your Call	AE9EE		DMR ID hotspot	010201801		Use AMBE	Thumb[V/DVStick
Serial Port Radio	COM5 ~	Enable DTR	DMR ID simple	0102010-		Model AMBE	AMBE3000	~
Save QSO Log			OPC	-100	^	Serial Port	COM5	~
RX/TX Colors	☑ Invert	RXTX screen	una	0	~	DMR ID	0102010	
Frequency	431300000		Enable at start			Baud rate	460800	~
Mode Timer	10 Seconds		DMR type	BM	~	Use AMBEServer		
Radio TX power			No inband data			Host/IP		
			Brandmeister			Port	2460	
Latitude	+ ~ 42.1700	in decimals	DMR Master	3103 US	~	Start/Stop Beep		
Longitude	- ~ 089.0000	in decimals	Master Password	passw0rd		Kill timer (min)	5	~
Always on top			DMR+			DSTAR text	Blue DV on I	Dongle
Language	English	 Active after restart) 	Master	TGIF	~	PTT keying		
STAR						Serial port COM	15	~
DSTAR Module	в ~		FUSION			RX Indicator	Enable	
APRS			QTH Location	EN52LG		RTS		High
Enable at start			Enable at start			ODIR		O Low
Default reflector	REF030C	(Empty is not connect)	Default reflector	● YSF ○ FC:	s	PTT Button		
Deradic Telleului		(Empty is not connect)	VCE	Carolina Link	~	CTS DSB		High
			Tar			O DSH		Low

In the main Menu, click on "Update".

You will see a listing of "Update DSTAR hosts", "Update call database" and "Update DMR masters".

If you are using DMR, you will want to click on "Update call database" on a regular basis so your list of DMR ID numbers stays up to date as new hams join. It will enable you to click on a call sign and get the current information from the ham's QRZ page. Once the "Update call database" is clicked, it can take 10 seconds or more for the DMR ID file to appear. Click the file to update the list in your copy of BlueDV.

Possible Problems

If you have made significant changes and SAVED them on the Setup Page, you may need to remove and reinstall the AMBE3000 Dongle in the USB port to reboot the device.

Do you have other hotspots on Brandmeister using your DMR ID? You may need to add an extension to the end of your DMR ID number on these hotspots such as 01, 02. It may take some time for Brandmeister to recognize these changes and allow this additional device to transmit on DMR.

If you get the message, "Can not open COM port", or if you attempt to operate BlueDV and you get error messages in the Status Blocks, make sure you do not have two instances of the BlueDV app running at the same time.

One strange issue involves DMR. If you are transmitting on D-Star or Fusion, your name and call sign will appear in the "Last Heard" list. Unfortunately, it doesn't happen with DMR. You'll see the other guy in the QSO, but your name and callsign will not appear in YOUR "Last Heard" list. Maybe an update is coming soon from David.

If you run "Windows Defender" or other protection software, make sure you change it's settings to allow BlueDV to run.

If you have problems establishing a COM port, you may need to install a new driver. Go to this link:

https://www.ftdichip.com/Support/Documents/InstallGuides/AN_396%20FTDI%20Drivers % 20Installation%20Guide%20for%20Windows%2010.pdf

Is your computer reporting the error "Unhanded exception has occurred in your application" when starting the BlueDV app? Update to the latest version by going to this link. https://software.pa7lim.nl/BlueDV/BETA/Windows/

After the installation, reset your microphone and speaker volumes under the "AMBE" tab using the "Echo" or "Parrot" channels of each mode described earlier in this document.

