	Fri, May 19, 2023			
	Room 1	Room 2	Room 3	Room 4
9:15 AM	KOOIII 1		110011110	KOOIII 4
9:30 AM	TAPR - Topics in	Linux and Ham Radio Software	ARRL Lab: Behind the Scenes	The Importance of Amateur Radio
9:45 AM	Digital Radio Scotty Cowling	Andy Stewart KB1OIQ	George Spatta W1GKS	Clubs Tom Sly WB8LCD 9:15 -
10:00 AM	WA2DFI 9:15 - 10:35	9:15 - 10:15	9:15 - 10:20	10:15
10:15 AM	9:15 - 10:35			
10:30 AM		Elecraft K4D		Instructor's
10:45 AM		Users Group	Digital Contesting	Forum
11:00 AM	Parks on the Air Matt Heere	Scott Wright KOMD	Ed Muns W0YK 10:30 - 11:35	Carole Perry WB2MGP
11:15 AM	N3NWV 10:45 - 11:50	10:25 - 11:25		10:25 - 11:25
11:30 AM	10.45 - 11.50			
11:45 AM			Amateur Radio	Vit Building
12:00 PM		Amateur Radio Newsline Town	High Altitude	Kit Building Joe Elsenberg
12:15 PM		Hall Paul	Balloons KONEE	KONEB 11:35 - 12:50
12:30 PM	Innovation in	Braun WD9GCO 11:35 - 1:00		12.50
12:45 PM	Ham Radio Chip Cohen W1YW			
1:00 PM	12:00 - 1:50			Remote HF Station Ideas and
1:15 PM		A Dartnarchin	ARRL - Protecting	Buiding Blocks
1:30 PM		A Partnership To Save Lives Brandon Peloquin, NWS	Ham Radio John Stratton N5AUS 1:15 - 2:25	Michael Walker VA3MW 1:00
1:45 PM				- 2:00
2:00 PM		1:10 - 2:30		
2:15 PM				Women! Ham
2:30 PM			ARRL - Amateur	Radio! Innovation!
2:45 PM		ARDC Update - Funding Amateur	Radio and the Law Fred	Anne Manna
3:00pm	Antenna Forum Tim Duffy K3LR 2:00 - 5:00	Radio and	Hopengarten	WB1ARU 2:10 - 3:30
3:15 PM		Managing 44Net John Hays K7VE	K1VR 2:35 - 3:45	
3:30 PM		2:40 - 3:45		
3:45 PM				Mastering SOTA:
4:00 PM		System Fusion	Software Defined	Tips and Tricks for Peak
4:15 PM		Mark Thompson	Radio Stephan Hicks	Performance Keith Schlottman
4:30 PM		WB9QZB	N5AC 3:55 -	KR7RK
4:45 PM		3:55 - 5:00	5:00	3:40 - 5:00

2U23 h	orums O		eaule	
Sat, May 20, 2023				
Room 1	Room 2	Room 3	Room 4	
Ham Nation and Youtubers Josh Nass KI6NAZ 9:15 - 10:15	Youth Forum	Foxhunt/ Transmitter Hunting Dick Arnet WB4SUV 9:15 - 10:40	Ardunio - The Next Generation Glen Popiel KW5GP 9:15 - 10:30	
Helping Hands -	Carole Perry			
The Story of The Ham Radio Spirit in Ukraine Carsten Dauer DM9EE 10:25 -11:20	WB2MGP 9:15 - 12:00	ARRL - Good Operators and Interference Riley Hollingsworth K4ZDH 10:50 - 11:50	Fast Scan ATV Art Towslee WA8RMC 10:40 - 11:50	
DX Forum Jay Slough K4ZLE 11:30 - 1:50	ARISS 2.0: he Future Vision Frank Bauer KA3HDO 12:10 - 1:00	ARRL - Amateur Radio Emergency Service Josh Johnston KE5MHV 12:00 - 1:20	VHF-UHF- Microwave Tony Emanuele K8ZR 12:00 - 1:30	
	AMSAT Phil Smith W1EME 1:10 - 2:10	ARRL Membership Dale Williams WA8EFK	QCWA Annual Members' Meeting Ken Oelke	
	Connecting Worlds	1:30 - 2:30	VE6AFO 1:40 - 2:40	
Contesting	China AR Jesse Chen BD7LLY 2:20 - 2:50			
Doug Grant K1DG 2:00 - 3:50	What's New in Ham Radio Deluxe Michael Carper WA9PIE 3:00 - 4:00	ARRL Collegiate Amateur Radio Andy Miluzzi KK4LWR 2:40 - 3:50	HamSCI: The Ham Radio Science Citizen Investigation Nathan Frissell W2NAF 2:50 - 3:50	
Understanding		ARRL - Youth	Using AREDN	
Ham Radio Propagation Michael Burnette AF7KB 4:00	Five Common Threads of AR Innovation Dave Jensen W7DGJ	Outreach Steve Goodgame K5ATA	Software to create an IP Network On Beach W6BI	

