***[](http://arrl-ohio.org)***

***March 2025***

|  |  |
| --- | --- |
| 🡪 [From the Technical Coordinator](#tc) | **🡪** [From the Section Emergency Coordinator](#sec) |
| **🡪** [From the Public Information Coordinator](#pic) | 🡪 [From the Section Youth Coordinator](#syc) |
| **🡪** [From the Section Traffic Manager](#stm) | 🡪 [ARES Training Update](#training) |
| 🡪 [From](#national) the Affiliated Clubs Coordinator | **🡪** [National News](#national) |
| 🡪 [Club](#national) Corner | 🡪 [Contest Corner](#contest) |
| 🡪 [DX This Week](#dx) | 🡪 [One Question Questionnaire](#one) |
| 🡪 [Special Events](#special) | 🡪 [Final.. Final..](#final) |

A person standing next to a table with signs on it

Description automatically generated with medium confidence

***From the Technical Coordinator***

***Jeff Kopcak – K8JTK TC***

[K8JTK@arrl.net](mailto:K8JTK@arrl.net)

Hey gang,

Were you a ham and don’t remember a previous call? Want to fill in gaps of previous callsigns? Need proof a license was held previously for exam credit? Have a vanity callsign and curious about whom held it previously? Pete "The Greek” - NL7XM is a Radio Amateur Callsign Historian.

Pete provides this unique service with his collection of Callbooks dating back to 1909. “He can research license dates, find lost Callsigns, or get past proof for FCC Lifetime Credit at very reasonable terms” according to his eHam.net page.

For hams that grew up in the 2000’s or later, not everything is on the Internet. Information was disseminated in these printed things called books. You couldn’t always go to QRZ.com, or other favorite callsign lookup, to find information about another ham. Instead, a Callbook could be purchased by individuals or clubs. Inside would be the entire listing of Amateur Radio stations. Often beginning with the 10th call district (stations with “0” in their callsign) and sorted by call suffix. Information would include class identification (Novice, Tech, Conditional, General, Advanced, Extra, Club, Military, Repeater) and station contact address. These Callbooks were usually published regionally (eg: North America) and multiple times throughout the year (eg: winter, fall, spring). Later editions were thousands of pages.

If you’re reading this and were a ham previously, interested in re-joining the ranks, use Pete’s service to find previous licenses which may gain automatic exam credit. Maybe jog the memory on previous callsigns. Some may have lost their license in a move, misplaced paperwork, threw it away thinking you’ll never need it again only to regret that decision later. If Pete can find your previous license, usually with the help of approximate dates, he can send a copy which is valid proof of holding a license previously.

Ways to gain exam element credit are listed on this [ARRL VEC page](https://www.arrl.org/exam-element-credit). Questions or clarifications, the [ARRL VEC](https://www.arrl.org/volunteer-examiners) has helped many candidates understand the process. They often reach out to the local VEC, where the candidate expects to take the exam, informing that team how to process the application.

Reading through some of the comments, Pete has helped find a radio club’s previous callsigns, ones which had been forgotten. He’s found when current license holders were first licensed, because that person had forgotten exactly. Found Novice callsigns of current hams. Callsigns held by other relatives such as father, grandparents, uncles, or cousins. Pete has even tracked down current contact information to help authors doing research for articles and stories.

I heard about Pete on Ham Nation and I contacted him a few years ago. I was curious about previous holder/s of my callsign. My original call was KC8MWP but I changed it almost immediately to include my initials, K8JTK, and have held it ever since. Since mine is a vanity call, I was not the original holder. Every once-in-a-while on-air someone would say ‘I knew someone in the area that used to have that call.’

One day, I wrote Pete and asked him to put together a history of previous holders (again figuring multiple people held it previously). Since my query was for my own edification, I told him he could put my request at the end of the pile because those that needed his services for license verification, I felt, were more important.

As it turned out, he did have a pile and got to my request about a month later. This was a few years ago, recent reviews indicate a much quicker turnaround time. It appears the workload has lightened!

Pete’s research found only one previous holder of my current callsign, and it was a YL:



"PeteTheGreek” - NL7XM and his vast collection of Callbooks (eHam.net)

*“Opal J. Glenn of 736 Arlington Rd. in Bangor, Mich. held the call for almost exactly 10 years from about July 1958 until the summer of 1968. There’s no further information found about her after that.”*

Only one previous holder of my callsign, I had no idea. I suspect locals remembered the callsign incorrectly or thought it was something else.

Recently, I did some quick research to see if she was still living or had passed. Nothing online. Searched that address and the road appears to have been renamed “W Arlington St.” A house with that exact number exists on W. Arlington St., according to Google Maps. I would suspect contacting the local Historical Society could provide more information, if I was so inclined. I haven’t been (yet).

In the footer of Pete’s reply, he requests leaving a review on his E-ham page. In addition, accepts donations via his PayPal. He provided me value with his service and his time researching, I gave some value back by throwing him a couple bucks.

He was very grateful for both my review and donation. He lamented the fact he’ll spend hours conducting research they asked for and promised a few “shekels.” They don’t even send a note back saying thanks or ever send him anything. Frankly, I’m embarrassed by that and hope that is the exception rather than the rule.

[NL7XM Callsign Historical Research](http://www.eham.net/reviews/detail/9782) offers a phenomenal service for those needing historical callsign or historical license details.

