

Spring 2021 QSO Today Ham Expo Schedule of Speakers

| Program | CST/CDT Day | CST/CDT Start | Track | Description | Presenters |
|--|-------------|---------------|------------------|--|--|
| Ham Radio Workbench Podcast Live from the Expo | Friday | 8:00 PM | Podcast Pavilion | The Ham Radio Workbench Podcast deep dives on making, DIY, electronics, and technical topics of interest to the amateur radio operator. Your hosts George KJ6VU and Jeremy KF7IJZ discuss current developments in ham radio while introducing listeners to a plethora of topics and skills such as test equipment, 3D Printing, Arduino, Raspberry Pi, and more. | George Zafiropoulos KJ6VU Jeremy Kolonay KF7IJZ, Michael Walker VA3MW |
| Ham Radio 2.0 Live Stream | Friday | 8:00 PM | Podcast Pavilion | We'll livestream a live audience interaction for Ham Radio Q&A | Jason Johnston KC5HWB |
| Amateur Space Radio Auditorium Presents a Techno Dance Party After Hours | Friday | 8:00 PM | Podcast Pavilion | Unwind after all the talks and exhibits with some uplifting techno dance music by John Brier at Amateur Space Radio After Hours, 6pm Friday. John is an active amateur radio satellite operator and educator who also regularly spins EDM records on Twitch. | John Brier KG4AKV |
| Software Defined Radio as a Platform | Saturday | 10:00 AM | FlexRadio | The technologies that make a true SDR adaptable using the FLEX-6000, external interfaces, important standards & FlexRadio's adoption of these standards & interfaces have allowed the 6000 to quickly grow and maintain its market-leading position. | Steve Hicks N5AC |

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| Introduction to Amateur Radio Satellites | Saturday | 10:00 AM | Space Radio | Douglas Quagliana, KA2UPW, presents an introduction to many of the things you can do with amateur radio satellites including telemetry, tracking, orbital mechanics, digital signal processing, and several really simple satellite antennas you can build. | Douglas Quagliana KA2UPW |
| Amateurs Research Poor Radio Communications At Battle Of Arnhem - 1944 | Saturday | 10:00 AM | History | The presentation covers how Tom G0SBW and a fellow amateur, Peter G8BLS, built backpack radios replicating the radios used during the battle, and used them on the actual Arnhem battlefield to assess why radio communications during the battle were a failure. | Thomas Robinson G0SBW |
| RaDAR - Rapid Deployment Amateur radio | Saturday | 10:00 AM | How To | Practising amateur radio in the outdoors in a slightly different but exciting way. RaDAR promotes a healthy lifestyle and may even one day become a radio sport. Learn more from Eddie Leighton, ZS6BNE. | Eddie Leighton ZS6BNE |
| Pipeline type radio wave propagation | Saturday | 10:00 AM | Expert Level | Sharing several years of experience on DX possibilities, especially on 50 MHz. | Andras Bato HA6NN |
| Using the Arduino In Your Shack | Saturday | 10:00 AM | How To | Michael Foerster, W0IH, successfully automates some of the functions in his shack using Arduino computer boards with simple interfaces. Michael presents his insights into the possibilities of using Arduino boards around the shack. | Michael Foerster W0IH |

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| 100 Watts and a Wire Live Stream from the Expo | Saturday | 10:00 AM | Podcast Pavilion | <p>I am Christian, K0STH. Join me at the intersection of life and ham radio. Together we'll explore this great hobby and public service. This ham radio talk show was originally launched as an audio podcast on June 22, 2015. Today, you can see the show! It features topical conversation, interviews and ham radio news. Please subscribe to the YouTube channel. The link is below. Don't forget to click the bell for notifications. You can listen anytime by subscribing wherever you get podcasts.</p> | Christian Cudnik K0STH |
| D4C -- "You call, we answer" | Saturday | 11:00 AM | FlexRadio | <p>From the beginning of a dream to the new deployment of Flexradio solutions at D4C in Monteverde (Capoverde islands) an incredible place for ham radio, a closer look into Multi Multi CQWW setup.</p> | Marco Rinaldi IK2LFF |
| Working the Easy FM Amateur Satellites | Saturday | 11:00 AM | Space Radio | <p>Join Clint Bradford, K6LCS to learn about finding a supportive club, licensing, and then on to the wonderful world of working the "easy" amateur satellites - including the International Space Station. Most hams already have the necessary equipment to work the satellite and space modes!</p> | Clint Bradford K6LCS |