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		Sun, May	21, 2023	
	Room 1	Room 2	Room 3	Room 4
	HF Digital Voice and Digital Mode VarAC Mel Whitten KOPFX 9:15 - 10:15	Lightning and Grounding Jim Bacher WB8VSU 9:15 - 10:15	Voice Control of ARS & Al Voice Assistants William Franzin VE4VR 9:15	Techniques of the Best Operators Mitch Stern W1SJ
	How to get started with Digital Modes Sholto Fisher K7TMG 10:30	Leonardelli VE3IPS 10:30	REZZO	DMR: Current and Future State Matt Genelin NOYNT 10:30 - 11:30
	- 11:30	- 11:30	10:30 - 11:30	

AF7KB 4:00 Jensen W7DGJ

4:10 - 5:00

- 5:00

4:00 - 5:00

4:00 - 5:00

Friday, May 19th, 2023

TIME	ROOM	FORUM
9:15 AM to	Room 1	TAPR - Topics in Digital Radio
10:35 AM		Moderator: Scotty Cowling, WA2DFI
		Speakers: John Ackermann, N8UR; Dylan Romero, KN6IVW; and Michael Ossmann, AE3H
		Scotty Cowling, WA2DFI, TAPR President, will give a TAPR Activities Update. John Ackermann, N8UR, will give an
		update on new TAPR projects, including CKM, timenuts carrier and UGLI. Dylan Romero, KN6IVW is active in the
		TangerineSDR project. Dylan wil discuss designing a 3-D printable case for your new SDR. Michael Ossmann, AE3H,
		will describe the new SDR-based Universal Radio Test Instrument currently in development.
9:15 AM to	Room 2	Linux and Ham Radio Software
10:15 AM		Moderator: Andy Stewart, KB10IQ
		Andy Stewart (KB1OIQ) has created a software collection for ham radio operators called "Andy's Ham Radio Linux". It is
		based on Ubuntu Linux, with a lot of additional software for ham radio use. In this talk, Andy will discuss at a high level
		the different programs which are available in this software collection. Andy has been distributing this software on
9:15 AM to	Room 3	Sourceforge since 2011, with over 100,000 downloads to date. ARRL Lab: Behind the Scenes
10:20 AM	KOOIII 3	Moderator: George Spatta, W1GKS, ARRL Lab Manager
10.20 / 111		Speakers: Steve Anderson, W1EMI, ARRL RFI Engineer
		ARRL members who are familiar with QST Product Review have seen some of the work done by the ARRL Lab in those
		test results. But the Lab staff does a lot more than testing radios! The Lab operates a Technical Information Service,
		helping members one-on-one to solve a variety of problems. The Lab conducts tests to identify noisy devices and report
		them to the FCC. The Lab supports members with their own interference issues. The Lab is a watchdog against
		spectrum encroachment from consumer devices, and provides technical advocacy through its work with industry and
		regulators. Hear about a new program, the ARRL Clean Signal Initiative (CSI), which commits to improving transmitter
		performance and cleaning-up signal quality. Come learn all about the work the ARRL Lab does to support members and
		the entire Amateur Radio Service. This forum will also talk about career and volunteer opportunities in the Lab if you'd
		like to be part of the action. Hear stories about the Lab that you won't read about in the pages of QST!
9:15 AM to	Room 4	The Importance of Amateur Radio Clubs
10:15 AM	TOOM 4	Moderator: Tom Sly, WB8LCD
		Speaker: Michael Kalter, W8CI
		Clubs play an important role in the success of a new ham being brought into the hobby as a successful and engaged
		Amateur Radio Operator. They can also be the springboard that brings an inactive ham back into the hobby, or even
		helps an active ham find new ways to participate and Have Fun with Amateur Radio. This is crucial to the continued
		success of Amateur Radio as the Greatest Hobby in the World! This presentation will be focused on both the
		membership as well as the leadership of a local Amateur Radio Club. Our goal is to help you create a club that members
		will want to belong to and participate in because of the value the club brings to the individual ham and his participation in
		the hobby. Presenters Michael Kalter - W8Cl and Tom Sly - WB8LCD are both long-time hams with experienc in
		successful clubs.
10:25 AM to	Room 2	Elecraft K4D Users Group
11:25 AM		Moderator: Scott Wright, K0MD
		Speakers: Robert Wilson, N6TV We are pleased to offer a Users Group for the Elecraft K4D for discussion. Robert Wilson, N6TV will present a series of
		tips and tricks for new and advanced users. He will be joined by others to share best practices and offer updates on
		maximizing the performance of this rig across Dxing, Contesting, General hobby use for CW, SSB and digital modes.
		maximizing the performance of this hig across bixing, contesting, ceneral hobby use for cw, 33b and digital modes.
10:25 AM to	Room 4	Instructor's Forum
11:25 AM		Moderator: Carole Perry, WB2MGP
		Speakers: Neil Rapp, WB9VPG
		The Instructors' Forum will have a presentation by Neil Rapp, WB9VPG who will speak about getting young hams
		involved with YOTA. Carole Perry, WB2MGP will speak about FREE resources for instructors through the RCA Youth
		Activities program she chairs. We will have useful sharing of ideas for teachers and instructors.
10:30 AM to	Room 3	Digital Contesting
11:35 AM		Moderator: Ed Muns, W0YK
		Speakers: Peter Driessen, VE7AB and Rich Newbould, K3RWN
		Current topics in digital contesting, primarily using the RTTY and FT modes. Three presentations are planned:
		1. "Increasing Rate in FT Contests", Peter Driessen, VE7AB
		2. "Can a Little Pistol be Competitive", Rich Newbould, K3RWN
10.45.634.	D 0	3. "Why You Should Care about Your LCR (Log Check Report)". Ed Muns, W0YK
10:45 AM to	Room 2	Parks on the Air Modorator: Matt Hoore, NISNIW/V
11:50 AM		Moderator: Matt Heere, N3NWV