Thanks for reading and 73… de Jeff – K8JTK

![A person wearing glasses

Description automatically generated with low confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEASABIAAD/4RG+RXhpZgAATU0AKgAAAAgABAEPAAIAAAAGAAAISgEQAAIAAAAOAAAIUIdpAAQAAAABAAAIXuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEFwcGxlAGlQaG9uZSAxMyBQcm8AABOCmgAFAAAAAQAAEVSCnQAFAAAAAQAAEVyIIgADAAAAAQACAACIJwADAAAAAQAoAACQAAAHAAAABDAyMzKQAwACAAAAFAAAEWSQBAACAAAAFAAAEXiSAQAKAAAAAQAAEYySAgAFAAAAAQAAEZSSAwAFAAAAAQAAEZySBAAKAAAAAQAAEaSSBwADAAAAAQAFAACSCQADAAAAAQAQAACSCgAFAAAAAQAAEaySkQACAAAAAzIzAACSkgACAAAAAzIzAACkAwADAAAAAQAAAACkBQADAAAAAQAXAADqHAAHAAAIDAAACUgAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABAAAArAAAAAsAAAAFMjAyMjoxMDoxMSAxODoxODo0OAAyMDIyOjEwOjExIDE4OjE4OjQ4AAABNoEAACnTAAKV9wABIvkAAOJEAAAhJQAAAAAAAAABAAABDwAAAGQAAP/hCaBodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvIj48eG1wOkNyZWF0ZURhdGU+MjAyMi0xMC0xMVQxODoxODo0OC4yMzA8L3htcDpDcmVhdGVEYXRlPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMAAwICAwICAwMDAwQDAwQFCAUFBAQFCgcHBggMCgwMCwoLCw0OEhANDhEOCwsQFhARExQVFRUMDxcYFhQYEhQVFP/bAEMBAwQEBQQFCQUFCRQNCw0UFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFP/AABEIAWgBtAMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APW+R0GamjkZfb+lSi1HHOKe1nhcq4I9K/dW0fioiy+Z1XB9RxSbR3wP0pgVo856elNlkLdOlBDY512/54qPB+lNGaXBaqM2w3GnKnsRT1Tp0qeOMnp0qXJGUmRKpHtVqFdygNyKcsCxxmWR1jiUZaSRgqj8a4Hxh8btB8Kq8doy6jcqPvk4iH+NcFbEwpqzN6NCpWdoI9Ot4dq7l6LyWPAFYmufEDw34fz9s1GNpAOY7cb2+npXy34x+PGt+I8obtkhzxGvyIPoBXmmoeJJrokvNI5PZTgV4tTGTk9ND6CjlX/Pxn1X4g/aS0CyUix05pSOjXMoUfkK4LU/2otWlyLKKG3UcDyYQT+Zr57bUW3ZG1T+BNQNfu2SXY/1rklVnLdnqQy+hDWx7ReftCeK7wkfbrmMem8IOvtisW6+MHiSU/NqUrn1NxmvLPPJPTAHfNJ5x46E+mayv5HUqEF0PT1+LfiCP5v7Rk6/8/OCKvW/xw8U26gR6pcf7q3Ofwrx/wA8tnke2AaUTEMBxRp2K9jDse52v7R3i234N7cPxxkK/wCFVLv44XepEnUd0hJyWkBU9PWvGhckfxY545p8eoSxnAlkXPZW4FXGo4u6I+rU+iPZbbx/p95kHzIyy4JRgwq7bajZ3UmYr2Muy7VSQbSOfy//AFV4f9uLEbo43x/s4/lirMOqlcYkkiGf7wdT09ea6FiZdSXh10Perv7Q1w8oQtGT8siDK7R34+lT6fq81qyskhUjkEHGK8Y0vxpqOnuWhuGZehKPhj/wGut0v4iW9wyR3kCI+Mb4wI2+uOhreOIT3MZUJH0J4Z+JRbZb6mGmToJMfOv+Nd7H5N5CJraVZoT/ABL29q+cLC+gvAGsrtJx02fdcH/dP9K67w54tu9DuMxPgfxI3Kn2Irup1XD4WeLiMEp6rRnrkkPqKgaH2qvpPjTTtY2K+LWZuNpOVrbltdvbtkV6NOupHhVKU6TtJGO0Z7Cmlcf/AFq0JIemRxULQj0xXUpmNymVB4x9KaYx6fhVpocdKY0Z54NaKQaFTysDpzSGI1a2Gk2dqrmEUzH+NJj2q75WaVbVm6DinzjsUNopNvatb+yXIDAqfYdqb/ZjK2CVB+tHtIlcrMvYfTijbW0ujAjPmrn0zUi6RCq/NKpPoBU+2iVyswljLdqkazkGDsOPXFba21vDyVL+mama7VVGFGAPu44qPbPoi1Huc8tuzMBira6WMAg/WtCS8EmBtCj2UCm+d82M/Sl7SQWQQ26R44Un36VdjuYt2JkGOnHNVdpMgHAPvTJFePJZSe3tWLXM9TRMuS3kC/6tc/pUP20IRmM471S8w/3eKl8mRow4Oc8cdqORLcOYsSXSycxkrgfxVBNdSbQQcj1FK1o7LnODU9vZr97kpjBX+tHuxHdshfUJ2hBVRGOhK96barLcB2U4KjJIOBWmsIhTy3AKHpntTYkjgY44PUip5lbRDM1Y5ZiV3tkfwseDTlhZYxyVl6Y7VZmdVclWwc9OOKqyXR6YBq02Tew1rmWM7cgfhRVdmdmzzRV8pPMX9pbAFOEbhvu5qxHH2xmpVhB7kVzuRoRrBnGVH0pjWaN1TH0q4sZHfP4Uc9O1Z8zJM1tNHUflTRZsp4rU9B2pQB6VXtGQ0Z0duehX3qn4j8Sab4NsftepyAMRmO2UgO/+Ap3jfxjZ+A9Fe8uCrXTqfIhPc4+8favjnx18QL7xXqU09zcOwY5J3E59vavIxOMfwQPTweAdd889jrfiR8cL/wASzSQxOIbRDhYo8hFHp715DfaxJcS7yWc+rVUuJvMbLHjt2AqpKxK+gxmvFlJs+upUY042ih89yWYFjk46VXaU9MgDGPeoJplXIJI7H1qDzGkxjGPU1NzezLLNnDdPUmm+2ST1FRqcZIOfrS7vXnPHtVCHhsdMD1o3f3Txn0qHd12n8uKYZcd/1oAsGQ89c+wApPM6ZJOPpVVpvm+Xp0HFMMvyj69h0pDsy6Zfl7/TAJFJ5nzenHpVMyd+v4U5ZvmH0444oCxb8wlRg8542ml3fNzgkDjsPpVMTAfdPv8ASnfaODxj9KYi0JjgHgntmrMd8xUKxEir/C4yB9Kzd+dv6Yp6v8uRjr0FAHRWGtTWjAwysmP4JGyD9Grv/DvxOZWEOpIZgO7EBx7g/wCRXkXmFW64A7f0q1HdHyxnBX0NaRqOOxnKnGW59NaTq8N5GJbSYSpjJA4dfqP616V4T+IxhVLXUN09svCyj76CvjjQ/El1o90stvKxUHON3zL9D3r1vwr48tNaREmdbe5PSTojex9DXfTrqWkjy6+FUlZrQ+rVSK7hWeB1mgYZVl6fSoHtx6Yryvwv4vu9BuMZJj6PC5yp/wA+teuaXqFp4gtBPaNwOHjP3kPp9K9OFZrSR8viMLKk7x2KLQH0yO1MaP1GBWnLblTjGKhaKuxVDz/Iz/L5HFIYweKttFzxTGhOeK1Uhlbyx6U4ZXpxUnl+2KFj/CnzDQzzm9fypm4mpmUU3Z+FMsj3svQ8UpmPTGacV9qTy/bFMCS1KzPtcgL71JcWixsMOGj9e4qvt9KXnpnip6lXJVt4PLPzbnzxzipAI44wcKSOh71V2joKNv5UWC4stwWfdgCmm6f049PSjy/anCGnoIiaQv2xUtvcGJufu9MCjyaBDT0Ama6RumencVF9pdW+Q4FO8rvR5PtxUe6VdkfnyPwTSNv7kmrcdv7Yq0ttu4CD64pOSRWrMryScd6kjt9zYx+Va8doNvRakhjVG+4PwrN1exSiZo0mRhlQpFFdEs0SjHlCiuf28uxpyRKf2Pb/AAEfTpR9n7Zx9a10UehB9acVT+6p/Cuf2rL5DF+zuBwM/Sk8k91raW3jbpkHt6U5bXd3BH0pe1I5TDFvu7VI6w2NrPd3LBLe3QyOTx07VrNYrxhfxB6V5p+0RrDeGfh+kcLsr3cmDjrtA6VzYjEckNDfD0Pa1FE+Z/jB8Q7jxZ4hu3L4gU4VVPAUdq8puJvMbd0HSruoTF5GY885O6siaTdxyB7fyrxb9D7inTUI2QySQc8cdNvrVeSbIIPPoBSyMN2DwB6VXdhuxjPYVNzYa20sCRk+lNZsADjPYUxmG0nGD6YqFn24qQH+Z8p55/So2nPGeR29qjZv8jioTICxyc0wsWWmJ9Dx+FMabHU447VXMwHH8qhkuAOc5ouBb87+VR+YucnFZsmpRRqfmGarNrUe3Chie3AGaANsyben6UCYev8A9aue/twc4U47nik/twdSp6+ooA6TzPf/AApVk98H1rnV11O+4flU8etRMQN+BjBzxTuBu+Z17mpFl6DOOcnHesmO+WTowJ/2eanW496q5LSNWOYEYPHOcCp45B16YHaseO4KsD1Hap47rkDv7dqZNjYjmww6E44q/a3TwyiSJgjdSMnB47isNLjdkg1Zjm2k4OOKYj2fwP8AEYPGllqLnao2h+N0fHT3X/Ir1/QfEVxotzFcW04AxkMhyrr6+4r5IguWyjodjqPlbkfhXqPw/wDiEI/+JfqBxFn5WySY2/vDnp0yK66VX7MtjgrUE9UfY/hnxJb+J4duViu1XLRg9fcVoSw8nivArDVp9Ju4poZNrrhkdDwR6j2r3PwX4gj8YafKeBf24UzL0DKfuuB+GD7ivShV5dHsfLYrCcvvwHNHj+VN8k+lbLaa27AXP0FH9j3Dfchc/wDATXX7aJ5igzDaMr2pvl+1bf8AYd2zY8pgf9rApjaJcr1RR9WFae2j3HysxvJ9sCjyK1m0qZcZMf8A30OKP7NYcF4/++hVe0QWZj+SfSjyD6Vr/wBn+ssfHvSfYVHWVMewNP2qHysyPJ9qTya2fskAUfvc+yrQttat3fP0Ape2QcrMfyfbNKIfatxbG32DG4nsMim/ZEXOE7d2o9sPlMhbf24p/wBnrTMKj+BeBTfLXoAM1PtAsUFt6f5akHIx9BVhk54GDSbT6UcwEccMbN83AqYWKN9zJ/CmbT6Uv7zGBuH04pXfcpMtppsi/KIhn3I4qX+zZQvJRR/vCqAErcZapIrSSTvgVm79y1IsNbBes0Y+hzSpaoxA838lqa102LP76Tj0XrV9V06xGW3PxwN3NYSnbRGi8yktjH/z0b8AKKvf23Yx4VbdCP8AaBzRWfNU7F3gV1vTwSob1zT1mifnZtJ9OlJ5ltIvAKUBUwCpUj06GpM+YswshHDKfY1Ou3jjn1FZ4XHI4NL9ode/FS4h7Q0FUfwhS3oeK8F/a883/hHNGJUqpZlx2617jDdNkHANeXftP6W2t/DRLhEy1ncBiPRSDz+lefiovlTPSwFRe2R8JXzHc2T3rLYlmPp71r6jGI5GyD14xWPM3zYxge1eez7NIryOQSBz7CoPvHnAqaXAxVdjtyDx6UFWI5Djiq8jcf5FPkJ5qoxalcLCTSY4z71A02MEnjHfgUk0iwqXc7R/nisaW4lv5fKhVjk8KvWmLcs3mqBSQmHPr2FU44bzUydiM6jqegrp9F8GsGSa7Xec5EY4FdlYeH1wAkSRpnoB1rN1FE6qdCUjzrTfBdxdZaQuF/uovH51rQ+Bolfld579gPavR49HWNPuhuw4xVtdLSOHDYz1xisXWOyOFR51F4TSNtoiU9s7RVqPwnDsH7pBnqzLkmu+j0gRqAwyW644psmk7cYyvHbtUe2Z0LDpdDhpPB9u0ZyilcfdwKxbrwhayE/ucH/Z4NeltYnGfm68giq76UCS3lLn16fjTVUTw8X0PJLjwfJGxaF2A/P8Kz5LfULEkEb1B9M17BcaaqwlSmBnGVrGutIVs/KCPpW0apyTwi6HncOsfNiVSh6Vpw3iTLkEEdOKval4fR8goPyxXO3Gjz2DFoWOP7prZSOCdKUTfjmxirsdwOB+NcrbapjEcg2uvHPFa1tdBsVrc5jfhuB9PTHatK3uTvDo211Pykfyrno5umOnpV63uNuO1HMVynu3w38aLq1omlXkqo68W7OQNrZHyE8cH+eK9l+Gviibw34s0qUuUjkmaynVmxhWA4x7EH86+PNNv3tJlmjJ3DggdCK978J+I/8AhJNLtZUdTe28sTOxBy8YyN/1HGce1dtOfNHkZ5tel1PtG6v7xXK+YwHT5QBVGaa4YEtM5PoWNSaDqEuseGdOumZVMkK7skZ3AYP8qc1nuzmVB27mu2lJNJ2PjKl4ycWZbs7dWY/U1EQ31+taMlqq/wAan6A1H9nXnJ5+ldakjApBfbFL5eKtmBemT+VJ5KejfpVcwisPce1SrGvAJANS+XH/AHWP4gU1kH8KEfjmlcrYBAvY5o+ypjPIPbFCkr0FL5jduOKQ+YjaIL90n+VN5Xtg9KfzR5ZbNVcOYiPakPGOKm8g/Q0vkn0ouK5Bz6UY9sCp/JNHktT5hEH6UmD2NWPJP4ULCaOYRXG4dyPpSfN/ezVoQHuPak+zt6UcxRWwfU/hRtq15Ix0pfIwOlLmG+xU2++KKt+X7UUcwcpMsftTxH3x9KsiH2z6U5YTxxxXNzIsr7T2pyr7VaEAqUWuV4FQ5CsV4o+egqLWNDg8RaLfaVcBTBeRNGd3IBxwfzxWitqw6DFSx27L1U1z1LTi4s0pydOSkuh+bPxD8KXPhXXrzTrqJopreRkO4Y6E1wdwuPT+dfev7Tnwe/4TDQn8R6fEx1GyT/SY1XJljH8f1Hf2r4Y1Kxa3kdWUjnBHpXiP3XZn3+GrRr01NGIx3Z4wagf5gf6VbmwpPHPfiqcx/wAig6yvJlulVpZFjXJ4GOe2KtyJgHHT1Fc7rV183krz/ex+goAq3M0mo3QSNSSThVFd14Z8LJZRq7jMpGWYj9Kr+D/DYt4lmlAMsnPrgeld/Z6aSQeQMVjOp0O2jTW7ILWzTPCn+Rrbt7HCjIxxnA5IqS10+OLO44OegrVhhDoQEwuePWuOUj1acSjHZBsHGGHPPNW4bHzBlgFA6mtK30x+mzC44wP51aTT3UHIwKxcjvjDsZq2SM2SOMdKik09VyWH0ArdjtQ3bH0pk1uvy4Ue5qbnTGmYKaeSMtGAMZA71DLpag7nU49mxXTQ26SR8EF/QUk1ojD5gA+Pb8qOYmVM4m402Nc4wR2Dcn6VhX1nt7cZ7816Nc6WjqPkYZ44AxWRfaL5aqwizxg7eK0UzmnSPOJrN2yy/N/ssOKx76xDZyuM9VPFeiX2krJkRkbhyFxg1g3WmlvvLkqOldEahwVaR5vqWixzZyuGHRhwR7VieZNp8wjmOU7MOlej3mnja3H1z/Kub1LSxIpUrkMOhrsjM8erSKdre7sc5U9xWrbzZ/KuTkjl0uUnBaI9R6VsWF0JAGByCP8AIra5ybaHSWsxUjntXc/D/wATSeHtctpd5EXmA7SflPqD7GvOrWTJB6VuafITjBweoqoysRKPMj9KfhDdLqXgeLyzujjkJjIBwFYAgfhzXVPDj/CvC/2OfFv9taJf6LKyiSNfOiX0wRvUfmD+Jr6FktQvTrXdQq3VmfEY+l7OszGaHvmmeUf8itRoPao/J56V3KZ5nKZvl0mw1o+QPSjyR6VXOHKZ/l8Yxik8nGOK0fJpPs/HvRzhylAQ57cUrQDjAA49c1eW27U4Ww9KXtC7XKC2+7HQVL9jCr1yfpV6O1LHAHPpVj+yZsA7ce2Kh1ktLlqm+iMZoF9z+GKPKTuCfxxWqdNkPVG/LFL/AGeowGVj9KPbLuLkZk+Wn939aTyxxgCtdrOKPGFbPvUaqisR5St9aftOwcpmeX7D2p208c4+layzIv8Ay7x57cUjTFuBFGPotL2j7ByoyPLPTNL5fvmtBgc/dA+gpjRZ6ir5xWKPk0eSOmKveR7U5YQvVAaOcLFHyVorSCj/AJ5rRU+0Dl8xVg9CKXyR6/pV3yeOlHk+1c3OXylMQ/l9KeqdqtLD/wDq6U5Yfap5w5SEJ6ZpyqecZFWVh6fSpFh9qzcx2fYrovXcMjGCrDIPHSvk79pj9nUaf9o8U+H4M6cxzc2qjJt2Pf8A3P5V9eLBz0qX7KskbxuiyxSLtaNgCrKRyCK46yUtVuelg8RPDS02PyE1LT3hkdWGOcelZDR/N04r7T/aO/ZZl037R4g8KWjXWmNl57KNS0lr7gd0/lXyHf6W9vIwZSvtXKpH2VOpGpHmjsc3fzeRC7cjjj2rO8L6S+sauJHGYofmJx1OelT6+G3rAoOWPKivRPhb4Nmms0YRH95ySR2olLlR0U480jU0jR1hjJ2Zz2A6V0FrprzMqoMBh+VdXY+DxaoDLtBXAOCMD/OK0rVbGzcxgKX6Ek8158p3PXjFGNpvhUlt7oCijA68Ctq30dl2fLtTsNuCK2LO4t7grCr4K/wjr+VX4/s/CsVwwwFrBndTtYxbbSvMJwqlORnr+FWm0ZAoyuB7cV0VlFbLEIkRQO2MYq08aiMLtGO+BWbZ6FKSWhxE2miNB+7OG98VWTTDIQwA2g4xtGK7u70/93kAkHjGBxUItYo4WYDJXtjmi56cXG1zkm0nb8ijLYySopsWjFsb4GyOcnpXWw2aeYJcZHt2q40ATkhQegLDp/nFBm3A4OTRVkJQgrg53Dt7Yqvc6FKqqeXBGM4613klqrEMRk5x8vBrNvkMYOF5HPPAoMpcrPN77Ql+b5ADngY/z6Vy95Z7m2shx02sMYr1DVP3fUKhxkZ61zmpSW+P3yYDHaDgZBxVp2OGpGJ5ffabsdiwIA456D3rntS00r0GR6CvVbrSI7iPdEyu2MBWrmdQ0lgDG0ZV1/2cZrojU7nlVKVzyy+01G3KQCOn0rm3hfR7gnk27dR3Fenaho/zNgc9eev0rl9SsBIrIy5HSu+EzyatKxWsbgMqEHIxkY6V0FjJhgwribCQ6feG2lJEZOUY11dnJnB6DFbXOQ+jP2VvFR8O/EzTs7vKmkWNlBwCGBU/zH5V+g1xpoSRlMyAA45r8t/hfeNa+JtMkBwVmAz+I/wr9S9v2q3t5jj97EsnHuopU52qWPnc0pL3ZGfJZIp/16n/AHc4qM2sf/PUf981f+zovX8hR5arztrvU/M+f5Cmtjb8Zlb8F4o+yWa9TK30AFXNy8fKPyo8xf7gNLml3K5UVFhs1/5ZSn8QKcps1/5dJD9XwKtrcKvRFH4Uv2gMOigf7tLmY+VFdbq1jHGnKf8Aec0f2lDjjToB+dSMiMevH0pv2WL+8R+FHu9QvLoS2+tLHhfsduo9QvNX11qNhkybeMbemPasv7JF034/Ck+xpxmQY+lRKFORrGpUiaTatZbSGiEjf3sVWlvbSbpGU98VWFmgx8/6U4Wqf3x+VJRhHUHUnLcqXBEjYGAvbAqH7MMfeGfStL7In94H6Cl+xr/e4+lbqokjHkbMz7N9MUfZ8dK0xagdGx+FL9mX1BNHtSfZmYLcd+aPs4boMVprar3IH4U9reNVwp5+lL2pXszI+y5HWj7N+Vav2dfXA+lH2ZR0NP2ovZmV9norU+zr/kUUe1F7Nh5Ix0pPJ9uOlW/LA60bPauT2hv7PyKwgHpT/s/TAq2sfTinCPnqKXtB+zIFt+1OWAcccVZWOpFjrNzL5OxXWEelSpCBU8UDSPtRCx64UZqj4q1CXwz4d1DUvIBe3hMiJICFPauedaK6nRDDVJ7IupDtYEYH+elfO3x4/Y907xtHd674Ye30jUVRpZ7KT5beXAJLKR9w+33fpXmfiL9sjxkly8cc1rYx79o8m1DEc9O5Jr1bULP4mX/gkalr+unQobiP5rGdnluWjYdDGmFXOR8pPfmuDEYh0mtD6bL8tqK8/aKKPhjQPgzfalq93eXMCNZW58tpA4KiTAIXPTpg/iK910/SdJ8E+HWWTUrGK6Zf+Wk0ahTxz16U1vhrYalqU1vLc3sy7d5WLbCu7jnCj+eeleaeKvhj4d0y4cx6ejy4IPmyvkH1IzWqqOfxI9ZqMHaDuW/Efj7TLS6dBrNheRNzIoZpQcDjG3Irk7rx9pDRoVv1Vo12hQp/LkdKxNS0nTbZfKg0e2cjrMwbP0H5VkXdpbwwBf7MTexyWWNRj25p8sTT2kjsLX4kWMvDXah14VypAb26cVtaf8RBczIIr2CX1Uv16cc/Qc15A9nCkmDaLjryoBH4Vahjto1A+zYGMEqSoocI9DWFaV7M95/4Te5jhSWFMsBh0B/Wuu8O+LpNSWJnwuByOor5uiVVVfst5cWUnbDbh0/Cr2n/ABC1zwfIDPFb6naZ++GK59sgcH6isXT5tj0I4iMVqfWsd0lxb5B3cdAcZ/zis68mZWKhc7VztXp3/wADXjWk/tLaBtSK8sr+wOOWVUmUHA9CD+lbdv8AHjwlqkvlw3tyXZcHNrJ2PX8jWXsZrodixlJr4jt28QJbw9izdCp4IqW315pLiOPBO8MMNgHIAwK8b1r45aFY3eLe3vLsqPmjCLGobHYk+/p2rHh+LWta5Gradpltptt82y5mYswHHQn0xxgVXs5JXehj9ahJ2iz3PWvEj6XZgxbnkZtq7Rn04A7txXGL401OWQQXDwwKrEbrgEsvv8pFeRat4i1i/YC41m5lfGB5PyKB7VyUlmN77pbuQ990xx168VtGmmtTlq4iS2R9PXur27WSNbyzSuDy8c0efYbc4H51ymp69HNuKzNMHGQyqoyMdCD0I5HHpXiVnaWEkJ8zzBKrcqtwwB46/X/61XVsdMk2PG94vPzKJ87T6gn6d6p049GcscRNdD1a31K0jkwhk8qRcltgAVs4Kkdx05HqK07e2t9cjMavGXUfJng15Tb6eLdIprfU7yEq2DuZXA6cjpiu28PWepzQmSDXYTJuxtnicEnt8w3D05xWEqfZnTDEW+MXWvCs8OT5XzD2rhtY0Ejd8oVvSvZs+LRCrXGnQapFHwZLUxzHgdwNj9vSuU1y+ju2k3aei+W211bfG6HHQoRkVpS507E1fZyjc8B8QaYyscD515HaptCvDcRhGOHQ/wCRXq8Xwv1Hx1HqL6NbJPLZ27XUluWxI0ajLFBjnA5x7V5NqGk3GiXwlaMqmQT2yD3r0VL7LPEkle8T1L4d5k17TVAJ/fqAOlfrHaqsmmWLIMJ9njwPT5BxX5c/AnRzq3i2wm2b4LcG4c5wAFH+Jr9RPB5+3eDdFn3bi1pHk9M4H/1qzfuz5jxcwjzRSQjQexpv2fd2rUaH8KQwitlUPB9m9jKa39qabf2rVaBaT7OPSq9qL2RlfZzR9nP92tT7OOuBSfZx34p+2F7MzfI7Yp3k9sVoeRz0pyw/h+FL2g/Zmd9nz0FL9lfj5a0hD+XtS+Wc9eKj22u5p7F2vYzPsrccU77Ky9QPwrc0i1guL0JcglSMDBqS6t4LW6aJOU7MMGsXi17T2fU7VgJex9t0Of8As59PwpPJPoa3THGOgyPcUq+RxlcfhWntmcvsDD+zHA4xSm29PpW03kj7qA0xsLz5a0e2YexSMyHT5JO1POlv25rRRpJPljTn0FOMk0R2n5T9Kz9s72uaLD+7zW0Ms6bIOq0f2bJx8v8AQVp/aJW43/kBTG3t1Y1XtJEeziUBpsn92irqxEjrRT9oxeyRkJhFLO276d6T7XHgcZ/TFOk0W501V811JYcLg4+tZpjnVjuXIz1HSvKjWe8WfUSwcLcskav2hEAzx9ak+0RkDDqG7Csd1dlJKMB7dqrncuDjAHQ1p7aZH1Gj2Omjyxx0HSryiOHZvXnpmuWh1dlAyO2M1oR65FMuHJB7E1yVJVZHoUcNh4fZOs0m6+zznyoldG+83Qil1qTR/ECG01EobcrtkilXKup/hrlY9cFuflfjHbpTBq1swOQrN1G8VzxpSlLmZ2SnGMeVI+HP2jPg7L8O/itZTaVbzf2FLfx3VlOqlkADq23d6jHT2rrrf9qr+3NN1O28VxMt3bwyQRX9rGQJWZgAZY+zdeV45HFfQvxOvS3guWckFLPULK7C8cbbhOfyJrh/j18A/DPiKzu9VsYRoup+bl/s4Cw3GDnJXoD7iuqo/hUyacotHkKa5awafLcQzeafLwjKuCeO/wCdee61JLeSFg21cLgFSCT68V2kfhOPRPD6Kz+Yd+PTI7EflWDr1wsdquyJFZR8x21upaExir6Hm2paJ5kxD/OfVhnFUZNBRowGXj3qz4i8VrYKwVVdxz7CuDvPFet6vHK9mWKKcZUAKKajKWx1c0YLU63/AIRu0b77qB2DY4/SsfUtEtlm2JPHn+6p5rzjVNS1eN3M1xI7K2CF9fSrtxN/pMS211NcwPgbrqJUbn2FX7OS6mftoS2R0l3YmzyE+bjJPAA9qqLcxXFvPbzKMNGwHsQOD+lUL+N7PYJC8AIyDuJQ07QyF1I3MqRyw28TyOrAMrfKQBjvnIrSPcJK6IdC8C6p4ksBfxgQWTMY1dlLM5GMkD0rcsfh3qGlSFopVJYbSJYTj9DX0H8NdFhtfC9kTaRqmzEa4woXjt+ddsumWN5CVeziBxxtU1lPETvoepQy2MqfM0fGtr4LvbjxRFp1/Gqed+9DI2UkUHkA/hiu3vdP8vBkwgT+EKBgY6V634q8I2UU0c/2cGe1LNE3IKFlIxx1zgDH0ryrxhfQvpqzWz71uNuGBOCpHWs5VnUsc8aCoNxRy8saTSFIfug4FPbS45IuQGHQ9RisVZLnlYlYDPDNkAVCJmZtks8lzKxwFVsKK1V+hMjprPw5BMvRT6Y5/WtWDw2kbHEancAOc5615leapqGm3rLA/lbRnarHFatj8QNSt7WCZp0mEhKgKwdhgjkjqPaqcJ9znVSnezPRJPDaYPOzIzgHj6V0ng/QTHp85ZnLrIAvGM8VwukeP01CMGdFX/aQZH5V6ZovjOw03RBDb2ge7YAmdiHVzjrjtiuOo5xViq0PaQtA6bRpptLty7gAEhWPIx7imeO7O38TaRa3IUnWYXEKsoG6WIg/KfXBAIz6mszVNZXUorR7ZpoBtzKEjCqWz2/z2rc8J+GbPW7wQOJJ4ZVb5Hc5BHO7IwQeKzpylH3jKjRcfj2Mz4XxeKPh22keN7Swju9Ku2kglPUxoG2tuXHcZ2npkc16n8WvgH4S8WaX/wAJBpIWXSdZtvLhuI1Ci2mZv7o6YJbjseKv/YfEGiabHDppWS0iCrFAfuqozxj0rB8I/E69+Hd1qUPiXQ3i8G3kii9ijX5LdmOPNQfw/wAuldftvaSuy6mFVOF4Hzt8L5dW+GvxJl8M6nIxCTfZWjYfLIucoRjqPTt1r9Q/hr+8+H+isevlEfkxr4D+PGmw2viDSPFehSpqWkLKtr9ujAyVIDwMwxkZUlDnuB6196/B668/4UaBcKnyyRMCB2+Y8VtiK3LBHjPDKtLU6fZ1/lTobVrhtq4A6Acc0+3CuXGQBjgCq95JKrfuRz0zwK86WKk1yxHTy2EHzT1QlyoW42IBgDn2pPJrNu5JrNd5fMrcY4OK1En3WqOV+YjleBiuulU5Ye8eficNzVfdW4wx4HWm8F9vftUseJCpdgD0FFzBGbyIRthV69qy+t3nyo2/s3kpOU3qN8sLzVrT7FbycIT2ycfyqu29kYoCUU4LAdavaHM24+WOV654J9qzxWJlGHuF4DBKdTmmazaLbQ25UIR6nvWTqSxeYBGioqjHHetebWY4lG5SSeMVk3s0NwCyDZgZwRivDo16qlzSPpKuHpShyWsMsdqq2EBkbgH8KqTRlZsPwfeq8N8hZtjZK8nb0qvdaiZJOWGcZNd9KrNVOZnJXw8JUeSOhduZhAuePas6LWoppniypK9+lW2kS4swXCkDistbOyuJgpiCc4LLwK7J1m3ozgoYOEUuaOppx3IZ8KAeMnFWFZZlG11U9MetZEdibG4EdvKsm7gszZIpJ7eW0cnzVcD+FR+lZ060o9dDethKdR2tZm3b3S2cm4uo9M1Ld6haTSkidW44AGMe1cjJqkhYI0THnripZ7hbRd7WzE4z93pWLk+fnW50woxjT9k1odUiQyW5cP8AN1GBwfao1XqTwAK5Q+KCxCpGyjsAMCr6XN5cxD5BzyCWGKr29Zbsy+p4aWyN1cEcHiiq1vpt55QP2qNfZTxRV/XTn/stdDkm8S6jNGRNIXi9wCBRDqimJxkK3Yf0qtcaFcWzGPzQcdh0qKPRbmVgNyoScAGu1Rp9CHKXUtRanLJlGXB6Ar1qRWYdduPRqjXwvqO7Alj45zuxTv8AhHbxeTLHj6mnen0Y/e6o3dNS0uWBYqh7rgEVYudHgmYlTHIP9k7TWFaaDeSHiVB+NW4tC1FW2hsAfxBuK45RV7qZ1wlp8Is1hYx5EiSxN0+VsiqT2lrxtdvStxdBmZRukQnuOaWTw7OrjaIwOhwc1UKqj9oicG+hx/ivQRrXhDXbCN973FlIqKOpYLuX9VFZXibxBHqngfQ72N1JvLSKZ0GDlimD+RBr0G20h47o/LnaegHBrwOfTZ/Duvax4anZnFjdebag5H+iyZeMfQMXH4VckqzWpMHyxehxvi6NrW3JYKYduIyCQRz6fnXkfiDUI2s3DSgnG0DPA9q9V+IzTKuz7Z5SMMErHuP0HSvEdZ8OXE0gLibyWbBaYhfx2rVs7KMdLnl8miz+LfED2UG4xscs4XO1R3rdtfBc3hRXjidJIJRgrJXuHg3RdK0TSSy29uZZBzJIQGPtWXrnkNIyQRK49EXdVym4rQ2jFSdmj58uvCE7zuYpYREeiyAkj2psPhFbeZJ7mYyFeQscZx9a9WubBWbmLGOgKgCsW+jG/YMF84Crz+FZ+2lsbrCwWpwOr2/2pQgDiPHGVGa1fA3gd/EOpadYRW5h+3XK+bJgkC3iAeVz9W2j9K7LQfBMmrXiGfCoOduM/n+VeqeAPBculXl1qU3lxPKggt42IUpCpJ/Nm5PsAK6ad2XGjzTSOk+zx2dukEcarHEoUA4BIxVrTtkSnzeB2C8Vf/s2No2kcFnU8KMYqxb6SJIdqr5WT90rms5Uz6unOKhynEeKYvmZkG4MuAMY+YEMv6jH414HeeGtQj8SahBiSfSoJfMiV1URCNgSqp34BU+nJHavpvWtJeHHmDarcK2cjPrXmesWAbUJEVNmOAqjAK9vyJP4EVzN8qPHxFBSqqSeh4v4jsXueQFS3VceQikH68Vh6fpCw3aSxooB6qzYI4r1rWvDpkLNHtSXGAQODXNy6OISIrhVWQ+oGPrTjV0OeWGaep5/4i8P3H2oXENs0qOMMsYz+IrKs/DzsBHHp0yFm53oQo/GvXrPREb5VyOcfKTWva6KZcKJSpxj5sYFbfWbI4pYFN3ueVXvhr7PHG2nwSPMOpVcDqeKm0PxFcaTfLDeRNCG+U5UKB717dYeFJlIKOh3DBwqjNQeKvhjYahpzvOhM+35fLYZH41n7ZS0kaew5NmQ6VcLNaoyTYDKMhSPT6V6Z8JbaQ6lPIqZEcWQHYEhmIA/kfyrw3w74b12zkFtHKk1up2qrDc2PTtXu3wftdQhsZbqNIJEmm2r5hKsVT5crx0zn8qjzCUb6HttnGWtwjrkYxuHSqetaLaX2mT28sKywSKYpI3UMpUjpjv1q/avK8aGQbCByq/dPuKjvJDEeDkAZHpXoQStc4Zxfw3PNLf4Y2y2uqaGU36NfDLRHrA4VFjaM/3Rs6e9fSPwMgm0z4OeGoZy5ljidSpGDw5H9K84ltWn09pYDiWPjGQD7DP+e1VIfFV1oJs7o3jQP/DGrkZx1G3oanFUk4rU5MMpTk0j6IgaONGLEiTGR6VRll3Yy+DnB4qjo+qweJNFtL9HAE0ecrxj2qF7As5DzOEB4K8mvHjS6ms6yi+Vjl/fXBUnAU/nWmrIyBA3zKMZNU00eFseRfsH7+YoAq4uiWmwA3m+XPLbtoFE30uTC25Vk1KO0kXzCMEY69KVtUaRQsQRQDzL1OPQVbvvB9h5IkW6M8vUqHH5VWj8P2TIPlIHrvIpQlFK6Iq3btJFiO8kSMrvATOc9/pTIbxUV51dVHQZOKmj8P2CEZfevtIevpVy18P6XIwBiXZnoGJzWUqkbe8aQp21hocw2sT6hOAspUA9c9as3fn2NuXafchHIyMjitTUPCOno5WMmJj08lqpz+C7fyUMl1O46bdwpKcOmxryyW5naVrlpbwT+XHvfGCxGP8A9dRQyRSCW4l6twvIAFdCvhbR/s4EcPP8W5jms6/8J2OwLEWiYd1YnP4VUZQvoJtqOpSstQjFu4LZHUZx6dKPtEawl2AJIyOeRUv/AAiNptwss4OOSrYzTtP8Ax3zyf6XMoUcBWFVJwirtkwm5OyRBpl4LfEqSr5hOGVvSq+qa+IbgkFemRtPBqxd/D1Y5Cq3c27p8wBqGHwPHBITPO7gcbQoFEXT3uOUprSxz83iCVpt29iOopLjW571wWLPxj0rr4/AtlIoYJIRjJJbGP8ACrNn4E0u4jLB3XacYVyKt1aSIjGctDK0MHyhGwaN26HZnP49q2YLeKxkP2grjOAVIwKWTwrHaxuAJSR90JOearL4SiurcB55oLnPRn3J9K55TU1udEY8nQ7C0vNNht0XzUP4iiuXg8GackYErzSP3ZWwKK4fZx/mOr2j7GDLfNI4LDI6ketOGoEtkRqPTFccfiVonHzy5/654pB8StFHG6b/AL4r7D6pV/lPj/rMf5jt/wC1JO6Dpgc0f2gzfw9q4n/hZeiY5M+Ox2U7/hZmiY/5eMY/uUvqdT+Qr63G3xHeW+pSLgKoqyusXG3aMBfavPF+KGiL/Dcf98gVMnxS0b+5cf8AfNS8BVf2Cljor7R6CupT7cZwKsR6tcKcAjn2zXni/FLRzwFuMf7oqVfijpK9EuMf7opf2fV/kH9eh/Oeix3jR5YMMt6fyryH48eH9QuZNL8T6BBHNrVhmCe0dggvbc8mLP8AeByVJ710UfxQ0jtHcD/eWqmueKrPWdPVYomU5+86gY9/5Uo4OrTabjYuOMhPSLPAf7Z07xNeSvGTDeR/LJYXaGK4gbj5WQ/04rG8T6eknEgxgZOeMcV6l440HSPEkMaavplvflQAkjriVOOocEMPz9K83vvhpZsALPV9ZsyTxH9qEqcdsOp4FbypK9kevh5PR2PP7i1WGQGJGfb0UD2/wqhNHdzeWFLxs54XzSV/KvQ5vhzdWmUTW5GTbz51pGePXjFZd54UuIcM+px715DC1AJ4xjk9K550JR3PXhKMtonAvpMrTgXNzI6MOUXC/wCelalroltFGHO2GLGC8h4Hvmr8+gSPMWe/uMk4LJHGv6YNXtI8F6VPdRfarY6i7MFi+3O0qhs8DZ93r7VnTppvVmtTmjHRG78PdJttWtZLuwHnW0bbVuMYWY9wn94Djnp6V3ccNuzZA28Z2nI/I1ratHFo+nxxQKqLDGqbFGAOOnFcrNqxki/enPquOnSvTcY00aYOMqmpopbbWX5i/HBYjitGxjW43o25plGFkzgn8q5+zuPtUiAoCeqrzn/PH6V0Nrl9vmuEVTgIoxmlHkkj0KinHYffWcd7CyTFs9lK4H+9XnHinwu8iu0LhJI/mVwOAfQ+xr15kS4sSqgAEYHHIrl2jENw3nYC7cE/iMGuOpTV9DKLck00eNDy7rzYJ0MN6nMlu+ARx94eq+mOK53VNLjmUxuC4zwccg1634w8L6fqGEuLcSIFJhZCUeNj0KuOQP04rz648Hz2sxFtq8+M4C30azDH1GDXBKmk9GVGU7WaucN/ZN5p8h8ifzE6hZs9PTIrRt9Suo1HmQKE7tGN1a58O607ELdadPg4JaORQP1NWYPCOrqmx7mwUZ5UJIwH4cVPKHL/AHWVrfWjJCVVVfI6MoUimus8zbnfCf3Sdq1vW/gOeTYJb4dcEQwBT+pJrotN+GdgixtKpups/wDLdiQePTpVxplKm/5TnvCuk3fih20/RVYRZxc6oynyoV7qn99z2xXvWk6TaaTp1pp9nHst7aJY41wMgD+vr9awdIkjsYUi2NDEuFCquFX8ulben337za4IbGRjkHmumNoo5KtBp3Olt1aOAZ5GM89DWfqRGBg4Gceg9KuQt/o7H7owpHqKztSb5SH4ycfT/OK1b908tR94v6bNu0O9lYrE6LyxAwOmDXhfxmhmXWNOu43YQ7d0YDfcbd83+fevb4bZD4cuIFbY5G7eScZJ4+leUfE2xNx4btrpl/49rvaSBztc9fzFcmIlJ00j0MphGOIcvM+hPgfIzfDWwLNuHmyBe2BkcV2ztj+VePeBPHg8K+C9MsUsBOu1pC5bGcsf8BWnJ8Y5FOP7KQdvmkPFdlHA4ipTjJI+Nx2MoxxNSN+rPSmYbT0/KgPtAYbfpivL3+M0y8f2VERnH+sOPpUTfGmZf+YVDn03tWn9m4j+U41jaPc9XW8kP938hT/tEmOuB7V5B/wu64XpplsB/wBdGxSP8crqPA/s61yRx+8ao/szEfylrHUf5j2Jbp+AXOPYVKs8gziRsdu1eKH463vUaVbEezNSf8L51DOF0q2P/AmxWbyvEfymix9H+Y9vjuH3fMfxp813jG3JNeGN8etRRcnTLQD3L8U0/H7UucabZnHBwWx/Os/7KxHYr+0KXc9w84t6j6Un2oKRkH3rww/HzVsgf2dYgdjlv8ajb4+ax20yyJ7AB/8AGn/ZeI7C+v0u57v5+5jszt7A9akj1KWyjZYvlJOSR1rwL/hf2r7tv9nWgbsAr8/rUbftA6xtGdOtVbPAMbY/nS/squ90NZjSWzPoBtaueAOnXnBPSmPfSOwyec818/8A/C/daUZNjZAYyMo4B/Wj/hfutFgPsdipxnlG5/Wj+ya3Yf8AaVN7s+gbjUG2lVbCdcf0qsmqSxEiMHB5AB4rwVvjtrjrn7HYhexMbf41H/wvjW1H/Htp4xxjy2Pb61X9k1uwf2jS7n0ImpTtkbutSPPLIFJPI5FfO7fH7X4yALOyHv5LYH/j1MPx/wDETY/0S1HHH+jt/wDFUv7KrdkP+0qfc+kft0j8snP1or5v/wCF/wDiJeDb2f8A4Dn/ABoqf7IrdkV/acO5Hq3hC60fYTPb3e7g/ZWZwOPpVWHRpnXmIr33SArXpLfE3XdQjL/bVhGclYYQoPFYl9r1zfSFnW4uSwwSw5+le7SrY+1qjiePUo4S96dzmk8KzPKn72BOfvM+FFF1oZtpnRL23kK85TO0/TitZbi4+YLYMG6DzOQKsxXF4uQdPU54JZcAV0KeM3dRfcczhQ25WcxHpbeYFYttxyRgCrUejySP5ajPHIDDFdF512MItnbqT0yCxP6UNb38dx5TRYkBwfkYDPpiqlWxL+GUSPY0uqZlL4Xuo2VGaBQ/ILTLgfWrtv4NlkkdDdWqhf4jPhTx0HFahh1WFVD24