

The Centurion



The 3905 Century Club Monthly Newsletter

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Welcome!

Hello and welcome to the September, 2023 issue of the 3905 Century Club Centurion Newsletter. The big news for this month is that the Eyeball has arrived! Here's wishing the folks traveling to the Eyeball a safe journey and wishing those of us who can't attend lots of contacts on the nets with those who are attending!



We are always looking for article ideas and contributions. As Kirk AA1NA would say—"The Centurion would not be the same without your articles"!

Please send articles or suggestion for articles to:

k7qhu@outlook.com.

Finally, the Eyeball is Arriving on September 7!

Here is wishing everyone safe travels to and from the Eyeball. If you are going to the Eyeball, please consider taking a few photos and writing a paragraph or two or as many as you want, about your Eyeball adventure and submit them to the Centurion for next months issue. I would like to have a section dedicated to your experiences at the Eyeball. Those of us that cannot travel to the Eyeball this year would really enjoy hearing from you. If you operate mobile at an "Award" or "hard to get state" location on the way to or from the Eyeball, a photo and a few words would be great. Check out the photo and paragraph that Paul, W1IP posted on Facebook and is reprinted in this issue on the "Trips Page". It's a great example of how to do it.!!

Dean's Column

Notes from the President

By Dean Davis, N7XG



Il roads lead to triangle, Virginia and I have included a map below of the second half of my trip from Oklahoma City to Tringle. As you can see from the little white box it is approximately 1500 miles. It is not easy to travel from the pacific Northwest but will the help of my reliable cap drive Clay I am certain we will arrive on time

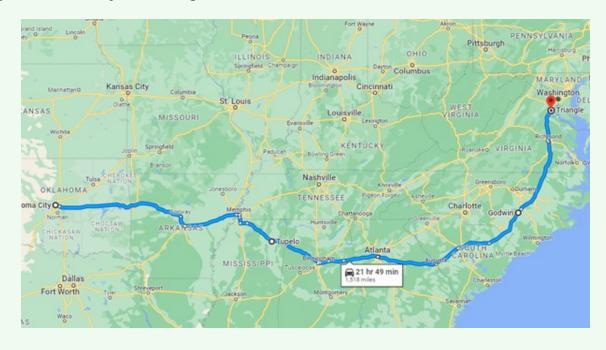
The Eyeball event has always been an opportunity for mobile stations to go to locations that are new to them and others stations getting in the car and discovering new landscape. For all of you that will not be making the trip, this event if nothing else will get you cards from Vir-

ginia and the surrounding states. When I first started with the club I was on a phone call with Gordon, K7MFG in the fall of 2002 just after the 2002 Eyeball in NJ talking about "stuff" when I mentioned to him having few cards from NJ. He responded with the following:

There is an eyeball every year in different parts of the country and this is an opportunity for you to "stock pile" cards from these areas.

He went on to tell me that just during the Eyeball week he worked over 80 stations resulting in a huge pile of cards.

Rumor has it that there will be people starting their trip as early as September 2nd and my suggestion to everyone is to get on the radio and make contacts.



Now for our outgoing schedule:

9/5 (Tue) I fly from Portland to Oklahoma City where Caly, WA6LBU will pick me up

9/5 (Tue) we travel by card to Tupelo, MS 576 mi. Look for us on the Tuesday evening nets

9/6 (Wed) travel from Tupelo to Dixon, SC Expect us to be on the nets from the NC/SC state line

9/7 (Thr) travel from Dixon, CS to the Eyeball site

9/7 (Thr) a bunch of us are heading to the MD/DE state line only for the early nets.

BYW, there are no allowances for Food stops, potty breaks or rack time. Our goal is to get there. Clay has assured me that he has all of the tools and parts for any kind of malfunction in his Jeep.

73,

Dean

BEN'S COLUMN

Notes from the Awards Secretary



By Ben Goldfarb, AE4NT

Ben is traveling to the Eyeball this month and his column will return next month. Safe travels Ben!



Century Club Logger

Backup/Restore and Data Recovery

Recently I was asked by one of our members to help in recovering data from a hard drive that crashed his system. After spending several hours, we determined that his hard drive was "toast" and unable to recover his radio logbook. In the 20+ plus years I have been asked many times to help with situations like this and in all cases I was unable to recover their data. One person insisted that it was my fault his system crashed. So the topic this month is both Backup and recovery and the following is an overview of what backups are very important:

Backups are crucial for a variety of reasons, primarily focused on ensuring data integrity, availability, and recovery in the face of various types of incidents or disasters. Here are why backups are important:

- Data Loss Prevention: Accidental deletion, hardware failures, software corruption, cyberattacks (such as ransomware), and natural disasters can all lead to data loss. Backups provide a copy of your data that can be restored in case the original data is compromised or lost.
- Cybersecurity and Ransomware Defense: Ransomware attacks are becoming increasingly common, where attackers encrypt your data and demand payment for decryption. Having up-to-date backups allows you to restore your data without having to pay the ransom.
- Software and Hardware Failures: Hard drives, storage devices, and other hardware components can fail unexpectedly. Backups protect against such failures by ensuring that data is stored on multiple devices.
- Peace of Mind: Knowing that your important data is backed up can provide peace of mind. You won't have to worry about losing important files or data due to unexpected events.
- Personal Data Protection: For individuals, backups ensure that cherished memories, personal documents, and important files are preserved even if devices are lost, stolen, or damaged.