		The Parks on the Air program has continued to grow exponentially in the past year. Matt (N3NWV) will provide an introduction to POTA for those who may be interesting in joining the fun, as well as the highlights from the previous exciting year of POTA. Topics will include: 1) The origins of POTA 2) What purpose POTA serves 3) POTA 101 and where to go to get started 4) An insider's tour of the POTA stats. How much has it grown really? 5) Details for the allnew POTA Plaque Event for 2023 6) Open Q&A
11:35 AM to	Room 2	Amateur Radio Newsline Town Hall
1:00 PM		Moderator: Paul Braun, WD9GCO
		Speakers: Neil Rapp, WB9VPG and Riley Hollingsworth, K4ZDH
		Current topics of interest to all amateurs, presented by experts in the fields. We will also have a Q&A about Amateur
		Radio Newsline and our history.
11:35 AM to	Room 4	Kit Building Techniques for Success
12:50 PM		Moderator: Joe Eisenberg, K0NEB
		A look at the methods used to have the greatest chance of success for both first time and experienced kit builders. Affordable tools will be featured as well as a variety of kits aimed at all skill levels. The correct type of soldering tools and solder will be discussed as well as methods of desoldering.
11:45 AM to	Room 3	Amateur Radio High Altitude Balloons
1:05 PM		Moderator: Bill Brown, WB8ELK
		Speakers: Ken Daniel, K9YO; Todd McKinney, KN4TPG; Hans Summers, G0UPL and Dave Beverstein, VE3KCL
		Four presentations will be given, including: "Introduction to long duration amateur radio balloon flights", "Build your own Arduino-based WSPR Pico balloon tracker", "Launching Amateur Radio Pico balloons from Antarctica", and "The QRP-Labs U4B Pico Balloon tracker". A Pico Balloon launch will occur shortly after the Forum (weather permitting).
12:00 PM to	Room 1	Innovation in Ham Radio
1:50 PM		Moderator: Chip Cohen, W1YW
		Speakers: Howard Rosen, VE2AED; Nathaniel Frissell, W2NAF; Jim Breakall, WA3FET; Stephen Floyd, W4YHD; Marty Sullaway, NN1C; Ted Rappaport, N9NB; Jeremy Hong, KD8TUO; Jack Nilsson, N8NDL and Isaac Bentley, NB6F
		The INNOVATION FORUM is an introduction and showcase of amateur radio's "enhancement of the radio art". Our speakers are examples of those who have made major inroads in invention, radio science, engineering, or technical entrepreneurship, in ham radio and in related fields —enabled by skills and knowledge first acquired and nurtured as radio amateurs. What were/are their paths like? What help did they get through ham radio? What roadblocks did they encounter and how did they overcome them? Their stories are fascinating and inspiring and just a few examples of the value that amateur radio brings to wireless, telecom, and progress in the human condition. Join us!
1:00 PM to	Room 4	Remote HF Station Ideas and Builing Blocks
2:00 PM		Moderator: Michael Walker, VA3MW In this forum, we will go over the building blocks of setting up a remote HF radio station. We will touch on the technologies available to keep you remote station up and running, how to control antennas, rotators, radios and more. How much internet bandwidth you may require as well as trying to leave some time for questions. This forum is for someone who is just starting through the motions to building a remote HF station or for others who may be looking for new ideas.
1:10 PM to	Room 2	A Partnership To Save Lives
2:30 PM		Moderator: Brandon Peloquin, Warning Coordination Meteorologist, National Weather Service Wilmington, OH and Kristen Cassady, Senior Forecaster, National Weather Service Wilmington, OH.
		NOAA's National Weather Service (NWS) is working to build a Weather-Ready Nation. A Weather-Ready Nation is one that is more resilient and better prepared to respond to extreme weather and water events. The NWS depends on partnerships to help build a Weather-Ready Nation and to help achieve the overarching mission to protect lives and property. One of these important partnerships is with amateur radio groups. This presentation will describe this partnership and how it helps to save lives during severe weather events.
1:15 PM to	Room 3	ARRL - Protecting Amateur Radio
2:25 PM		Moderator: John Robert Stratton, N5AUS, Chair of the ARRL Legislative Advocacy Committee ARRL has a proud history of advocating for the rights of radio amateurs. This session will include an update on ARRL's legislative activity, and efforts to eliminate pervasive private land use restrictions that prohibit the operation of amateur radio and the installation of amateur station antennas.
2:00 PM to	Room 1	Antenna Forum
5:00 PM		Moderator: Tim Duffy, K3LR Speakers: Frank Donovan, W3LPL, Dr. Jim Breakall, WA3FET, Dr. Nathaniel Frissell, W2NAF, Anthony Luscre, K8ZT
		"Six Meter Long Distance Propagation During the Next Four Years of Solar Maximum" by Frank Donovan, W3LPL "Some Practical and Useful Antenna Innovations for Amateur Radio" by Dr. Jim Breakall, WA3FET "hamSCI Festivals of Eclipse Ionospheric Science" by Dr. Nathaniel Frissell, W2NAF "The Ten Worst Antennas and How You Can do Better" by Anthony Luscre, K8ZT
2:10 PM to	Room 4	Women! Ham Radio! Innovation!
3:30 PM	NOUIII 4	Moderator: Anne Manna, WB1ARU