j4yMwnJ9+lSR2us3TDZFI7dgsBGf0rn9rjetSJoqWH/AJGYUPh26lmKpECBzneADir6r9jjEbIyyMAdpOQAD1/lW/pug6zIxJspODwXQjHtWZ4rs7nTb62S8ZllkQYQAD14rOvip8qjKSfodmDwq9pzJNI53xNC9w0ckZKFQMlcc8/d+nFYtvYzLNcPNIJC3QKMKB2Fa9w8s0oDR7XVcllJz9OaZuXaEUbx1GRwFz1BrGnvzM+nh7sLIxNTU+WVyNm4Bh0xweP5Vy92yyByRkdOR+tdRq8iebOMgDHIbgdBXJ3U2ZHDD5c/LjtzWGIke1hoe7coyR+TsyBhRz2zV3wZp76lrm4SCBLP9+XPQsD8o/M1n3+ohIsCMFc8sOuKTwr4i2nU7UYEsgSVQDzheP6/pXFBrmOqqny2Ol17XrzUJnE5CgdVTO3jvXGahrx84jJBU4Ckdfeua8WfFbUPDuoIw09bu0DYnXkPt77fetGz8QaT4qs11HT5luLbowYYeFsfcdf4TWkpcy0N8LU9hpJG7pfiIxH5WzKOSD0/zgVsQeI7mZfmRc5yGXqPbFcpYvE1wNsar2LcA10UvkaPp/mylmdvuqoyxrBOWx6kq8Er2Olsdam3IC+1icfL0P8AhXRWtrb6lYuMjz+ozyRx0/SvmTW/jXq/h3X5bVvC8rRwvgym4ABXH3h8vNdp4G+NGm+L7l7UpLZXMfytDJ0/4Cw4NVz8u5x+0hUdlueh+JrG5sYC0ybsDAOe1cxIi6hGNi4kB4zxn2r0C5vI9U8N3MDMpfb8jnnHAxXnI32MgD5+U4DYwDWFTX3ka00tie30naCiJyP7+CfpWrb6LujztVsDkEHFVLLUAspy65wAAT1roLW8QoFByvIAUAAfWpjY1dyK101VUELlV5Oa147dVwoGABkE/hUA+TLBscYAP16Vct2V+WODnBXOK642iJ3Ifs/m+c6YQr8q98cDj9RTVuRbzRs7NvUZ2thRVwIrAx7iCxJwOMHHBFZNywmuPnZfMXIKscKeB8/6mokzkmdppV9FcWoMR3qwIB64wen+FVdak8tUIOCTnpxxUXhmYzW+2KMJGpxIqtkFjnGPyqHUbxJbiG3z8zNgncOOeR+GaaleJ4zjaTZvaeqyQzWj4YtHkZ7jG7n88V5ddxnUNN8QaSkzSqqmVVkGGUowcH8gRXqemsrbFlbcrHDAclVVjz+leY2VpdR69r7SooDJN86jCyqQdrA/Q1jW2SNME+VyZ29n4fkTRdP/ANGkkH2dcNuBHOf8ahfw+2754JlG3IwARXUXlhcWsMEeQE8mMhVDsB8o9Ko5uNwDTfuhwWKOAP1r7PDzcKMddLH5bioqpiJu3VnNt4fcRqSjhGOM7hn6kdqgu9DMPCZk5+Zg2FPHSuv1Kzgs1glXW45ywyUi3oy/XNUWa0eMYvmD5zhvnB561tCdSfvLb0MJU4x0aOVGmXMh2CPBY5VVYH8Ktnw1qtwyR+SS2cBUK7j+taV0WjLPHqh8xR8vlxgk/pVF472+jZZNZuEVumCYyP0FU3V6NBGFPqjTtPhHrmpRo9vFHcZOMLcxHZ/vDNXLr4G+KYrzyU0z7WM8SxSIYjwOc1kD7baFDH4ikuQRyHUEDpx0qx/b15b5j/tVztOQI484/wC+a81/Xb6SX3HoKOFtqn95rt+z/wCKoVBSwQEruJ85cf7v1pkvwC8VxwhzY2pGRx5qE/U1QutWvmt3263chCOAsZ3VzkNxeC9EP9o695UmMz5fZ+tTbHdZL7hv6n0i/vOwf4Fa/Au65fTYVYf8/Sg/TABqp/wqHVZmCRJZSy/3BdKpC+uSB1xVUpdmMD+176TH95lBPH0oX7Yuw/b70nGMfLj6dKaji+s19wf7L/I/vG3fwn1nT5vKNvb3LSLkNHKhA9uvbFV4vh3q/wBqeOSxUlRnaHXP1qaaO8mUs15dhs4EakL9c8Vnr9oSQhbnUBn+87Y/lXXBV7e9Jfcc8vYdEyX/AIQbVFyFtoUG7kSOM/Sr1r8PLq8lVHuNOsh0MkjSE/QBRWb9ln84Za/VT/F5zYqVo7tYyzXN4EU9mbP0pzhWa0YoexT1RtSfCMNMFTXdHdccsyTJgflTG+E0bMqLrWmn+9IBIAPfmsV5sRN8+oOR/EGcj+VVZprp42EcGoSjHyglgufQ8iuVUcQlrU/A6faYfpT/ABN9/hnbrmOXVYBFnAkjiZmbj0zVz/hU+hzWKFNelgl6SD7KWU9Onz5+teexx+KdyltMSJG4G6WU/wAjWotn4k+UGyhcY523Ui4/Oplhq8tfav7hxxFBf8u0bv8AwqW2VmH9vySLn5WhtMrj8W4+lFZUi6xGwV9Fhcgfe+25zRWP1Wv/AM/X9xX1nD/8+j3JfH1nEpiGmWohyAAsKnp+FST+OLWaMldItzls5+zgEflXEfb1z8qSL64pjXjn7v2hhnnDEVzLA097fidv1yez/I7ebxlDjd/ZSPLjJU2y7ai/4TqZVfy9PiiLLt/1HIrjxdSnJ/0jHqXJ/ClXUHjXb+/PHc8ir+qU+xn9an0O4j8fXEgizp8SbDjesJDD2FDeLrlkbyonjcgqZNuWGa4qPVJlIXzZwPQnipY9UlbgPITj/IqJYOnukNYupbVnUx+LtRhkCm6upGXgblU456c1ck8YathvKllKsOQyIcflXGpqTBhjcD7pmrUWsXK/KJWUeojwKbw0H0RP1moup3Vl46ufIAm+0Pc9mG1V9uMV598UtS+1PaXM8kcku1mdxgFPT8uf0q4uoXJ+YXTZx2BBrG8YfvltJJx5qeZksAeMDv7CuKthYUffid+HxM6s+WRyF9eeTbl2BUscqztkkFQcAfjWeuoqdgjRkORkNx2456VD4okAjaLzT+7YFpCvAXHQe/I/Wsb+1NqoqDJb7uOcj19jx/KnTqa2Z79Ommh+tagLdpW272YZLHkd+B+n5Vxt5qjnCEKMjJJyCas69fNHMfMlAXGfmOevYVzkm57jCuucc7hkHPauerK7PoqNOMYE11qMIi2u7deNqk59adaaSVkjvI5Ggl6ruIGeP88VoaD4bW8ulZyzqo3YXPPIGM9ByRXo1n4VhhZImCPznaADjgcc/wCelFODep5uJxEIPlPLrzwxPrSmYWEkitlZGUDYOOuelUdJ8B23hm+N0kcnnSDBjhxiRcdx3FevyWU98ot49ttBH8zbmA2LkAf09M5rOjht3t7j7IjXsu5B5zDAO4N90jk9Bx71VrbHN7dz0OBjW0hukfDJ3MT8Ffauoj1i3uGB+zLLBt2sVG4jnFQT6WkskjGBYoFByzcAfMBn+daum6PLoqTXBTckaEtHgZ5H+IFZ69D0VKMbJspar4M0rXkijubPbGv3XTG0+3vWPceB9G0PYbS0WIxnkYxnqcjH0r06GC3fUWZAXtNuVC5JJKg4x+NaN1pcXkWkFwvnQSDa0hXLRsD1z/nqKfs+ZF/WIU5I8+0+4mNqYIo3WIjBd1II9q073QxeWyRhDg878cDjqa6aDS0iujbxwxicKxVQQ2/GcjHrwfrSXkaw2cqSII0y2NucbV7HH4j8qtU7RsW8QpP3Tyn7HNp108cqkpnCtjA+laNteyRyL37MAOfrXX32iedY2sMZWQMqs+1TvC8nOD1+UCuTvNLfT948wK21pFz3UHkf59q5JQcWd0KqktTVt9QRx/ECeABxV77YGjK8hhyCveuWtbjaxcOobruyeOOorR8/7VGZIyWljG5kGQCPUe/9KSmaOSNqTUWhtzlwrYD9Mg4PUfh/KmW/mX0hnNu2+NgVZcAg5HH+e1ZVrdTXBe2RPNk2+Yi7ss4/uj8/0rR00i40x7q2dYpI5Qkm8YKYB5/z6U+ZyOCtJROq0djDbzKiiLL7miPDBgBxj25qjJZw6leLKPleMqDgYLZXOB+n1Bq9bsbq22MdiyDer7eQrdAeh4JP5msdZWivG86T7ILUL5TyNwcbcqf++fyq0eTKV9jS0m8VZrNmLP8AvPKCsCD84OFP4qf0qr4qjFvbRPAjCeZhBOBj+E5P9KVLdvtm2QsVEgDBflw4zhs+nAxV3y4dXuHspMiVpFcA5zu4H8sZ+lTBc0nFmkLJc3Y9am0DUtVtrPdqEWFiQJH5JAA2Djg1nXHgW7aQj7dGT/EohJH1+9WfcW+qedlbzVcKcApZsAAP/wBVU2s7+TO651s5OTi2OP5V9VTpyhFJT/A/NalVSm24Gj/wr+5dcm/hIxgbrfp7fepv/CuJJgMahabPa34H/j1ZP9nXBOC+ut6fuwAf0qL+xblv+Wetn0/djGa6Fz/8/PyOfmj/ACGrJ8NZo851K2x2/c//AGVN/wCFaybVDarb4zyBFgn/AMerOXw/fNjdDrhHsuB9KR/DNz0NtrTdhkcfzpPm/wCfn5DTX8hf/wCFbQLIynV41PZVhXI/8epi/DVVkC/2/HDu+6NgAPt16VQTwzdbif7H1iQ9iXIz/wCPVOnhO8k6aHqxOO8mf/ZqlylFfxPyKjq/gLE/w38lSTr8bsp4AYKBWfP8PRuDtrinI6LMM1c/4RC724OhaoT/ALRyD/49TW8J3Q4bQL0D/aVP/iqzU3/z8NeX/p2UB4JtUYCTWyExz+9U4qO58K2UOdut5QdMzKAP1rch8Mz7Ts8Nyn/eijP48tTF8PXS7wfDcjDHGIYgR+GaftddZk8jt8BzMmj6eq5/tgdedrg/jwarSafp/mYGps4x7kfTg1p+Gl1vUtY8QGPR2ews7oWdvsgjOHRB5uT/ALxx+Fb2dfh4TRLgj1Fsmf51UcQmvi/EUqMou3KccNPtFyy3O8/3SsmP0NMNmA3y2rTjPBRpx+Ndys+uLn/iSXbkjJUxoBUUl1rwbC6DcZxgZiQY/Wn7dfzfiT7KT+z+ByHkXEa/LYXBPYCabH8qabO9uPvafcdevnSnH511yt4icgHSJAPdUOPbrR5PiFi3/EskA7cRA/zp/WI9194/Yy7HLL4furhwDZSeytM4z+tI3g2/fBECofX7Qc11Udj4j5I0yQezNF/Q1ZWHxRtUHSFPY5kQf1qHiF/Mh+xl2OOHge4YDFlCe3N21FdsNJ8QyfN/Y6D/ALbL/jRWf1iP8yL9hP8AlOxhms1XDwIOOu3/AOtUH261jbCLGBn6VxLQvHjc5A6DLioHaBMiSdR65YV4SqR8z6J0n5HdtrFj0LwDnGODTP7WtNxAMB7DaMmuAN9ZR5Pmj6gZoHiSxi4DzOfVMitbp7JmThbqj0W3vl3DEKkf7MRI/lVyTVEiHECgdMlMV5a3i63XO1bhh7viq7eLAc4if2BkNP2Tn0ZPMo9Ueu/bUk/uIf8AdwKSRpAoKupH+yuQK8g/4SW5f/Vw/T7xqZdc1aQAAMo68rx+tV9XZLrI9Sa72thpRj6AVx/xHm87RQscj5J/dqoXezHHP+eeK50XV7Ix8y6VP95wKbfTFrCQvdb5f4SmThsgL+GSKqdG0Lip1PfRxviCZdOuJHnjjNpFwUB3GVuDyPr/ADrigyrbSyEiRtuQgb5Rzwo9gMV0WvSfNIYWYrCWhjkdcAtuAZvxIP51zl0RapLFDEuVjDBmzsHU5J746fhXm7SufUUGuUw9U2r88gKZHReT06/Ss613mR2QL5irgtJjbEB3/l+lat4IGtV+1ytPK3I2qWwMgD0556VkXdxENSi02yBBuVVTKY95GT94+57Ae1ZSZ3+10sd/4MvrmS5trK3Es0kWGZ9wSMrn14+bJ9K7meSPT1ZYAt28a7fMA2Qocnne31/XiuP8N6Tb2t5CsVu0phYtIzMoBXH35PcZPyjvj0o8SeNopmlUxqRDGzouzKoR8oAA/Q+x9K7YT9nT1PDqL2tXQ0NQvxNp5ERj2NKZFmywWRlGBj23Egcck1dsbS302SBZBm22xsu2YKNx6pgkNkE8/gO9cnJMW0qySO5WO58re8lySJNuOq4HHBP6V1EP2O3thcSmSQ/fjjWMOZZOMbMkcDaPm+tZqXU6FG2iGa9eSi33JEZdsqLbiRQodgDukOONi5HT0rT0e4S8tYs7ZWt18pjKMGV9jMzyf7J4xWBqKrq9xbQsjrezMgMcW0/Zozn5fQZxn6AZrak1C2ttXnijjDRCMruwCHPHy8ckdOffFWnbVltXSSLdjHs12EQoI1WUpIAMEbQ3PXHO4H8BW9N5EMM7xvuWIBiSMbC+1gmMdCMfTPvXOaZdSzao/lOHSOFz5gwMyMBxwPUYrS1bWF0uOTCAx3AYu2QFcRhePbOSB9BWsOVRuZ1ubnSLttGstwkiOrztD5ls6/3T0/DJx+dOeFrrTYnBED7txYruCHZhhj1DCsObWltJ7SVVQ2hik8pm+Uhdh+Tj6rj6Grja5AfCf2qzuRGvzIzMcNFIFIO7r6D+taRlBoyk6kWminAfsYSQyR4kbdDh8lY+Dt/A57elT69ovmyvGYt8nVNoI3KCM49uPyxVO+hTXY7CWJI4LmVNwihOxi+OiexHQfSpW1C6vLiKS4zbTE7oyr/KVXH88H9O/FY+7sdsasnaVzlL7Q4mYSQfIXDDaWyOMZBHUc5FZMTTW/mFUzOvCtCcgYIOB69BXfa9CYtOkmiDRlp9zKV3KFK8rnuPmU89Mj0rnba3hlYTKY/Ln2qEYYG8oGA+vPb1NcNSnyM9OlX9pEr2sT300ctssRnhfzGjU7WfnBK+nuKmZm3XMrQvbSSyqJY2IYy4LcD32Yz2OanjgF8uVg3yqpf5iFbbkKQpHcZB/A1dkt5LiOyuifNgZtkqlSDuB+97Nx+gpRWhz1pe9Y1tF+coZIy0awSZ2EqRtC4H6DH41RutPw1m82bi3lVlZSmQBnrj/dyB9BXWafZxWNmdm4jLZXgMBg9vy/SsW6VvMI/gYeYq7jtQ5AIzzwdwx710uPLE8tVOaWhX0+WGPX/KmziMYjdFxuUqu1fT+EVe1HT3XxFb3hc+YsiszKOGweDWE115OtiQKqHz1fCry6GPbj6dfzq5p3iCW+S4jKborctGJNpHzZwB/WjDx56nKzWtU9jSlUv0Okl+JGtOx3apcgZz8rYrPm+IWsM3Op3Ptya56RjuqBga+t5YLoj895pdzqV+JmtRcC8YjH8SgmmS/FPXJB/x+Og9EAArlGWoypxjFLlh2Fd9zqm+J2sjlb+Y+u7BqtJ8RdXkPzandL/ukCubKn0GO1RMvtS5Y9kXr3Opb4nawkIRNSujzksxFQx/ErV48M2q3YP+y2BXMmHrkD2xUJjPTaKnlj/KgUn3OsHxO1dj8+rXwHbawNMl+KGrfdGqXbjOfmIrkWg6gAVGYe+BU8sP5UaXl/MdhH8UNYjYkajcYxj5jSyfFW+tYZrmW/uAIkaQ7WyDgE/0rjDDnoFrnPH14+k+GZmVN7XEiWo29RvPJ/IGplGNtIoqLd1dnceCvHWp6b4XtlOpXcUlwXu5wjAAySsXJ/UV0Fv8Ur+E/Nqd249GIzXC/Z0jjRUUBQqhVxggYFJ5PTpikoQikuVBKUpSvc9FHxUnGCNRvA3o2CKy9N+OGq3msaja3MLCytioguRLhpcjnI7YrkY7c7hkfl2rz3wTdSyeN/EtqyMEkuCUYjcox/DuHA47VlJRc4pRKjflb5j6btPjPaJEBNaszDuG5NF18Z7GfA+ySJ7rLg15AYfb/wCtTfJPdc1XsaW9h+0ntc9Um+MSeWFiM6EfxLKP8Kgh+MU0Kj/SLoj0Dj/CvMfK9qcsHXt7U/Z0/wCUnml3PUT8dtSXhLqbb2zj/CivLvs5Pail7Gn/ACor2k/5j2aTwlqPPm3NqnuZgag/4RsRtia+i6c+XhjTGz/GW/Go2ES4/ds/44xU/VKvct4qHYdLpthFkNLPKcfwgAD2qu32SHiK0ZuwMsn+FP2joICB67u1DozYXywPcGtY4SfVmTxK6IhaVeAtpAnvgk/zp32iRcYCr6bEUUvkuP4Ae3pU0du237v455roWHMXXZCL285Amkx0wpwKFjkf77Fv945qfyGDcJ9QKmWEzDlAPqMVSopdCPatlWOL6Y7VZ2ZhbOGAGSBwSB/D+n8ql8j5hvCqOntVjyFUAkqeenGD7frUVKXuvQqnU99HH6sqQqGeLeiksI/+efQr1659fauJ1bbDHGkoZ5doaeOMcBsBhEB2xnLV6NqUMfKJlZVCgkLnPHAPp1GB7VyWv6W0NwkUbq4UMszkEM3zDn0wOB7185WpNan12ErK9jhXtL2WMPEFjklKsXYjEaYbLDp749TisnVNTbSbwfZJ44fJjKyyzyFF6bQV/vEevA54rqPFuqfY4GWKVrkJDuC4AiG0j5j2x8pxx9K8U1q8vb6SWKTDySEyShThsseB/M49xXnStE9aN5+h3B+J0Gn6I+n2dzNMjLmVnMh346KD6FiPfC1mab48sbO1Z570TXUGEaPcAWQD7uexGcfnXM6f4Bnuo0laVnTOSUfCD0H6V12g/CXTpQFmSNJWyQ/X2zSjLm0ZoqajqQy/FK31Se4iceY6Rf6PFGrPt4Hy564OB19DU2qeMrzVLqCeT7RGWWMKFiICEAZAXtyDXWaf8OrfRWO21E6SHAnjTLH2/Q4ret/C+nBcrEw3DEaupBP+17fz4rrjC5rCMbnEWvxRuIWuPtILOSdss4OTuGGzxycCpk+J0d55kLXXllimBCCSFB7Y/SuybwXbSY/dLtx3U4qyfAthtVvs6FjgZVAO1V7M7Ywgjk/Dfj4WeoIh+0IHRjLuUhF4IyO7NyAM1e8beP7i+LxafbTGGQbRnBSKPAG0c8txyfrXRWvgW0ZzOiMxBwdq56exrVs/C8JgUfZmKluWHCjjrS5Xy2E6NLm52cLpvjpoo9PgltLj7PHbpI85GFD7SoB/AjP0FQHx3aWdrPpvmLBHu3K0gZQzsPnZvZvbtXc3XgmNW8oQrGuMhlKqRg9DWfN4F06GRmkcyq3BhcDan49a5ZLl2Yexged2XxSggtY4WvnCWIY297HI2IvLwNvXB6jjPpW1ovx3e6hRJ3V5YzJI8hC5kQkcn39xitWf4f6XHBIjWUPlK24Kzcqx4yOPpXE+NPhyuj/Zr7T4o4UYENLu3GLjBJX7pHPHHpWanJPQ5qlGHU99t9ch1Lw1b3lq63Tyx7lijGCFIzyM+xz+FVrex32MkDrzIPMgZgMrt+UdPYn8qzfh/ZQw6S06xKkxiacZHJUIsanH8OSWP5V09vCLeHTBKgufJj2GRWIJO/cGH0JxXbK84ps4qLVNtIhk002ccZYMHkRpCYyfmmUA/KfQqM/jViHT5P7PPyCRreVcMqgbtyjD49CCPyraa3FxAkWShVvtMDLwUbk/0PtTdPZpytxA4aJ4zHKi8bVBPzfyrSNK1jmnWvqSyLOLIm3lSQpMTEcdiAcfXrWJqEyWqvHIjK/l7k8vmMHBbI9hg1t3GbWwlZIt0q4ddvylmYD5focH8hWVeKJrNpY2kdVRYiWwMcBgPxB/U1pKPQ5oSM61t1N1CqHGCzyc4AJYlce2Nw/EVoahC7TNxkZzhcYFN02GK5vJNqjDDy8qAMYA+X8z29auSRdRnAxjNejl1HVux42a1neMUzAkt8LnYeuOlQmEc+1bMlr2JOPaonsQnzA4HcEV7fsj57nMVlCtwO3So2jK/eH5VuJYqwOAuOw61FLp4YDBAPTnkGk6bHzow2XHUZFRsMdsds1sNp/digOcAc8006f7ADsMGp9mPnRht6YJ+nFIq5x8mfY1svp+1ei449eaa1ic5AwAMHjij2Y+cyxbrIjtgDnG3PNQ+TE2N