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| Learn to Solder Workshop | Saturday | 11:00 AM | Events and EMS | This workshop will introduce wannabe kit builders to the basic tools and techniques of building electronic kits. Rex Harper, W1REX will hold a live stream building session using a custom 20m transmitter kit designed specifically for this workshop. | Rex Harper W1REX Stephen Houser N1SH |
| Solar Cycle 25 Predictions | Saturday | 11:00 AM | General | Carl Luetzelschwab, K9LA reviews the many predictions that have been made for Cycle 25. He will address both the consensus for a below-average solar cycle and the small number of predictions for a big solar cycle. | Carl Luetzelschwab K9LA |
| Behind the Tuning Knob -- Frequency Control Past and Present | Saturday | 11:00 AM | History | A look at how we set and keep frequency from the dawn of radio to today. Homebrewer, atomic clock timekeeper and frequency measurement hacker ("Time Nut") John Ackermann N8UR examines how we set and keep frequency from the dawn of radio to today. | John Ackermann N8UR |
| High-Speed Radio Communications - The NEFR | Saturday | 11:00 AM | General | Imagine you're one of 45 radio operators deployed to a remote area. You're tasked with taking everything you need to communicate for hours on end in any weather. Tim Carter W3ATB reveals how 45 radio operators work the New England Forest Rally (NEFR) every summer - and survive. | Tim Carter W3ATB |

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| Elecraft K4 High Performance Direct-Sampling SDR Transceiver | Saturday | 11:00 AM | SDR - Software Defined Radio | Eric will talk about and demo the key features as well as the latest features of the K4 High-Performance Direct-Sampling SDR. | Eric Swartz WA6HHQ |
| Implementation of LDPC encoder on FPGA | Saturday | 11:00 AM | Expert Technology | This presentation by Anshul Makkar will focus on implementation details of LDPC protocol on FPGA. | Anshul Makkar |
| FlexRadio's Product Line Overview | Saturday | 12:00 PM | FlexRadio | JP is going to do an introductory overview for the operator who is new to FlexRadio solutions. | JP Pacheo KG5ZZB/LU9ARV |
| History of Phase IV Work - DMT from Open Research Institute | Saturday | 12:00 PM | Space Radio | Open source, cutting edge, easy to use, affordable, adaptable, and fun. Learn all about exciting and innovative microwave broadband multi-user systems for amateur space and terrestrial use from Thomas Parry. | Robert McGwier |
| Using Drones for Amateur Radio | Saturday | 12:00 PM | General | Flying drones can be handy tools for use by radio amateurs. In this session, Michael Walker, VA3MW will cover the basics of drones and offer practical suggestions on their use for amateur radio. | Michael Walker VA3MW Wally Ritchie , Thomas Parry |
| Ham Humor: A Look at the Best Ham Radio Cartoons | Saturday | 12:00 PM | General | Quin (K8QS) and Tom (WA9TDD) look at print cartoons that capture the fun, craziness, and frustrations of amateur radio. Quin and Tom are 50-year hams who co-host "Ham Radio Perspectives" on YouTube. | Quin Schultze K8QS Tom Dulisch WA9TDD |

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| HEMA what it is and where is it going | Saturday | 12:00 PM | General | HEMA is a Summit scheme for everyman which started in the UK but is now expanding into other countries. A Q&A session will follow where two driving forces from HEMA, Rob G7LAS & Mike 2E0YYY will join Ed to answer questions and discuss expansions to HEMA | Edward Durrant DD5LP |
| How the Ionosphere Really Works | Saturday | 12:00 PM | General | Eric P. Nichools, KL7AJ, discusses the structure of the ionosphere and the properties that make it uniquely suitable for long distance propagation. Eric will do a recap of his QST article, "Gimme an X, Gimme an O, What's that Spell? Radio" and explain what X and O mode propagation is. | Eric Nichols kl7aj |
| Machine Learning and Ham Radio, ID of HF/VHF Signals | Saturday | 12:00 PM | General | We'll cover some basic machine learning (ML) at a minimal technical level and show how to apply this to the rapid detection and classification and identification of signals on HF/VHF. An ML supercomputer used to learn will be shown. Edge nodes shown. | Bob McGwier N4HY |
| FlexRadio PowerGenius Amplifier - Overview and Features | Saturday | 1:00 PM | FlexRadio | Dan will go over the features and some internals of the Power Genius Amplifier. | Dan Quigley N7HQ |