		Young Ladies Radio League is pleased to present a forum for all women interested in ham radio, whether licensed or
		not. The format will include time for interaction and networking with other YLs, as well as short presentations reflecting the contributions and innovations of YLs in ham radio.
2:25 DM to	Doom 2	
2:35 PM to	Room 3	ARRL - Amateur Radio and the Law
3:45 PM		Moderator: Fred Hopengarten, Esq., K1VR, member of the ARRL Amateur Radio Legal Defense & Assistance Committee
		This session will address (1) liability insurance issues for your club and members involved in public service activities, (2)
		how to read local zoning ordinances dealing with Wireless Communications Facilities, and (3) the ARRL's bill in
		Congress to help hams living in homeowner association properties.
2:40 PM to	Room 2	ARDC Update - Funding Amateur Radio and Managing 44Net
3:45 PM		Moderator: John Hays, K7VE
		Speakers: Rosy Schechter, KJ7RYV, Jon Kemper, KA6NVY
		Amateur Radio Digital Communications is a 501(c)3 non-profit private foundation with an international reach based in
		California. ARDC owns a pool of 12 million Internet addresses which are made available for a variety of non-profit
		amateur radio activities such as data communications over RF, repeater linking, websites, remote control of amateur
		radio stations, and citizen science. The presentation will describe recent work done to report, improve, manage, and
		extend the application of this valuable address space. ARDC also has an endowment which funds approximately \$5-6
		million per year in grants for the support of amateur radio, research and development, and education including \$1-1.5
		million in scholarships through such programs as the ARRL, Society of Women Engineers, OMIK, and others. This
		forum will inform on how to apply for grants, as well as document some examples of grants already funded. Meet and
		learn from ARDC's Executive Director, Rosy Schechter (KJ7RYV) as well as staff leads: John Hays (K7VE) for grants,
		and Jon Kemper (KA6NVY) for 44Net.
3:40 PM to	Room 4	Mastering SOTA: Tips and Tricks for Peak Performance
5:00 PM		Moderator: Keith Schlottman, KR7RK
		Speakers: Charlie Brown, NJ7V & Brian Betz, W7JET
		Are you ready to take your Summits on the Air (SOTA) experience to the next level? Join us at "Mastering SOTA: Tips,
		Tricks, and Techniques for Peak Performance" where we will explore the latest techniques and innovations to help you
		get the most out of your SOTA adventures. Whether you're a seasoned SOTA veteran or just getting started, this forum
		will provide you with valuable insights and practical advice that will help you take your SOTA adventures to new heights.
		Don't miss out on this opportunity to learn from experienced activators and connect with fellow SOTA enthusiasts.
3:55 PM to	Room 2	System Fusion
5:00 PM		Moderator: Mark Thompson, WB9QZB
		Speakers: John Kruk, N9UPC, Sales Manager, Amateur Radio Sales Division, Yaesu USA
		The System Fusion™ Forum will include a presentation & discussion about Yaesu's System Fusion™ Voice & Data
		technology designed exclusively for Amateur Radio. The forum will review updates to Yaesu's System Fusion™
		technology including 2m / 70cm Analog FM / C4FM Digital Voice Repeaters & Mobile / Portable radios and WiRES-X™
		(Wide-coverage Internet Repeater Enhancement System) & IMRS™ (Internet-linked Multi-site Repeater System) VoIP
		communications linking systems. Everyone who is using or interested in System Fusion is encouraged to attend and
		participate to share their experiences & ask your questions about System Fusion.
3:55 PM to	Room 3	Software Defined Radio
5:00 PM		Moderator: Stephan Hicks, N5AC, CTO of Flex Radio
		Multiple speakers will discuss new advances in Software Defined Radio (SDR) technology and software defined radios.
		At the close of the forum, speakers will form a panel and will take questions from the audience regarding SDR
		technology, products, advances or other topics relating to software defined radio. Moderated by Steve Hicks, N5AC,
		CTO, FlexRadio Systems.
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Saturday, May 20th, 2023