In summary, backups are a critical part of data management and protection. They provide a safety net against various types of data loss, ensuring that your information remains safe, accessible, and recoverable in the face of unexpected events or mistakes

So why is this so important? Simple once you have a system crash and all of your data is contained on your failed hard drive you are "up the creek without a paddle" and there is no recovery. Over the past 20 years I have received many calls from people using the Century Club Logger requesting assistance in recovering their contact data after a hard drive failure and in every instance, I explained to them that this could not be done. Going forward the solution is very simple and can be done by everyone as follows:

Take backups frequently to an external device such as a flash drive or external hard drive for all of your data that is important to you. Included with the Century Club Logger is an easy to use program that will provide your with backup/restore capabilities. With this utility you can set events to remind you to backup every so many days. As for other applications and important data I would suggest you find a backup program for Windows and it's file system.

Mike, KU1V continues his spring, 2023 trip to the southwestern national parks. Thanks again Mike for taking us along on the trip!

Petrified Forest National Park and More!

By Mike Rush, KU1V

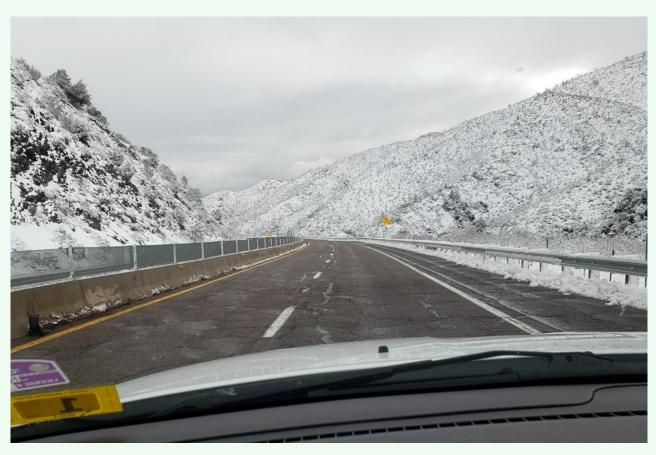
March 2, 2023

Starting early for travels to the Petrified Forest NP from Tucson, AZ, and the Saguaro NP. The plan was short 4:30 hour drive that turned out to be near 10 hours. Original plan was drive through Globe and Show Low and continuing to Holbrook, AZ, (Blue line). However, due to somewhat unexpected snow fall and road closures this route was not usable. Next route (Yellow Line) was attempted via Phoenix and Payson. Again, due to road closures this route was not passable after Payson, AZ. Receiving some local knowledge in the Payson area, the next route (Red Line) was used bypassing the main route. Regrettably this route was slow driving due to snow fall with unexpected road delay. Further, this route took me through Winslow AZ near 55 miles west of Petrified Forest NP requiring some back tracking.