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| Debris Mitigation In Earth's Orbit | Saturday | 1:00 PM | Space Radio | <p>This presentation will focus challenges faced by ARSS community in the new Era and how these can be overcome. Focus will be to showcase which tools can be used and what all factors needs to be considered to plan your mission to meet the rules around Debris Mitigation.</p> | Anshul Makkar |
| Design Notes for Solid-State RF Power Amplifiers | Saturday | 1:00 PM | General | <p>Carl Luetzelschwab, K9LA reviews the basics of solid-state RF power amplifier design and will address the decisions needed to make successful designs.</p> | Carl Luetzelschwab K9LA |
| Challenges in Paradise: 30 years of Rotuma DXpeditions 1991-2021 | Saturday | 1:00 PM | General | <p>Antoine De Ramon N'Yeurt, 3D2AG explores the unfolding of single-handed DXpeditions to the isolated island of Rotuma by 3D2AG since 1991. Antoine shares the joys, pains, difficulties, logistical challenges and the ultimate sacrifices made to activate this DX entity.</p> | Antoine De Ramon N'Yeurt 3D2AG |
| The Search for Earhart's L10E: Replicating Earhart's HF Comm Link | Saturday | 1:00 PM | General | <p>In September HF comm link tests that replicated Amelia Earhart's 1937 vintage HF communications system were conducted over the Atlantic. System performance was measured with SDR's. This presentation will explain how the tests were accomplished.</p> | Tom Vinson NY0V |

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| Underdog Contesting | Saturday | 1:00 PM | General | This presentation addresses geographic, equipment, propagation and other obstacles that often hamper HF contest enthusiasts. Learning objectives of the presentation share with hams how they can improvise, adapt and overcome to improve their contest abilities. | Fred Regennitter K4IU |
| Rebranding Amateur / Ham Radio - ICQ Podcast Live from the Expo | Saturday | 1:00 PM | Podcast Pavilion | | Colin Butler M6BOY |
| Keynote Speech - David Minster, NA2AA, CEO of ARRL | Saturday | 2:00 PM | | In September 2020, ARRL, the national association for Amateur Radio® in the United States, welcomed David Minster, NA2AA, as its newly-elected CEO. David will share his enthusiasm for advancing amateur radio, and he'll highlight ARRL initiatives to engage and inspire this current generation of hams. | David Minster NA2AA |
| FlexRadio Tuner Genius XL overview | Saturday | 3:00 PM | FlexRadio | The TGXL tuner is FlexRadio's latest product. The tuner is capable of legal limit operations on all bands from 160M to 6M. Two models: An (SO2R) version and a single input with 1x3 antenna. The TGXL works with non-FRS radios as well. | Mack McCormick W4AX |

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| How to Enjoy Amateur Radio Contacts with the International Space Station | Saturday | 3:00 PM | Space Radio | You can enjoy ham radio contacts through the ARISS radios on the International Space Station. We'll explain how you can have fun trying ARISS packet, SSTV and repeater mode. Intermediate level & even beginners learn how to try off-the-planet hamming. | Frank Bauer KA3HDO |
| Build it! The NS-40 QRP Transmitter | Saturday | 3:00 PM | General | The NS-40 is a 'No-Simpler' design, only 14 components, yet delivers 5 watts of RF at 7.030 MHz from 12v. Build this QRP classic with personal instruction from the kit designer, David Cripe NM0S Kit available here: https://tinyurl.com/yxgkdet8 | David Cripe NM0S Virginia Smith NV5F |
| How to have a contact or QSO for new hams on HF | Saturday | 3:00 PM | General | New to HF operation? Just upgraded and want to get on the "low bands"? Jim Heath, W6LG leads a discussion about the HF bands, calling CQ, answering a CQ, exchanging information, signal, plain language reports, common mistakes, listening and then applying what you have heard. | Jim Heath W6LG |
| The Storied History of the Ham Radio Callsign | Saturday | 3:00 PM | General | Every amateur operator in the world has been issued a formal callsign that becomes their primary form of moniker among other amateurs. That wasn't always the case! Mike Ritz, W7VO invites you to join us as we learn the origins of callsigns, and how they have evolved over the years. | Mike Ritz W7VO |