TIME	ROOM	FORUM
9:15 AM to	Room 1	Ham Nation and YouTubers
10:15 AM		Moderator: Josh Nass, KI6NAZ
		Ham Nation discussion with past guests and youtube creators.
9:15 AM to	Room 2	Youth Forum
12:00 PM		Moderator: Carole Perry, WB2MGP
12.00 1 111		Speakers: Landon Baumgartner, KE8TJU, Grace Papay, KE8RJU, Javan Miller, W8UA, Lyle Strachan, KE0ZNV, Collin Holdsworth, K0NNK, Katie Campbell, KE8LQR and Jim Storms AB8YK, the Hamvention General Chair
		Young Hams Landon Baumgartner KE8TJU, Grace Papay KE8RJU, Javan Miller W8UA, Lyle Strachan KE0ZNV, Collin Holdsworth K0NNK, and Katie Campbell KE8LQR give presentations. A special presentation will be given by Jim Storms AB8YK, the Hamvention General Chair, about getting young hams chosen for the Dave Kalter Youth DX Adventure (YDXA). ICOM will donate an HF rig for a door prize. You must be present to win.
9:15 AM to	Room 3	Foxhunting/ Transmitter Hunting
10:40 AM		Moderator: Dick Arnet, WB4SUV
		Speaker: Bob Frey, WA6EZV; Brian DeYoung, K4BRI
		Basic foxhunting equipment and techniques for mobile and on foot foxhunting. Amateur Radio Direction Finding/Radio Orienteering. KrakenSDR high tech transmitter hunting
9:15 AM to	Room 4	Arduino - The Next Generation
10:30 AM		Moderator: Glen Popiel, KW5GP
		Join the author of ARRL's Arduino for Ham Radio book series, Glen Popiel, KW5GP, in an all-new Arduino presentation, as he introduces exciting breakthroughs and discoveries in the world of Arduino, and demonstrates how you can take your Arduino projects to the next level.
10:25 AM to	Room 1	Helping Hands - The Story of The Ham Radio Spirit in Ukraine
11:20 AM	KOOIII I	
11.20 AIVI		Moderator: Carsten Dauer, DM9EE, Ham of the Year
		The story of true amateur radio community spirit in helping ukrainian ham radio families in a difficult time. Carsten will share how he is offering a home to evacuated Ukrainian family members in Germany as well as shipping tons of donated radio gear, power banks, solar panels, first aid kits etc. for use in the Ukrainian effort to defend against the Russian
		invasion.
10:40 AM to	Room 4	Fast Scan ATV
11:50 AM		Moderator: Art Towslee, WA8RMC
		Speakers: Mel Whitten, K0PFX and Mike Collis, WA6SVT
		Introduction to Amateur Digital Hi-Def Television (DATV). Still using analog ATV? Let Mel show you how to upgrade to
		full motion high definition TV with a simple but fully functional Digital ATV station at an affordable cost. Both hardware and software will be covered including a home-brew interface to control readily available transmitters and receivers for
		the 70cm and up bands. Mike will describe the new features of the California ATN network and DATV repeater system. The ATN network located in the Los Angeles area is vast and the largest in the USA. It needs careful planning and
		maintenance so Mike will detail the work in progress to define and enhance the linking process as well as equipment
		needed to convert individual repeaters to digital operation. Wrap up and summary of the new DATV stand alone
		scanning receiver software progress. He is designing a new stand alone scanning digital television receiver with open source software powered by an embedded Raspberry Pi computer module. This will allow both DVB-S and DVB-T
		reception from up to 7 separate channels. With no RF signal, it outputs a series of selected slide show images. Art will
		describe the work in progress with a working prototype model.
10:50 AM to	Room 3	ARRL - Good Operators and Interference
11:50 AM		Moderator: Riley Hollingsworth, K4ZDH, ARRL Volunteer Monitor Program Administrator
11.007.		Speakers: Lark Hadley, KA4A, Director, Region Three, FCC Enforcement Bureau, Bart Jahnke, W9JJ, ARRL Regulatory Information Manager and Steve Anderson, W1EMI, ARRL RFI Engineer
		Amateur Radio has a long history of instructing the rules and regulations, and helping each operator stay within the lines.
		This session will include an update on the ARRL Volunteer Monitor Program, and advice for helping each other maintain
		high standards on the air. We'll also cover best approaches to handling radio interference from solar panels and other
11,20 414-	Dog = 4	solar devices. Sponsored by ARRL The National Association for Amateur Radio.
11:30 AM to	Room 1	DX Forum Medicators Joy Clough K47LF and Brian Boths AE9ED
1:50 PM		Moderator: Jay Slough, K4ZLE and Brian Bathe, AF8FD Speakers: Thierry Mazel, F6CUK; Paul Granger, F6EXV; Jack Prendergast, N7JP; and Robin Amundson, WA7CPA