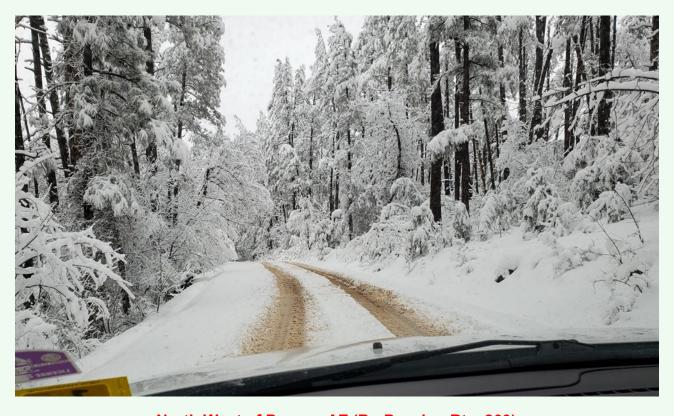




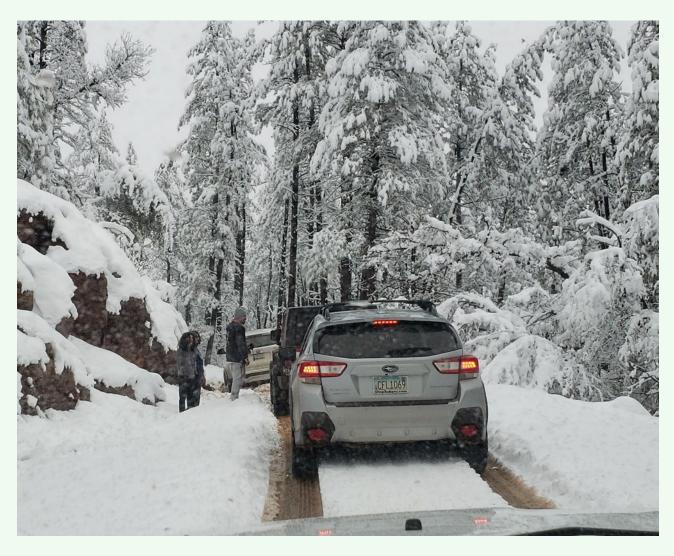
Near Casa Grande, AZ. Clouds (condensation) form on the NE side as SW wind blow around the mountain.



South of Payson AZ (High Desert?)



North West of Payson AZ (By-Passing Rte. 260)



Off road, two wheel drive NO chains, what more can one say – 1 hour delay.



General area on short cut route.



North of Pine AZ., slight delay, but now all clear to Petrified Forest NP



KU1V, Petrified Forest NP

Continuing west from Petrified Forest NP to Joshua Tree NP. After a good night's rest in Holbrook AZ, I am happy to be back on Interstate 40. This route will take me through Flagstaff AZ where many roads, including portions of I-17 were closed last night due to heavy snow. News media reported some travelers apparently spent the night in the vehicles.



Mountains Easterly of Flagstaff AZ

Continuing I-40 to Arizona 95, Parker Junction (South of Needles CA), then dropping South through Lake Havasu City (Home of the London Bridge), then to Vidal Junction. After Vidal Junction following route 62 near 29 Palms (Marine Base) and after many miles of straight road, I am continuing onward for the North entrance of Joshua Tree NP.



Route 62 East of 29 Palms CA - must be a turn here somewhere!!!

The Joshua Tree NP visitor center (Norther) is one of NP visitor centers not located within the NP boundaries, but about 5 miles outside of property. Thus, after a brief stop at the visitor center, I continue to the NP entrance gate.



KU1V, Joshua Tree NP



KU1V, Operating position 20M net, Joshua Tree NP

Snow covered mounts in back ground is the San Bernardino Forest, North East of Palm Springs, California.



Among some of the largest Joshua Trees

Joshua Tree National Park (U.S. National Park Service) (nps.gov)

One of the reasons I picked this time of year for travels, was the temperatures which are more comfortable in the fall and spring, with highs typically in the range of 70-85°F (21-29°C) and lows around 50 (10°C). In the winter, highs are usually around 60°F (15°C) and near freezing at night. Summers are hot. The highs are typically over 100°F (38°C), and lows are usually around 75°F (24°C) at night. Although springtime could be busy tourist times, I did have moderate traffic but no difficulties,

After a portion of the 20m SSB net, I head North for Death Valley and some evening nets.

Leaving Joshua Tree NP enroute to Death Valley NP, I chose a route more to the west as being well traveled as opposed to a slightly shorter route easterly thru the baren lands. Thus, leaving Town of Joshua Tree following routes 247 Barstow / 58 Ransburg / 395 Olancha / 190 to park entrance. Drive time was a little over 6 hours with fuel stop and sand storm. Yes, good old sand storm visibility was probably down to about 200 /300 feet. The good news, I did not lose any paint on my Jeep.



KU1V, operating in California Death Valley NP

This park is known as the Hottest, Driest and Lowest National Park.

<u>Death Valley National Park (U.S. National Park Service)</u> (nps.gov)



Did not purchase any fuel here, but these gas prices could get one's attention. Glad I planned for fuel on next day's travels.

After a short nap, I am my way to Sequoia National Park.

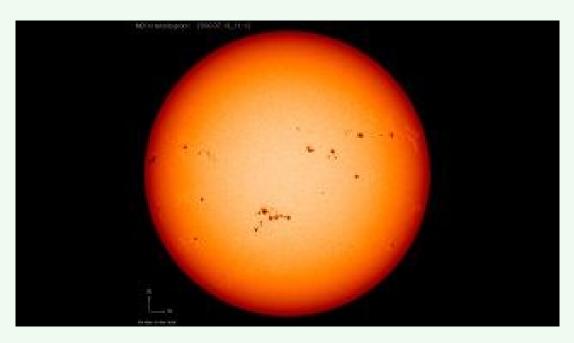
Best 73 Mike KU1V

The below article is reprinted from the "Space.com" website

Solar activity may peak 1 year earlier than thought. Here is what it means for us

By Tereza Pultarova published April 20, 2023

A team of researchers who had previously issued an alternative solar forecast that turned out to be better than NASA's claims the sun's activity will peak next year.