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| Working with Youth in Amateur Radio | Saturday | 3:00 PM | General | Practical ideas and resources for individuals and clubs working with Youth in Amateur Radio (YIAR). For schools and youth organizations - find out how to get your foot in the door. Piggybacking on STEM. YIAR myths. Modes for radio demos. Off-air activities. Competition/Gaming in AR. | Anthony Luscre K8ZT Katie Campbell KE8LQR |
| Double Inverted HF Delta Skeleton Slot Antenna | Saturday | 3:00 PM | Expert Level | John Portune, W6NBC, takes a close-up look at the most popular antenna from his previous talk on Slot Antennas. Small beam gain from an HF vertical that's horizontally polarized for lower noise. Includes recommendations for using it without a remote automatic tuner as a monobander. | John Portune W6NBC |
| K9CT Station Tour and a peak at 2021 enhancements | Saturday | 4:00 PM | FlexRadio | Craig takes us on a tour of his FlexRadio based world class contest station. | Craig Thompson K9CT |
| Getting on the Air With Amateur Radio Satellites | Saturday | 4:00 PM | Space Radio | Tom Schuessler, N5HYP, covers basic information you will need to begin working contacts through Amateur Radio satellites. You will also be given additional information and resources to continue learning and growing in this fascinating aspect of the hobby. | Tom Schuessler N5HYP |

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| My favorite DXpeditions to DXCC "top 10-most wanted" | Saturday | 4:00 PM | General | Well known DXpeditioner Bob Allphin, K4UEE highlights his three favorite DX excursions. Bob completed 43 DXpeditions and activated eleven DXCC "top 10-most wanted" entities. His trademark is large QSO totals so the rare ones can be worked by as many of the deserving as possible. | Bob Allphin k4UEE |
| ETs or Hams? Receiving Moonbounce with a Radio Telescope | Saturday | 4:00 PM | General | The Allen Telescope Array in northern California is used by the SETI Institute and Breakthrough Listen projects to search for extraterrestrial life. Derek Kozel, MW0LNA had a chance to use the array on several bands to show Moon bounce to students. | Derek Kozel MW0LNA |
| My years with Dentron Radio Company 1981-1983 | Saturday | 4:00 PM | History | George Mistic, KE8RN will discuss working for Dentron Radio Company as the only engineer. George will discuss the products he designed and what happened to Dentron in 1983 and the operation making air variable capacitors, reduction drives, and other parts that are still around | George Mistic KE8RN |
| How (and Why) to Organize an Amateur Radio Special Event | Saturday | 4:00 PM | General | Special events are some of the best things that happen in ham radio. This interactive seminar by Steve Masticola, WX2S is for organizers of special events and those who would like to be. Topics include the full range of activities involved in running special events. | Steve Masticola WX2S |

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| Low Band Receive Antennas for All Yards | Saturday | 4:00 PM | Propagation | Static (QRN) can cover DX, nets, and rag chew QSOs on the low bands. The solution for some hams are Beverage antennas 1000' long, but there are other receive-only antenna options for smaller lots. Learn how you can hear the weak ones like never before! | Gary Sutcliffe W9XT |
| Ham Radio 2.0 | Saturday | 4:00 PM | Podcast Pavilion | We'll livestream a live audience interaction for Ham Radio Q&A | Jason Johnston KC5HWB |
| Getting started in Remote HF operating | Saturday | 5:00 PM | FlexRadio | How to start to setup your remote HF station. Michael will go over some of the basics to get you going and how you can build out beyond that. | Michael Walker VA3MW |
| Receiving WSPR and FT8 on all bands at once using GNU Radio and RTL SDRs | Saturday | 5:00 PM | General | The WSJT software makes it simple to receive FT8 or WSPR on a single band with a standard SSB HF receiver. But how can you do both at the same time and what about the other bands? Mark Smith, KR6ZY says "Use inexpensive RTL SDR, Raspberry Pi, and GNU Radio!" | Mark Smith KR6ZY Derek Koziel MW0LNA |
| Remote Labs for P4XT Engineering Development | Saturday | 5:00 PM | Space Radio | Open Research Institute has equipped two labs for remote development of FPGA-based wideband digital systems such as P4XT. Paul Williamson, KB5MU takes a look at equipment selection, remote access techniques and review some lessons learned in the first months of operation. Remote developers invited! | Paul Williamson KB5MU |