		The SWODXA is proud to moderate the DX forum again this year, in conjunction with ICOM America. In addition to four presentations on recent DXpeditions we will be making a major announcement of the new DX mentor award sponsored by ICOM and awarding a new ICOM radio to some lucky individual. Tickets for the drawing may be purchased at the forum.
		FT8WW - Crozet Island's one man operation by Thierry, F6CUK, being presented remotely by F6EXV T88WA - Palau by Jack N7JP and Robin WA7CPA
		CY0S - Sable Island - Seven years in the making by one of the team members. 3Y0J - Bouvet - by one of the team members
12:00 PM to	Room 3	ARRL - Amateur Radio Emergency Service
1:20 PM		Moderator: Josh Johnston, KE5MHV, ARRL Director of Emergency Management
		The Amateur Radio Emergency Service® (ARES®) consists of licensed amateurs who have volunteered their
		qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Come learn about opportunities to volunteer and train, and to hear stories about best-practices, the importance of building mutually beneficial relationships with local emergency management services, and the importance of our partnerships with served agencies. Sponsored by ARRL The National Association for Amateur Radio®.
12:00 PM to	Room 4	VHF/UHF/Microwave
1:30 PM		Moderator: Tony Emanuele, K8ZR
		Speakers: Rus Healy, K2UA: Jay Baack, N1AV: and Rus Healy, K2UA
		Presenters & presentation titles: Rus Healy, K2UA: Getting on the 76/78 GHz band.
		Jay Baack, N1AV: The path to the Fred Fish Memorial Award (FFMA) in 1,481 Days. FFMA is awarded to those
		amateurs who work the 488 Maidenhead grid squares in the 48 contiguous United States on 50 MHz.
40.40 DM.		Rus Healy, K2UA: The Impacts of Analog-Only Categories in ARRL VHF Contests, and How We Got Here.
12:10 PM to 1:00 PM	Room 2	ARISS 2.0: The future vision for Amateur Radio on the International Space Station Moderator: Frank Bauer, KA3HDO
1.001101		In December 1983, Astronaut Owen Garriott, W5LFL, electrified the world via his ham communications from the Space
		Shuttle Columbia. Starting at Hamvention 2023, ARISS will spend a year celebrating 40 years of amateur radio on
		human spaceflight vehicles! Our new vision, ARISS 2.0, will expand ARISS youth education outcomes, ham-in space
		operations, flight hardware systems, and even our space platform (in addition to ISS, think commercial space stations and lunar operations). Learn what ARISS is doing to support ham radio operations on human spaceflight vehicles – now
		and over the next 40 years. Expect some surprise guests and new announcements.
1:10 PM to	Room 2	AMSAT
2:10 PM		Moderator: Phil Smith, W1EME
		Speakers: Robert Bankston, KE4AL, AMSAT President; Jerry Buxton, NOJY, AMSAT Vice President for Engineering; Alan Johnston, KU2Y, AMSAT Vice President Education Relations; Drew Glasbrenner, KO4MA, Vice President Operations; Frank Karnauskas, N1UW, Vice President of AMSAT Development
		AMSAT Forum Hamvention 2022 AMSAT Status Report: Robert Bankston KE4AL, AMSAT President, will highlight
		recent activities within AMSAT and discuss some of our challenges, accomplishments, projects, and any late breaking
		news. AMSAT Engineering Program: Jerry Buxton, NOJY, AMSAT Vice President for Engineering, will talk about the Current and upcoming satellite missions. AMSAT Education: Alan Johnston, KU2Y, AMSAT Vice President Education
		Relations will talk about the AMSAT CubeSat Simulator. AMSAT Operations: Drew Glasbrenner, KO4MA, Vice
		President Operations, will discuss current satellites and operations. AMSAT Development: Frank Karnauskas, N1UW,
		Vice President of AMSAT Development, will report on AMSAT Youth Initiative and its features.
1:30 PM to	Doom 2	ADDI Membershin
2:30 PM	Room 3	ARRL - Membership Moderator: Dale Williams, WA8EFK, ARRL Director — Great Lakes Division
		Speakers: Rick Roderick, K5UR, ARRL President; David Minster, NA2AA, ARRL CEO; John R. Sager, WJ7S, ARRL
		Treasurer; Bob Naumann, W5OV, ARRL Director of Operations
		ARRL is the National Association for Amateur Radio®. No other organization works harder to promote and protect
		amateur radio! At this session, you'll hear from representatives on several key areas of membership interest including ARRL "Year of the Volunteers." Learn more about 2023 ARRL Field Day, Logbook of The World, and the yearlong
		Volunteers On the Air (VOTA) operating event. The new ARRL Estate Planning Workbook will be introduced. The
		workbook will help you plan to share your commitment to amateur radio with future generations. ARRL will distribute a limited number of free copies of the workbook at Hamvention. Members and prospective members are all welcome!
1:40 PM to	Room 4	QCWA Annual Members' Meeting
2:40 PM		Moderator: Ken Oelke, VE6AFO
		We are proudly celebrating our 75th Anniversary, and we want the membership to know how we plan to make the next
2:00 PM to	Room 1	75 years a huge success for QCWA and the Members. Contesting
3:50 PM	ACOIII I	Moderator: Doug Grant, K1DG