The distribution of sun spots on the sun's disk varies throughout the 11-year solar cycle. (Image credit: NASA)

The sun may reach the peak of its current activity cycle in 2024, one year ahead of official predictions, new research suggests. But even after the sun reaches its peak, its wrath will continue to threaten Earth for at least the next five years.

A team of researchers who had previously released an <u>alternative solar cycle prediction</u> that turned out to be more accurate than official forecasts by NASA and the National Oceanic and Atmospheric Administration (NOAA) recently published improved estimates of the current <u>solar cycle</u>'s strength and progress.

The team's finalized forecast for the current cycle expects it to peak in late 2024, one year earlier than NASA and NOAA had predicted. The cycle, the team thinks, will reach about 185 monthly sunspots during its maximum and thus be somewhat milder than what the team originally forecasted. This peak intensity will place this cycle at about the average compared to the historical record.

The current cycle, the 25th since records began in 1755, kicked off in 2019 and, according to official predictions, was supposed to be extremely mild, peaking with about 115 monthly <u>sunspots</u> in 2025. The solar cycle is the approximately 11-year ebb and flow in the sun's magnetic activity that manifests in the number of sunspots, <u>solar flares</u> and eruptions. These cycles vary in intensity, with the weakest on record having produced less than a hundred spots per month during the maximum and the strongest peaking with nearly 300.

Cycle 25 followed the extremely weak Cycle 24, and NASA and NOAA thought it would be just as underwhelming. However, since Cycle 25 picked up momentum in 2022, it has been steadily outpacing the official predictions in line with the alternative forecast issued by a team led by NASA research scientist Robert Leamon and Scott McIntosh, the deputy director at U.S. National Center for Atmospheric Research (NCAR).

But why do Leamon and McIntosh's results diverge so much from the official estimates, and why are they closer to reality than what the bigwigs agreed on? It turns out that solar cycle forecasting is still rather crude and with only 25 cycles on record, the amount of data available for computer modeling is limited.

In their studies, Leamon and McIntosh therefore explore alternative ways of predicting the sun's behavior based on the star's magnetic activity. By analyzing historical records, they found that the strength of every subsequent cycle depends on the time when the magnetic field of the previous cycle completely dies. This event, which the team dubbed the terminator, doesn't happen exactly at the minimum, but up to two years later when the next solar cycle is slowly waking up.

"There's always the overlap between the old and the new," Leamon told Space.com.

The researchers think that understanding solar cycles not as framed by the miminums but rather by the terminator events can produce more accurate predictions.

"If you measure how long a cycle is, not the minimum to minimum, but from terminator to terminator, you see that there is a strong linear relationship between how long one cycle is and how strong the next one is going to be," said Leamon.

The original prediction Leamon and his colleagues made was based on the expectation that the terminator event ending Cycle 24 would arrive in mid-2020, which would suggest a very strong Cycle 25. Cycle 24, however, ended up lingering for a year and half longer, with its magnetic field eventually completely disappearing in December 2021.

"When the [terminator] event actually happened, we changed the input and that gave us a somewhat milder prediction than what we expected originally," said Leamon.

The terminator events are part of what scientists call the Hale cycle, a 22-year cycle of magnetic activity that encompasses two 11-year solar cycles. During the Hale cycle,

magnetic waves of opposing polarity move from the sun's poles toward the equator where they meet and cancel each other out. When these magnetic field lines are about halfway through their journey, the <u>sun's magnetic field flips</u>, which corresponds with the approximate time of the solar maximum. The Hale cycle is complete when the magnetic field returns to its original state after two solar cycles. The terminator, the canceling out of the magnetic waves at the equator, can be observed in historical records of sunspot generation as a complete disappearance of sun spots in the star's equatorial region.

Based on their calculations, Leamon and his colleagues expect the sun's magnetic field to flip in mid-2024, with the solar maximum of the current solar cycle to arrive a few months later.

For us on Earth, that means we are likely heading into a period of more frequent and more intense <u>aurora displays</u>, but also of more intense <u>space weather</u> events that can create trouble in Earth's orbit. Auroras are produced from the interactions between material that flows from the sun and <u>Earth's magnetic field</u>. Similar reactions that produce these stunning natural light shows, however, thicken Earth's residual atmosphere at high altitudes where satellites orbit. That leads to increased drag that can cause <u>satellites</u> to fall from orbit, among other problems. In February 2022, <u>SpaceX lost a batch of 40 brand new Starlink satellites</u> after launching them into what forecasters considered to be only a mild solar storm.