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| DXCC One Bite at a time | Saturday | 5:00 PM | General | Achieving DXCC can be a daunting task. However, when you break it down, it is all about perspective. Bill Salyers, AJ8B says "Break the chase into 3 levels, set realistic goals, and then achieve it!" | Bill Salyers aj8b |
| Detecting Earthquakes Using HF Receivers | Saturday | 5:00 PM | General | The RF Seismograph is a continuing project that came out of the Solar Eclipse measurement in 2017. We are continuously monitoring background noise on 6 bands, but the discovery of quakes creating propagation came in 2019, after reading a paper about how earthquakes create electricity. Learn more from Alex Schwarz, VE7DXW. | Alex Schwarz VE7DXW |
| How To Run A Ham Radio Station At An Event For A Large Number Of Youth | Saturday | 5:00 PM | General | Boy Scouts of Canada Jamboree leader Ron Bilinsky, VA7RTB presents some ideas for running a successful ham radio demonstration for young people. The 2 primary focuses of this presentation are: 1) The 10 essential steps to setting up a Ham Radio Station for a large number of youths, (i.e. as in a Scout Jamboree style event), and 2) 12 Ham Radio activities to engage and teach youth aged 10-15 years old. | Ron Bilinsky VA7RTB |

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| VP6R - An Overview of the Pitcair DXpedtion | Saturday | 6:00 PM | FlexRadio | The October-November 2019 VP6R DXpedition to Pitcairn Island was the first ever all-FlexRadio DXpedition. Over 82,000 contacts were made with emphasis on the low bands and digital modes (FT8). Presented by Glenn Johnson, W0GJ. | Glenn Johnson W0GJ |
| Solving the ITAR and EAR problem for the Amateur Radio Satellite Service | Saturday | 6:00 PM | Space Radio | The regulatory framework for communications satellites has carve-outs for public domain work. Recent successful regulatory efforts have resulted in landmark improvements for open source amateur radio satellite service work. Come hear the good news! | Michelle Thompson W5NYV |
| Introduction to Digital Amateur Television | Saturday | 6:00 PM | Expert Technology | Amateur Television has gone digital! We will show you how ATV has exploded into the 21st Century. You'll learn about the equipment we use, where to get it, how to use it and what it's used for. We are on the air to everywhere. Let us show you. | Amateur Television Network (ATN) Michael Collis WA6SVT, Roland Hoffman KC6JPG, Rod Fritz WB9KMO, Jim Andrews KH6HTV |
| The LAN in today's HamShack | Saturday | 7:00 PM | FlexRadio | Today, the Internet and the LAN is a key part of any hamshack. Dan will go over the basics and help you lay down a foundation for a solid station. | Dan Quigley N7HQ |

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| <p>Around The World Scavenger Hunt from Amateur Space Radio</p> | <p>Saturday</p> | <p>9:00 PM</p> | <p>History</p> | <p>https://watsonadventures.com/location/virtual/global-scavenger-hunts/</p> <p>Enjoy an online adventure! Explore the world and have some fun after a long day at the Ham Expo.</p> <p>This will be Saturday evening starting at 7pm Pacific</p> | <p>Michelle Thompson</p> |
| <p>CW OPS Special Event</p> | <p>Saturday</p> | <p>7:00 PM</p> | <p>Live Social Event</p> | <p>CWops has reserved table 21 to 40 in the main lounge for visiting, networking, and shmoozing, all night long. Look for the CWops logo in the middle of the tables to meet with your friends from CWops!</p> | <p>Mark Beckwith N5OT</p> |
| <p>FlexRadio with IBM's Node-RED in the Ham Shack</p> | <p>Sunday</p> | <p>10:00 AM</p> | <p>FlexRadio</p> | <p>Node-RED is a software tool that can be used to enhance the integration in your ham shack and to allow different types of hardware to communicate with each other. It is great for the casual user, contestor and/or the remote user.</p> | <p>Dave de Coons WO2X</p> |
| <p>Makers, Youth and Ham Radio</p> | <p>Sunday</p> | <p>10:00 AM</p> | <p>How To</p> | <p>"Using the Maker movement as an entry point into Amateur Radio" From suggesting that we all become "ambassadors" for ham radio, to student activities and teacher experiences and importance of inspiring passions for science and technology.</p> | <p>Wayne Yoshida KH6WZ</p> |