		Speakers: Fabio Schettini, I4UFH; Claudio Veroli, I4VEQ; Gregg Marco, W6IZT/C6AZT; Tom Georgens, W2SC/8P5A; Krassy Petkov, K1LZ; and Jeff Briggs, K1ZM
		"WRTC2022/2023 Update" - Fabio Schettini, I4UFH and Claudio Veroli, I4VEQ "Contest DXpedition from a Rig-in-a-Box" - Gregg Marco, W6IZT/C6AZT "The New 8P5A Station" - Tom Georgens, W2SC/8P5A "The K1LZ Hybrid Multi-multi' - Krassy Petkov, K1LZ and Jeff Briggs, K1ZM
2:20 PM to	Room 2	
2:50 PM	1100m2	Moderator: Jesse Chen, BD7LLY; The founder and CEO of Chelegance JNCRadio
2.30 FW		Join us for a forum on the state of amateur radio in China and its potential benefits to the global ham radio community. We will explore the challenges and opportunities of internationalizing Chinese amateur radio, the unique characteristics of Chinese amateur radio enthusiasts, and the innovative products and solutions offered by CHELEGANCE.
2:40 PM to	Room 3	ARRL - Collegiate Amateur Radio
3:50 PM		Moderator: Andy Milluzzi, KK4LWR, Advisor, ARRL Collegiate Amateur Radio Initiative
		Speakers: Tony Milluzzi, KD8RTT, Advisor, ARRL Collegiate Amateur Radio Initiative, Bob Inderbitzen, NQ1R, Staff Liaison, ARRL Collegiate Amateur Radio Initiative, Steve Goodgame, K5ATA, Staff Liaison, ARRL Collegiate Amateur Radio Initiative
		Since the ARRL Collegiate Amateur Radio Program (CARP) was established in 2017, we've been growing our community of participating students and ham radio clubs at colleges and universities. CARP holds monthly Zoom meetups and make connections through our CARP Facebook group and Discord. Join us! We're (re)inspiring ham radio among our nation's colleges and universities, meeting other students, and developing career connections. Hear from students, alumni, and faculty. The ARRL Collegiate Amateur Radio Program is sponsored in part by the W1YSM Snyder Family Collegiate & ARRL Affiliated Club Endowment Fund.
2:50 PM to	Room 4	HamSCI: The Ham Radio Science Citizen Investigation
3:50 PM		Moderator: NAthan Frizzel, W23NAF
		The HamSCI Forum presents the latest experiments and results in amateur radio citizen science. This year's forum will include plans to study the impacts of 2023 and 2024 North American eclipses on the ionosphere and radio propagation, results of traveling ionospheric disturbance research, and progress on the HamSCI Personal Space Weather Station. Learn more at hamsci.org.
3:00 PM to	Room 2	What's New in Ham Radio Deluxe
4:00 PM		Moderator: Michael Carper, WA9PIE Much has been changed and improved in Ham Radio Deluxe in recent years. Our popular HRD Alert is accelerating the pace of progress towards DXCC and other operating awards via FT8 with WSJT-X. There are several new features that are lined up for Dayton 2023. We would like to share these new things with our ham colleagues. Our presentation includes a live demo that we do with RemoteHamRadio.
4:00 PM to	Room 1	The Fast Track to Understanding Ham Radio Propagation
5:00 PM		Moderator: Michael Burnette, AF7KB This lively, fast-paced presentation is a plain-language guide to understanding ionospheric propagation. Michael Burnette, AF7KB, is the author and narrator of the Fast Track series of ham license courses as well as supporting workbooks and other material, including the book, "The Fast Track to Understanding Ham Radio Propagation" which covers propagation from the ground up literally! Michael started playing with radios at an early age when he found the plans for a crystal radio set in a Superman comic book. Once Dad hauled him into town so they could park about a block away from a radio station, the radio worked! The fascination never wore off. After a career in commercial broadcasting and another in live adult education, Burnette (finally!) got his ham license in 2013 at the urging of a friend. His wife, Kerry, KC7YL, got her license shortly after that, using a "set of notes" Michael wrote, which became their first Fast Track license course. Lately, Michael's favorite operating mode has been FT8. He's also a regular user of 2-meter repeaters in the Puget Sound area.
4:00 PM to	Room 3	ARRL - Youth Outreach
5:00 PM		Moderator: Steve Goodgame, K5ATA, ARRL Education and Learning Manager Join us in exploring ways to attract and engage today's students to ham radio: through technology; learning about how-radios-work and building things; communicating through satellites and talking with astronauts; competing in contests and winning awards; developing skills, career networking, and making new friends. Who should attend this forum? Club representatives, teachers, young hams, and anyone who wants GROW amateur radio. Sponsored by ARRL The National Association for Amateur Radio® and contributors to the ARRL Education and Technology Fund.
4:00 PM to	Room 4	Using AREDN Software to create an IP Ham Radio Network
5:00 PM		Moderator: Orv Beach, W6BI An overview of how AREDN software, installed on stock commercial wireless equipment from various vendors, can create a ham radio IP network. Examples of useful services that can be provided, such as voice and video chat, and data services such as Winlink will be discussed. A review of available hardware, both existing and recent additions, will be included. Orv will also present a sampling of AREDN networks throughout the United States.
4:10 PM to	Room 2	Five Common Threads of Ham Radio Innovation
5:00 PM		Moderator: Dave Jensen, W7DGJ