The arrival of the solar maximum will not mean that we will be out of the woods when it comes to the risk of disruptive space weather events. Leamon said that according to available data, powerful solar flares and eruptions frequently take place on the downside of odd-numbered cycles, such as the current Cycle 25. In the case of even-numbered cycles, the risk of dangerous solar storms is highest during the first part of the cycle.

"Since Cycle 25 is odd, we might expect the most effective events to happen after the maximum, in 2025 and 2026," said Leamon. "This is because how the poles of the sun flip every 11 years. You want the pole of the sun in the same orientation compared to the poles of Earth so that then causes the most damage and the best coupling from the solar wind through Earth's magnetic field."

The biggest solar storms of the current cycle, Leamon added, are therefore mostly likely going to happen after the maximum.

"We need to be vigilant for about five more years," he said.

September 2023 Club Events

Note: Regular Board Meetings are always held on the second Saturday of each month, local time at 9PM Eastern, 8PM Central, 7PM Mountain, 6PM Pacific.



• 3905CCN Board Meeting: Saturday, September 9, 2023. This month the Board Meeting takes place at the Eyeball.

Did you know that videos of all Board Meetings are posted on the Club's YouTube channel? Courtesy of the Board and produced by Sammy KB1XP, you can view them at: (11) 3905 Century Club - YouTube



Weekly Zoom Meeting on Wednesdays at 01:30pm Pacific Time. Check your email for the Zoom log-in information.

Road Trips!

Al4K and K9DBB Eyeball Road Trip: Dave and Debbie are planning the following operating locations:

Before Eyeball: Wednesday Sept 6th we will be WV State Cap

After Eyeball: Sunday Sept 10th we will be NC/SC border

Bonus: Dave will be bringing club AI7B and special event station N4A. Debbie will be bringing club NH7DX and special event station W4A.

Once again the D & D team will endure the "writers cramp" aftermath in order to bring multiple contacts for each stop they make. Thanks Dave and Debbie!

Last month, Lisa, KC1YL and Paul, W1IP made a lot of members happy by putting the Maine - New Hampshire state line on the 40m Early Net. Paul posted this picture on the 3905 Facebook Page and it is republished here in case you missed it. Paul had this to say about the spot they found: "The Maine/New Hampshire border is a "wet line" for many miles, thus not eligible for two state operation. I found this great spot on Route 110, entering Maine from Route 153 into Newfield. KC1YL and I operated there on 40ssb. They even have a nice pull off, and there was no noise. Great spot if you want to do the

border."



KC1YL at the Maine-New Hampshire state line

CLASSIFIED ADS

This section is for members who would like to sell, swap, or purchase ham gear. If you would like to list your equipment here, please send the information to k7qhu@outlook.com. The deadline for ads is the 30th of the month.



No Member Classified Ads Were Submitted For This Issue



NET CONTROLLERS WANTED!

The Club runs CW nets on the 160m, 80m, 40m, and 20m bands. If you have ever thought you might like to try your hand at running a CW net, now would be a great time to volunteer. If you think you might be interested, check out the "CW Nets 101" page on the club website at: The 3905 Century Club - CW Nets 101 (3905ccn.org). We really need CW NCS's as currently the 40M and 80M CW nets do not have Net Control Stations.

If you are interested in giving CW NCS'ing a go, please contact the CW Net Coordinator, Steve Davis, K7QHU (k7qhu@outlook.com) for more information.

By the way, the Club is always looking for Net Controllers for all nets and modes. If CW is not your thing, then please consider volunteering as an NCS for any of the other Modes. If you volunteer, you receive free NCS training and all the associated NCS benefits offered by the club!

Fun Facts About Our Nets In August 2023

Did you know we had 549 unique U.S. Stations that checked into our nets during the month of August, 2023. Check to see if you made the list!