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| Scratch-building 101: How to design, build and enjoy your own QRP rig | Sunday | 10:00 AM | General | You've built a QRP kit -what's next? This session by Paul Taylor, VK3HN will inspire you to plan, design, build, test and enjoy your own scratch-built receiver, QRP transmitter or transceiver, including concept, choices, construction, testing and enjoying your creation. | Paul Taylor VK3HN |
| The New Frontier of CW Operating | Sunday | 10:00 AM | General | The early days of amateur radio began with Morse Code transmissions. The development included many technologies for public safety, military, and now into advanced SDR communications. Peter Butler, W1UU shows how today's CW operators are contributing to scientific knowledge -- and having fun at the same time. | Peter Butler W1UU |
| Let's BUILD something! | Sunday | 10:00 AM | How To | Rex Harper, W1REX, leads this virtual BUILDATHON where participants build the Mini-Sudden, a pocket & mint tin friendly direct conversion 20m receiver. Kits will be shipped to QTHs around the world so builders can take part in this special group BUILDATHON. | Rex Harper W1REX |

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| GNU Radio: a toolkit for digital homebrewing | Sunday | 10:00 AM | General | GNU Radio is a free and open source software toolkit for working with signals of all modes. President of the GNU Radio project Derek Kozel, MW0LNA takes a tour of exploring the spectrum, filtering audio, and create entirely new modes. This talk shows some examples of what's possible and how to get started. | Derek Kozel MW0LNA |
| The State QSO Party Challenge | Sunday | 10:00 AM | General | Looking for more on-air challenges? Anthony Luscre, K8ZT presents the State QSO Party Challenge, which aggregates participation in State and Province QSO Parties. Operators report scores in individual QSO Parties via 3830.com. Scores are combined for all SQPs in a year-long competition, like year-long activities such as National Parks on the Air (NPOTA), W1AW/P and CQ DX Marathon. | Anthony Luscre K8ZT |
| Youth Forum | Sunday | 11:00 AM | General | Carole Perry, WB2MGP will give a brief summary of the free resources available thru RCA Youth Activities and will offer suggestions for recruitment and retention of youth into ham radio. I will have 6 or 7 young ham speakers on various radio topics and events. | Carole Perry WB2MGP |

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| Best receiver settings for your Flex 6000 series radio | Sunday | 11:00 AM | FlexRadio | Tim will go over how to best optimize your FlexRadio 6xxx receiver settings. The use of AGC-T, Preamps and more. | Tim Ellison W4TME |
| 3D Printer Basics | Sunday | 11:00 AM | General | Virtually every ham can benefit from owning an inexpensive 3D printer. Ron Jones, K7RJ explains how 3D printers work. Not a deep dive into specific printers or software, but an overview of capabilities and many examples of how they can enhance your station. | Ron Jones K7RJ |
| Lightning and Grounding Protection | Sunday | 11:00 AM | Expert Level | Ron was in the Two-Way Radio field for 37 years dealing with lightning protection at remote mountaintop radio sites. | Ron Jones K7RJ |
| Software Defined Radio - expanding the capabilities of Ham Radio! | Sunday | 11:00 AM | General | Affordable, high-performance SDRs offer more capabilities than ever: SW broadcast and amateur bands, digital decoding, weather satellite imaging, SSTV, diversity tuning, panadapters and more are all within easy reach. Learn all about it at this seminar by Steve Brightman, KI5ENW. | Steve Brightman KI5ENW |
| Send an Amateur Radio Balloon around the World | Sunday | 11:00 AM | General | Learn how to send a balloon carrying amateur radio around the world from Bill Brown, WB8ELK. Focus on how to receive balloon signals via APRS and WSPR modes and how to track them online. Bill shares practical advice on trackers as well as balloons that you can use for best success. | Bill Brown WB8ELK |

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| Choosing Your Ideal Callsign | Sunday | 12:00 PM | General | Many countries allow hams to apply for "vanity" callsigns of their own choice (as long as they fall within certain criteria). How do you choose the best available callsign for you and your operating style/interests? | Anthony Luscre K8ZT |
| Systems Integration For Amateur Radio | Sunday | 12:00 PM | General | Take a deep dive into best practices for tying everything together in your modern, software driven station. Ria Jairam, N2RJ covers basic connectivity, software choices, links to internet resources and how to work online or offline. | Ria Jairam N2RJ |
| Dual-band Satellite Dish Slot Antenna | Sunday | 12:00 PM | General | Marcel Stieber, AI6MS presents an improved dual-band stealth antenna disguised as a satellite TV dish! This dual-band design expands on the 2016 2-meter antenna from W6NBC by adding a second slot and a diplexer. Come see the design, construction, and field test results! | Marcel Stieber AI6MS |
| The Science Behind the Pings - Meteor Scatter Propagation | Sunday | 12:00 PM | General | Meteor Scatter QSOs are easier than ever thanks to the WSJT-X software. This presentation gives an overview of meteors, their ionization trails, scattering of RF, and the reasons for the daily and annual variations in meteor scatter propagation. | Rob Suggs NN4NT |