Dave Jensen W7DGJ (author of QRZ's popular new column Trials and Errors) will present on the topic of Ham Radio innovation, with a focus not only on the early innovation that led to the hobby (and its myriad of sub-hobbies) but also on today's innovators. Jensen has spent considerable time interviewing amateur radio innovators for his column, and there have been common experiences identified that these special people have identified in their work. Each of the five common threads for innovation will be reviewed and told in story form from the personal experiences related in Jensen's interviews. W7DGJ will show that it's the practical application of radio advances that sets the stage for growth of businesses in the ham radio hobby, and not simply new technologies on their own. Dave has spoken at universities around the world on the topic of innovation, from Japan's Okinawa Institute of Science and Technology to Harvard and the Nobel Hall at Karolinska Institute in Stockholm. His presentation will highlight how our technological industries advance through innovation.

Sunday, May 21st, 2023

TIME	ROOM	FORUM
9:15 AM to	Room 1	HF Digital Voice and Digital Mode VarAC
10:15 AM		Moderator: Mel Whitten, K0PFX
		Speakers: Mooner Salem, K6AQ and Mike Weilbacher, KB0FX
		Digital voice is commonly used on amateur radio, but did you know that you can use it on HF as well as VHF and UHF
		using equipment you already own? Come learn more about how you can get started with FreeDV, an exciting up and
		coming digital voice mode designed for use on HF. 'New Digital Mode VarAC'. Mike has been experimenting with SDR
		technology and digital modes for years. Mike will discuss a new digital mode known as VarAC. Its goal is to promote
		having "Real" QSOes.
9:15 AM to	Room 2	Lightning and Grounding
10:15 AM		Moderator: Jim Bacher, WB8VSU
		Speaker: Ward Silver, N0AX
		First part will be Jim Bacher WB8VSU and he will focus on what lightning characteristics are and external building
		bonding and grounding. Second Part is Ward Silver N0AX and he will focus on the in-shack bonding systems.
9:15 AM to	Room 3	Voice Control of Amateur Radio Systems & Al Voice Assistants
10:15 AM		Moderator: William Franzin, VE4VR
		This talk will cover various methods of applying voice control to existing amateur radio systems and potential new areas
		of development that would benefit the amateur radio community. Let's take the lead and jump ahead of consumer tech.
		Many of us have become familiar with Apple's Siri, Amazon Alexa, or Google Assistant. These widely adopted voice
		assistant products have revolutionized how consumers interact with mobile devices. Amateur radio operators have been
		talking to each other for a very long time. Now it's time to stop pressing buttons and start talking to our radios, our
0.45.484	D 4	repeaters, and give our infrastructure an upgrade.
9:15 AM to	Room 4	Techniques of the Best Operators
10:15 AM		Moderator: Mitch Stern, W1SJ
		Why is it that everyone else works all the juicy DX and you get shut out? It is likely that they are super operator! We will
		talk about how to bring up your skill level so that you are an excellent operator working contests, chasing DX, or our
40.00 4145	Daam 1	highest calling - providing emergency communications.
10:30 AM to	Room 1	How to get started with Digital Modes Moderator, Shelta Fisher, KATMC
11:30 AM		Moderator: Sholto Fisher, K7TMG Explaining the basics of digital modes, necessary hardware, software and configuration.
10:30 AM to	Room 2	Solar Power for Portable Operations
11:30 AM	KOOIII Z	Moderator: John Leonardelli, VE3IPS
11.30 AW		Easy to understand How to Solar Power your portable and field operations. The 5 key components will be explained with
		best of breed product choices. Three use cases will be explored with low QRP, Mid Power and Field Day set ups. After
		this presentation, you will be able to choose the right sizing for the components that you require for your operations and
		enjoy operating Off the Grid.
10:30 AM to	Room 3	SWR Meters Make You Stupid
11:30 AM	11001110	Moderator: Eric Nichols, KL7AJ
11.007		For decades, there has been a lot of misinformation propagated and shared with respect to transmission lines. Based
		and expanded upon Walt Maxwell, W2DU's classic "Reflections" series, SWR Meters Make You Stupid goes a few steps
		farther, with a detailed description of the Vector Network Analyzer (VNA), a wonderful device that was not available to
		hams during Walt's lifetime. This talk will use minimal math, and I will introduce my simplified "Fat Purple Crayon" (FPC)
		Smith Chart, which takes all the dread out of the Smith Chart.
10:30 AM to	Room 4	DMR: Current and Future State
11:30 AM		Moderator: Matt Genelin, NOYNT
		Digital Mobile Radio (DMR) has become a very popular digital mode on VHF/UHF. In this talk (including time for Q and
		A) Matt Genelin, NOYNT, will explain the current 'peer to peer' state of DMR in a post-DMRx world. Influences of major
		networks like Brandmeister and regionalization of independent cBridge networks will also be explained. There are many
		ways to make DMR radio easier for newcomers to continue to grow this digital mode; a few future-looking ideas will be
		outlined.
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