		KA3UFV			KL7RST	KV6OTT			WB4YBY	
	K3CD	KA3VIS			KL7WG	KV9Q	N7HRR	W4FLW	WB4ZVR	
	K3LEO	KA5PXE		KG5YK	KM4DCQ	KW1DON	N7IV	W4FSO	WB6GBS	
		KA7IMA		KG5YOC	KM4KZV	KW5DRE		W4JLH	WB7VEQ	
AA1NA	K3UHU	KA9QWV		KG8WL	KM4MCK	KX1G		W4JPS	WD6CWE	
AA1QW	K4A	KB0EL	KD9KLO	KG9HY	KM4P	KY1KY	N8BRO	W4MUF	WE4FUN	
AA3DP	K4ARD	KB0HV	KD9PDJ	KI0FV	KM9U	KY4FF	N8HH	W4PUD	WF4H	
AA3WD	K4ATV	KB0KAD	KD9SPI	KI0Y	KN3B	KY4YJ	N8SOT	W4UIT	WF4ROG	
AA5R	K4BCF	KB0QGT	KD9UEG	KI2X	KN4CQB	N0CWM	N9BFI	W4ZDP	WG0I	
AA7LC	K4GCD	KB1EQD	KD9VGL	KI4FSZ	KN4HUM	N0PF	N9CBB	W5BNK	WG5N	
AA9TC	K4INU	KB1XP	KD9WNY	KI4NBE	KN4LGM	N0PUI	N9EAZ	W5FJF	WH6GVN	
AB0DK	K4ISG	KB2ADF	KD9YGE	KI4QMB	KN4NCJ	N0TMU	N9GDE	W5GFM	WI9CE	
	K4JEL	KB2MN	KD9YPK	KI4WCA	KN6TXR	N0W	N9IBM	W5HRP	WK1J	
	K4JUU	KB2TC	KE0CGJ	KI4WCQ	KN6UDK	N1ABY	N9OLS	W5LPZ	WM0G	
	K4KRK	KB3LPE		KI5CGG	KN6ZHJ	N1DPM	N9PCF	W5MKC	WN0P	
	K4LO	KB4JOY			KO4EEG	N1GZB		W5NF	WN1F	
		KB7DA		KI5ELD	KO4FCO	N1JI			WO9E	
	K4RDJ	KB8NHP		KI5FIT	KO4FUD	N1PGF	N9YBK	W5WJN	WR3V	
	K4TER	KB8PSY		KI5KYM	KO4LEM	N1URT	NC3J	W6LDK	WR8WM	
		KB8QFO		KI5NPM	KO4LLC	N1VCW		W6MDP	WS2Q	
					KO4LLC KO4MEX	N1ZEP		W6PNY	WS3F	
	K4ZUW K5CIP	KB8UGP		KI5KQG KI5SFP	KO4NEX KO4PIV	N2KED	NF0J	W7ANC	WT3B	
	K5DFD	KB9DIP		KI5SOK	KO4RAA	N2OHP	NF0T	W7JCA	WU2T	
		KC0LKV			KO4SMP	N2OOJ		W7KJB	WV3S	
				KI5UPP	KO4SOW	N2XTT		W7SCD	WV7MS	
	K5VG	KC1CAB		KI5WEP	KO4TJE	N3BGI	NL7UP	W8BI	WX8NN	
	K5WEL	KC1PSV		KI5ZHO	KO4TRA	N3BPM	NO2CC	W8DDS	WX9DX	
		KC1STO		KI5ZLY	KO4UOJ	N3LBP		W8DLK	WY5DXD	
		KC1YL		KI5ZND	KO4ZDC	N3MH	NT0TT	W8GG	WY6N	
AF5P	K6YEK	KC2DAQ	KE8JNN	KI7HCK	KO4ZVT	N3SRI	NT4OM	W8HQ		
AF6MV	K7BBS	KC2HII	KE8PKJ	KI7LIK	KO4ZXF	N3TFS	NU8R	W8JCS		
AG5T	K7BNY	KC2JQC	KE8RAW	KI7PM	KO6AFN	N3TKG	NV1Y	W8NET		
AG8D	K7CDW	KC2MBB	KE8RRG	KI7S	KP2JR	N3VEJ	NX1K	W9BLF		
AI0ME	K7EGA	KC3AM	KE8RYW	KI7WQH	KQ0Q	N3YHM	W0DDW	W9BLI		
AI4K	K7HRT	KC3HCK	KE8URV	KJ2AM	KQ4BAP	N4BKH	W0FLA	W9BUM		
AI5CD	K7JXY	KC3SAC	KE8UWD	KJ4OFD	KQ4BGY	N4GIH	W0FLZ	W9KMH		
AI8O	K7MFG	KC3WCJ	KE8VOP	KJ4RM	KQ4BRG	N4JKD	W0GAF	W9ME		
AI8W	K7MKA	KC3WIA	KE8WSA	KJ4SKP	KQ4BWB	N4JZH	W0PJH	W9ROG		
	K7MWL	KC3WMH	KF0AHT	KJ4WYF	KQ4CHU	N4KME	W0ZWY	W9WWG		
		KC4RD			KQ4CIA	N4KQR		WA0O		
		KC5BUJ			KQ4DCO	N4NZM	W1FEA	WA0ROH		
	K7QHU	KC5THR	KF0KCA	KJ6EEP	KQ4FIP	N4PSA	W1GBA	WA1LNY		
					KQ4FNU	N4SJC		WA1TUT		
					KQ4FOH	N5AFK		WA1101		
					KQ4GCN	N5BWC		WA2VQW		
					KQ4GEX	N5CMA		WA4ARB		
		KC8VKL		KK0SS				WA4AKB WA4BKL		
					KQ4GFE	N5FKW				
		KC9VFI		KK4KYO	KQ4GFK	N5KB		WA4NID		
					KQ4GMY	N5NXV		WA5NIC		
		KC9YY			KQ4HJN	N5OHL		WA6LBU		
					KQ4IMS	N5R		WA9EIW		
					KQ4JPB	N5WGA		WB0CSF		
					KQ4KGB	N5YZ		WB1LL		
					KR0LEX	N6CIT		WB2JAX		
		KD2HCE			KS0WC	N6LCT		WB2JPQ		
		KD2TZX			KS4QF	N6LSU		WB2MKX		
					KS9WI	N6OTQ		WB3BHT		
K2PRR	KA2YEG	KD2WCY	KG4PRA	KL7CCN	KU1V	N6TCO	W3WAT	WB4HZA		
	KA3IVN	KD4IWF	KG4QIQ	KL7JR	KU8RLY	N6THC	W4CBH	WB4MAB		
K2YS	KA3MTT	KD4JWF	KG4ZOD	KL7OR	KU9O	N6XTM	W4CPO	WB4QBD		