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| High Speed CW in Your Head | Sunday | 12:00 PM | Skill Building | <p>Many hams don't try to copy CW in their head because they think it's too hard. Maybe the reason it's hard is because you're not doing it right. George Allison K1IG teaches one method of "head copying," and by the time the session is over, you'll be copying 30 words per minute in your head.</p> | George Allison K1IG |
| Teaching Online Ham Classes | Sunday | 1:00 PM | General | <p>When the pandemic hit, Dan Romanchik, KB6NU, suspended his in-person ham license classes. When it looked as if the pandemic wasn't going to end soon, he moved them online. This presentation will discuss how Dan conducts online classes and some ideas for making online classes more effective.</p> | Dan Romanchik KB6NU |
| Build a Kit! Building the Cric-Key | Sunday | 1:00 PM | How To | <p>Joe Eisenberg Cripe, K0NEB, CQ Magazine Kit Building Editor, leads a hands-on workshop: Cric-Key is the latest in innovative and easy to build kits from the 4-State QRP Group. The Cric-Key is a simple CW keyer with paddle, well suited for not only use at home, but in the field as well. Simple to build and all parts are included.</p> | Joe Eisenberg K0NEB |

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| Another new look at verticals | Sunday | 1:00 PM | General | Tom Schiller, N6BT shares the results of empirical testing of mainly verticals via drones through the actual field. Data of various vertical installs, adjacent to sloping ground, salt water. New, minimal real estate, high efficiency counterpoise and current balance in a vertical antenna system. | Thomas Schiller N6BT |
| Top 5 Station Accessories Every Ham Needs to Have | Sunday | 1:00 PM | General | The various station accessories hams need in order to get the most from the hobby...and the ones they don't need. How to have everything you need and nothing that you don't! From longtime ham and prolific author Don Keith N4KC. | Don Keith N4KC |
| CW Academy, A Great Way to Learn CW | Sunday | 1:00 PM | General | Eric Silverthorn, NM5M presents the various levels of CW Academy, the teaching methods of the program and offers advice on how students can achieve success in the program. | Eric Silverthorn NM5M |
| VHF Contesting | Sunday | 2:00 PM | General | VHF contesting on the Magic Bands with super results from average stations. No need for a superstation. VHF offers small antennas with high gain. Power levels are not that critical. Small groups of competitors means you too can be competitive. Learn how from Jim Wlson, K5ND. | Jim Wilson K5ND |

Spring 2021 QSO Today Ham Expo Schedule of Speakers

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| Introduction to Antenna Aperture | Sunday | 2:00 PM | Expert Level | Most amateurs are familiar with basic antenna specifications: gain, efficiency, F/B ratios etc. Few are familiar with antenna aperture, yet understanding aperture permits deeper insight to antenna performance. This presentation by Robert Zavrel is a basic introduction. | Robert Zavrel W7SX |
| An overview of Parks on the Air | Sunday | 2:00 PM | General | Session will cover the POTA program: -What it is -What participating involves -How to become a participant -Tips and Tricks for the Activator role | Matt Heere N3NWX |
| Be a Merry Merry Operator - How to start /MM operations without a headache | Sunday | 2:00 PM | General | Want to benefit from RFI-quiet conditions at sea? Want to learn how to plan a ship activation and what to bring? What rigs antennas and power sources to use? How do you NOT infuriate the ship's Chief Officer with all those antennas and potential sources of interference? Learn the answers to these questions from professional mariner and ham Mike Brennek, SP2J/SP1MM. | Michal (Mike) Brennek SP2J/SP1MM |
| 10GHz LNB uses and Modifications | Sunday | 2:00 PM | General | This presentation by Doug Millar, K6JEY will focus on modifying universal LNBS for use on 10 GHz. Information on stability improvements, external SMA input, and uses with various low-frequency spectrum analyzers will be covered. | Douglas Millar K6JEY |