Version 21, March 31, 2021 by Jim Hall - AE9EE

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DX INFORMATION

				An	noun	ced DX Operations: 2022
				[AI	Dout ADX	0] [ADXO Text Version] [Abbreviations] RSS
						[Submit a Dxcedition] [(Cai DXCAL link]
NC				Active/Up	coming	Expired Previous Years
NC					Ex	spired Contest and Special Operations (1995+)
NC	ЗзК	N	lG3K		Las NG3K	t updated: Monday, 08-Aug-2022 00:10:00 EDT [Currently Active Operations] North NGRK NGRK [Spots provided courtesy of <u>DX Wetch</u>]
Start Date	End Date	DXCC Entity	Call	QSL via	Reported by	Info
2022	зК	N	IG3K		NG3K	NG3K NG3K NG3K NG3K
Ju	ıly			RSG	B IOTA Con	test (Jul 30-31, 2022) Check here for pericontest activity too.
Aug	gust					
2022 Aug01	2022 Aug08	Madagascar	5R8LH <u>NEV</u> [sects]	LoTW	100X 20220803	By IV3FSG fm Andavadoaka (LG17ow); HF; CW SSB + digital; QSL via IK2DUW
2022 Aug01	2022 Aug13	Azerbaljan	4K7DK	LOTW	<u>TDDX</u> 20220803	By DK1DKE; 80-10m; CW FT8; QSL via DL1DKE (B/d)
2022 Aug01	2022 Sep09	Madagascar	5R8LH Isostal	IK2DUW	425DXN 20220722	By IV3FSG; HF; SSB + ditigal
2022 Aug01	2022 Sep21	Solomon Is	H44MS [sects]	LoTW	100X 20220719	By DL2GAC; 80-8m; SSB, some FT8; 800w; begin date uncertain
2022 Aug05	2022 Aug09	Rodrigues I	3B9 [spots]	тва	<u>TDDX</u> 20220519	By 3B8FA 3B8GF 3B8CF 3B8FV 3B8BAN; HF; 100w; G5RVs; also 3 QO-100 portable satellite stations
2022 Aug07	2022 Aug20	Tonga	A35JP/p Iseastel	LoTW	JADRQV 20220606	By JAORQV fm Niuafo'ou Island (OC-123)); 80-6m; CW SSB FT8; QSL via JAORQV (B/d, d w/ SASE); exact dates subject to change
2022 Aug08	2022 Aug14	Tanzania	5J2JK Jacobal	DL8AAI	DXW.Net 20220730	By DL8AAI fm the Kilimanjaro region and Moshi; check 18.144, 21.244 MHz; SSB
2022 Aug08	2022 Aug18	St Kitts & Nevis	V4 Jacobal	NT5V	DXNews 20220622	By NT5V as V4/NT5V fm St Kitts; HF; CW SSB FT8
2022 Aug08	2022 Aug20	Maldives	8Q7AG Isoctal	LoTW	<u>TDDX</u> 20220622	By IZ2DPX fm IOTA AS-013; HF + 6m; SSB + digital; 100w; vertical; QSL via Club Log OQRS
2022 Aug09	2022 Aug23	Seychelles	C3 <u>879</u>	TBA	DXW.Net 20220507	By EA3BT as S79/EA3BT and EA3WL as S79/EA3WL fm Praslin, La Digue, Mahe Is (IOTA AF-024); mainly satellites, but holiday style SSB CW FT8
2022 Aug10	2022 Aug16	Svalbard	CodW	KA1S	100X 20220608	By KA1IS as JW/KA1IS; @JW5E; HF; CW SSB NG3K NG3K
2022 Aug12	2022 Aug16	Angola	D2TX	PA3CMC	20220713	By ZS4TX; HF + 2m EME NG4K NG4K NG4K
2022 Aug12	2022 Aug19	Grenada	J3	N9GB	20220711	By N9GB as J3/N9GB; 40-10m; CW, some SSB FT8; holiday style operation
2022 Aug14	2022 Aug20	Maldives	8Q7QE <u>NEV</u>	LoTW	DXW.Net 20220805	By EA5Q fm Thinadhoo I (IOTA AS-013, MJ63sI); HF; CW; 100w; vertical; QSL via EA5Q
2022 Aug20	2022 Aug24	Maldives	8Q7QE	LoTW	DXW.Net 20220805	By EA5Q fm Fulidhoo I (IOTA AS-013, MJ63rq); HF; CW; 100w; vertical; QSL via EA5Q
2022 Aug20	2022 Aug27	Aland Is	OG0C	LoTW	OH5CW 20220803	By UT5UY OH2MZB OH2JIU OH5CZ OH5CY OH5ELX OH5CW fm rare KO09; 160-2m; CW SSB FT8 RTTY; QSL via OH5C
2022 Aug20	2022 Aug31	St Kitts & Nevis	V47FWX	MOURX	DXNews 20220622	By G0FWX fm St Kitts; HF
2022 Aug23	2022 Aug23	Albania	ZA	LoTW	100X 20220624	By Z35M as ZA/Z35M; 40-15m; CW SSB; 5w; QSL via Z35M
2022 Aug28	2022 Sep25	Tonga	A35JP	LoTW	JADRQV 20220605	By JA0RQV fm IOTA OC-049; 80-6m; CW SSB FT8; QSL via JA0RQV (B/d, d w/ SASE); exact dates subject to change
Septe	mber	1	G3K		NG3K	NG3K NG3K NG3K NG3K
2022 Sep03	2022 Sep05	Ogasawara	JD1BOW	JADJHQ	DXW.Net 20220718	By JA0JHQ; 160-2m; CW SSB + digital; 100w; vertical, delta loop, end-fed wires
2022 Sep09	2022 Sep21	Chatham I	<u>ZL7</u>	OQRS	KSWE 20220527	By KSWE KD5GEY as ZL7/KSWE fm Kaingaroa; 160-10m, incl 60m; CW FT8 FT4 SSB RTTY; 500w; Hexbeam, vertical; see Web page for full QSL details
2022 Sep10	2022 Sep23	Dodecanese	SV5 NEV	LoTW	20220803	By HB9OAU as SV5/HB9OAU; 80-6m; SSB RTTY FT8; QSL via HB9OAU Buro or direct w/ SAE + 3USD
2022 Sep16	2022 Sep28	San Andres & Providencia	5К0Т	Club Log OQRS	20220516	By LU1FM LU9FHF LU7MT LU8YD fm San Andres I; 80-8m; CW SSB
2022 Sep19	2022 Sep26	Svalbard	AUWL		TDDX 20220714	By N4XP N4HU SM5AQD WB4JTT W6IZT W6HC YV5EED; @JW5E; 160-6m; SSB CW RTTY FT8

RARA MEMBERSHIP FORM

If you would like to join the Rockford Amateur Radio Association, please fill out the form below and mail it (with the membership fee payment) to the address shown at the bottom of the form. If you have any questions contact our treasurer, Jimmy Curtis, KC9GOL, at 779-537-2233, jimhcurtis7818@yahoo.com Thank you for your support!

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202	2 RARA Membership Form
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