Did you know we had 34 unique DX Stations that checked into our nets during the month of August, 2023. There were 25 Canada DX stations and 14 Other DX stations. As for new stations, we had 262 unique new stations check into the nets in August. Note: PJ4/W0JKT and HP3EFS Checked into multiple nets this month.

25 CANADIAN DX STATIONS

14 OTHER DX STATIONS

KU1V	VE3CMB	VE7HHS
VA3AVP	VE3HMK	VE7WCC
VA3INV	VE3KUZ	VE7WDO
VA3LBX	VE3OHC	VE9EX
VA3ROV	VE3PUH	WT3B
VA3TKA	VE3SIQ	
VA3TUV	VE3YWN	
VA3YKT	VE5RR	
VA7QZ	VE6DDJ	
VE3BUT	VE7DNG	

2E0IHU	England	40m SSB L	SM5FWW	Sweden	40m SSB L
8P6MY	Barbados	40m SSB L	SV1LJA	Greece	40m SSB L
9Z4GKM	Trinidad	40m SSB DX	V31MA	Belize	75m SSB L
AA0HF/KP4	Puerto Rico	40m SSB L	PJ4/W0JKT	Bonnaire	75m SSB L
G1SDK	England	40m SSB L			
HP3EFS	Panama	40m SSB E			
I8SAT	Italy	40m SSB L			
KJ6EEP/KP4	Puerto Rico	40m SSB L			
ON3PAT	Belgium	40m SSB L			
ON7HJA	Belgium	40m SSB L			

262 NEW STATIONS

							ı	
AA5R	K9XJT	KD2WBZ	KG4PRA	KN4HUM	N0CWM	NX1K	WA5NIC	
AA7LC	KA0RTM	KD2WCY	KG5YK	KN4NCJ	N1DPM	VA3AVP	WB2JAX	
AC5H	KA3IVN	KD4IWF	KG5YOC	KN6ZHJ	N1JI	VE3BUT	WB2JPQ	
AC9JA	KA3MTT	KD4NT	KI0FV	KO4EEG	N1VCW	VE3PUH	WB2MKX	
AC9PA	KA3VIS	KD9KLO	KI2X	KO4FCO	N2OOJ	VE6DDJ	WB3BHT	
AE4YP	KA5PXE	KD9PDJ	KI4WCA	KO4LLC	N3LBP	VE7WCC	WB4HZA	
AF1RO	KA7IMA	KD9SPI	KI5CGG	KO4RAA	N3MH	W0DDW	WB4MAB	
AG8D	KA9QWV	KD9UEG	KI5CY	KO4SMP	N3SRI	W0FLA	WB4ZVR	
AI0ME	KB0KAD	KD9WNY	KI5ELD	KO4TJE	N3TKG	W0GAF	WB6GBS	
AJ6XI	KB1EQD	KD9YGE	KI5FIT	KO4UOJ	N4BKH	W0ZZM	WB7VEQ	
AJ9K	KB2ADF	KD9YPK	KI5KYM	KO4ZDC	N4GIH	W1FEA	WD6CWE	
AK0SK	KB4JOY	KE0CGJ	KI5NPM	KO4ZXF	N4JZH	W1LOG	WG5N	
K0AAG	KB7DA	KE0FPN	KI5SFP	KO6AFN	N4KME	W3DMC	WH6GVN	
K0GKW	KB8NHP	KE0MTF	KI5SOK	KQ4BAP	N4KQR	W3QD	WM0G	
K1GKM	KB8PSY	KE2BAU	KI5TPF	KQ4BGY	N4PSA	W3TJG	WO9E	
K1SSG	KB8QFO	KE2BGZ	KI5WEP	KQ4BRG	N4SJC	W3WAT	WX8NN	
K2PMS	KB9DIP	KE2BLS	KI5ZLY	KQ4CHU	N5AFK	W4EAO	WX9DX	
K2PRR	KC0NZM	KE4IFI	KI5ZND	KQ4DCO	N5FKW	W4FLW		
K3BB	KC1CAB	KE4USD	KI7HCK	KQ4FIP	N5NXV	W4FSO		
K3LEO	KC1PSV	KE4UWJ	KI7LIK	KQ4FNU	N6CIT	W4JLH		
K3TRS	KC1STO	KE5USN	KI7WQH	KQ4FOH	N6LCT	W4PUD		
K4ARD	KC2HII	KE8CUG	KJ4SKP	KQ4GCN	N6LSU	W4UIT		
K4BCF	KC2JQC	KE8JMQ	KJ4WYF	KQ4GEX	N6XTM	W5FJF		
K4INU	KC2MBB	KE8JNN	KJ5AUV	KQ4GFE	N7MXK	W5LPZ		
K4RDJ	КСЗНСК	KE8RAW	KJ7BRZ	KQ4GFK	N8SOT	W6LDK		
K4VDO	KC3WCJ	KE8URV	KJ7OMO	KQ4HJN	N9CBB	W6MDP		
K5KTD	KC3WIA	KE8WSA	KK4RXY	KQ4IMS	N9GDE	W7ANC		
K6ASN	KC4RD	KF0AHT	KK6HPB	KQ4JPB	N9IBM	W7JCA		
K6TR	KC5BUJ	KF0GTR	KK7FYT	KR0LEX	N9OLS	W7KJB		
K7EGA	KC6CJY	KF0LHS	KK7HSO	KS4QF	N9PWM	W8GG		
K7HRT	KC8DEL	KF0LKG	KK7JEV	KV6OTT	NE7O	W9BLF		
K7MWL	KC8VKL	KF0MGC	KK7NKV	KV9Q	NJ1O	W9ME		
K9QAG	KC9YEU	KF0NEZ	KM4KZV	KW1DON	NL7UP	WA0YDO		
K9RJT	KD0GIX	KF5RHG	KM4MCK	KX1G	NU8R	WA1TUT		
K9WFT	KD2BMD	KF5SIF	KN3B	KY4YJ	NV1Y	WA4ARB		

Unique Check-Ins By State and SSB Net June, 2023

State	75M SSB EARLY	75M SSB LATE	40M SSB EARLY	40M SSB LATE	20M SSB		State	75M SSB EARLY	75M SSB LATE	40M SSB EARLY	40M SSB LATE	20M SSB
Alabama	1	1	3	3	2	N	Montana	0	0	0	2	0
Alaska	0	0	0	0	0	1	North Carolina	2	1	15	7	6
Arkansas	0	0	6	4	1	1	North Dakota	0	0	0	0	0
Arizona	0	0	1	4	0	1	Nebraska	0	0	4	2	0
California	0	0	1	14	0	1	New Hampshire	0	0	2	3	1
Colorado	0	0	1	2	0	1	New Jersey	0	0	8	5	4
Connecticut	1	0	6	2	1	1	New Mexico	0	0	0	2	1
Delaware	2	0	3	0	1	1	Nevada	0	0	1	1	0
Florida	1	0	17	9	11	1	New York	3	0	12	3	5
Georgia	1	0	10	8	1	(Ohio	1	0	15	5	4
Hawaii	0	0	1	1	0	(Oklahoma	0	0	2	3	1
Iowa	0	0	3	1	1	(Oregon	0	2	0	5	0
Idaho	0	0	0	4	0	F	Pennsylvania	0	0	11	4	3
Illinois	0	1	6	6	3	F	Rhode Island	1	0	0	1	0
Indiana	2	0	2	4	3	5	South Carolina	2	1	6	7	1
Kansas	0	0	0	4	2	5	South Dakota	0	0	3	2	0
Kentucky	2	0	8	2	2	7	Tennessee	3	0	13	5	2
Louisiana	1	0	6	1	0		Гехаѕ	3	1	14	8	8
Massachusetts	2	0	3	1	0	U	Jtah	0	0	0	2	0
Maryland	0	0	3	1	0	١	√irginia	2	0	13	7	4
Maine	1	0	7	1	1	_\	Vermont	1	0	0	0	0
Michigan	4	0	5	2	3	١	Washington	0	2	0	5	0
Minnesota	0	1	4	6	1	١	Visconsin	3	0	6	1	4
Missouri	0	0	6	6	0	١	West Virginia	1	0	6	1	1
Mississippi	2	0	0	0	3	١	Wyoming	0	0	1	3	1

Exit with a Smile!