24AjgkVrNZsvQY/DFNa1ZehwfzqfZD5zOXTY/LDNKgB6c4rnPEljBfa1odi+JIcyXciqcghFwB+bfpXa/ZWKHeG+pwR9a5iztRe+ONTmJGyytYrYcfxMS5/QCsalPZeZtTlvIkht/skKxqCyKMCnbXX/lmcVrrp6nPyMFHc09dNVT19+pxW/sjHnRjqjbhmM9eucV5z8N4orbS9T1G3LvHJrLqxkwCFOF/mRXrGoRra2NxMTjy4mbPphTXA/BPTkfwDEzYzNdSynPc7h/hXLKD9sl5HRGS9k35nTfMP4APUYxSNGevljFbTWMXAIyfUUgsYsYyfTPpXT7Iw9oYnlkcFP0pVt2ZsBAD9K2/scaDByeO9OEKAcAY+lHsfMftDBa3fP3QPzorca2Tt0+tFL2XmHtDu1XcvQYPtTNiM2Mgfjio1IjjxuwBxgDpUfnFmJDqB0ztArt6HMTrsZjyT2wOlO2quDknttA5FVhv6qd5z26U7zXY43KhUcnFUkFyd5IxjHX054qQSLtOAx+lU2jZjktn1xxU6Q4jB56d2xVWJuT+cCwyrDjucCnecmBy3pwag8k9Nh6cZYAUgjbjcM89RRygWpLiPhcFvpUilJIyI0K8Y3bcY461XiY4ZVQnt0GRUsbuildh+pH6UnBNWFzcruY99J/Z9xNIwznJ2jv6H9OPpXL6haxHVJHmlcooztIDALj7pz6mux1uPzIw5AAjOSpXqMEY+nP6VgXG6dZRggsrLG3BywT9Ohr5jFU2tD6nBVlpI8w8QxvN+7uEe58xt5hOQ03Qqpx24/QCuT8I+EYNY8QXdybBksoGbzJHG4Sycndz/AAZI4HtnAr0HUNPttX1ARPPJJO0ys8UabRt2n+I9sA/ka6TS7c6ZbsmdlpGm5wrbmbJG0dQMcc47V5EKPO7s9+ddRjZHI3OgLayIwicHGY45GUOeBg7V4A9OKt6fpJ+ZjDg5yWcjavA4475rrLmxMVkHG1J5AJN0S4lVc8fePfnmufvJVlW3tLcXE55D7zyTk8HH1HtUVKPKzWnXcloXl8/DiN2+6fLVFyGGOuf8PSnzR33kjZtJVcKAjA8jrzj2zUP2xzaW1lDKRFIm0FVKLgHlk28ge+KvpqQtbMeXe24hVcGWRgXkfOM/Kcdv06VfLpa4e2mnojH1S3u9PszcTzu/lRgbd2DIzY+bHYY6D6VK2l3s1uDa3DZcKSshKonOGPHoRx9RUN5eTRsbi6EarPL5isiGRpGx1c9eAOFwO1blpp8liiATSPcFcwwy4U/PgEEduMn64rNRudP1moupFHptytiCs0hmYHapYNmMcbuMdTjn61Fp96Lq1jVpZGQvIqyKxPyoVB6f736Cm3DRQrqVhFK17qNsiyyAcNjJwqfRSD9QKmhit10NJ9OjMgmh2/JkFCFYhtvox6ke/apcTWOIn1GaPfNfak0BYNMsmySJmBCdPlz74/A4FW78jUJriGE7GhZlJcHlNwwfwxx9K5SxjktdQSVpFhlmiUCRlwVzjcw/LjPoa7HS4rhdJmKzmWdchiwDMY+crkexzWCTeh1OWtyCwCvZYkXzT8yq69Qem0eo4/UU+PS4dSEtjPbfJIm1RIM5OQMA8H0PU9Kngto7XzYoGDCYLLErgFWxnIx2IJGa0U09rdlDRq1vdESxqRyGU5KA+o5x3rSnBsxxEko3MLwSr6bYPbujR3EVxNCYyxAUAEgcgcZJ25HQ1qW+pDzPIctcRMNpAO0pv7Z9sZq5cQq2ofaIHZrfztw2EE7iAQPqMDp1wa5ywuP+KwKP+6jm2x9eCdinPPXr/OuuS5Yo8uEuaTudzp9615amWNmE9rmNmOecdsducH8BTlUw3F3cRp5O0bZYlOFPHJXHqMnisXS9Wt7HxBLYh2imYKxVuNysp2sP5VuzwyWskUaliki+U8e7IbIJUj9R7V003zI4qzUWXfOjvrULhmZlwGBG18AbT+tYlrceXbPC4wvSU9i20Hd+HNTW94i7bdmxKR8rdPlzjP4EY9s1kW+pNNq8/l87l8tk2/L8pOP1P8q23scseqNfRI/3MrDd8zZQtj7vOB+Qp8zktuDrjrjOKI2SO0jRNyOq7T8pGduRnn/PSq00jIGxFg4yGOTXvYSnyU7nzWNqc9VoWTOOJFB754qB5Cg3b1YdOhAFRArJGGkeUHoFwMfyqCZjwFUgf7S9a7jzvInafcwO/GB0ApvmhucsDjOBUBudi4yoUjBwORUXn9NrZOMDOQKkepY8wHOW2j1LcmmtNG3y7+cdjUBmYqNg5B59KjW4fBBC5P8AEFyaLFEglTIw+0em4fnSvIr/AMY6cfMDUHnJ6AdumKa0ybh0wBwAOaLDJvOO1txOPXPSnJcxSHAYE455GaoSXDbiOD9RjFOWb0jB4JLFaQyWa+i3BfMAycdcVzXgu7ivLO/1HcAL6+lkU8cqpCL/AOgmtedVmyCHcEcrt4/KobXT7e1j2RwfZ4x/CqhQOaycLzUuxqppQcTQ+1Rdn9yBxUizxEEDOf5VmyOnO11Udg2eaRdqsMOhPorE1rYyIvF14LXwzqsxziO0lPTvtNYHwhjSz+HejKy/M0bOSPdjz+lJ8ULprX4e646Ogb7KV745IH9am8Ax/Z/AegoWVSLVMttJHOf8a5P+Yl+h1W/cL1OqaWIc8D3PJpvnRYzuz6YqsuQACR652mnbgzBA/H+6a7DmJ1kT+8Tntij5ffHYcVAzDn5sDGRhelMVlJyzkH0UA0tBXJLi1WSQsGxn/aFFHmLx8/5AUVHKh8zOhe/iztImgYHG0oTn2PWlOrWSsOSPUbcCuV/4WEJG8qKymMeB8ysuDU9jrkGpZZg9tKRgK7DA56GsFXb2Oh0bbnWfbIzt8ogjrwcVItxGuMkZ6cHpWELn7Pt89pASPlKuoWqi6xvEuy3XavzGRnTitvbdzL2fY60XCxMVPz8fdzwKJLuTA2qQpHHauJXxYFmw6RxjHDMdxOfTFWoPFSMdgcOirk7o+Kr28Q9lI6YXzRH53Dg9CpyB7VLJeFkVliYsTgAdBXLtqlsrHc9vvHzBVYL+FL/bkJlRruWAJ1DF8Dp7Ue1QeyZ1cdwYmH3nYjJVcYqZr4bFI4J4HHT2rlIdc0y5ZnEqlEGMxyLj+eacutafO2+eKTZnCrK+A3v1+lHtl0I9izrBLHcRvFIrESLtLbQce9c3JatpsySO5ItW3BSPlHXg/l096t2+rJJ8tsqvE38KkkD6e9Q+JpAtnI7vjMXOWxjB5Y/n074rhxPLKPMd2Fcoy5TlLCyt9LvrqZYoTPcxrIPmyxyfuc+o6egB711um6OJWn+0ICI1w24E7mGGOfUZ6fSvO/BcM9nr19dXaPKc/wCjSTqN0+ecx/7IAP4H2r1jw9HBFJfhpGlbYsaiQg7ck5/LPua82jFSWx69abi9zJ1a3bMrpJiSM4CKwO5iOnf26Hiq9vp08flTXrRxAxmNY1hHmv8AKepPAA9+PxrYnjihZITtO0ZLSAjHPr27Ch4W1G5jWT7rYUqOPlyT/h+lVKkjSNbSxz89vLJ9o4y0g+ZUVQqR4H3mI5OP5iorW1hmuokhijd4V3RRkHYCAcsPxIyfrT9WuHvboRiBxahtnygqp46fRQTzjuKwftkkq3aWUgNzcLnzpAF2qxCkhf7qjOfoK8yVkz2acbxNG6ult9SeL7ZJcXBGw265MAkxnIHrzx+FbfhrSxaRXcxiM9yzm3DSAhtwwNoY9c85NYttcrHJE0dt581wI9kaEeZLuI4+g64HsD6VvXmrnw7ZlrsrLd7XZY0UnGQABjux7/jVwSerCpJq0ImDDZi01DU9SsQLi5JMREXOWJyT+HFaGh6GYdWuYoCyRTFbtXX7kZVCuz2BJwP/AK1Y9neXJs4rA2cdmSzNOkQIR84zl+vy5H4j0FaF5rdjo+nyeUWkkxkITw8caDg9O7Zx6c1j7t7s63KTVluM1DQS98ZrohILWVnmxlQMlf6EY+tb+n6bGrRmNREIhHJkkgnqMeh9Me9VfDdwLjSb15MRwTW6OInIb5cDKp6qO3pmuhmt44LCBFUMFVXJGcDOB+R/pmtqdKPxGNXESXuFGPR/PkCyZD5DNEy4xuXop/A/lWqung6VHHKuWU7onydwyQAR05BUc/StC8s1MxZAGMkIKSg8nkHb+Z/UU66UGIWf3UZVUSZyY2yf/ZgB+NdCopHDPEOVtTnNetWurWR4VWO6B3gR5UHGece2D+BFcx4qsZVuYdVt0jkksT5csHYhhwfpuwfbca77UGSVmdnco0TNHIoJAyv/ANf9K4bV78aXdSJcIrGSHzJlj6BthG3/AGcgHn3FKpTVtTCFV9DBv9v2LTNR3yS20e6GO6j4eNAWO0/3tv16Yr0BtQeOSxbzVK5T72QR8q7v17+9eW291Dbxw6YLmTyLoLJHuUZTgEn8MV2cyst6LIuwSNPMjmUjCtnbt5/zya5qb5TepeaSZHeak8sJ8uEJcbHDM7fKnI4/HKn3zTNDnis7i4liDSzy/OiZwR6D/vsn8CKp6xqUV5cSqisiqfvYKq6kAY/ILx7Grfh+KRZIrkK8vlMGUHkYHAOB7kVKnKpVUIm/sY0aDqTOr1aZNNZLaZ5PM8sAMvIPAyazLjUo2cojsu04C7s9utX/ABBeFtJsdQt0MhH7pgQTgkcE/Tn8652XVo5Jgku+S5AyzW0ZdR/nFfYr92uXsfnz/eNzNQ3C7VeSU4J6ZxUX2iIkoN5Vj3IAAqit0NrXHybcbUVk2t096LeYeV5iztGT8pRgBn25q+d7EchZaVHBVUwFOT0wKi3RyMVDkkc5GPyqrcalDCyEPMzyHDR7c4/EU6K6i8wQliiv8wYLg4HvU86RXKyzwmSJGG3qGxge9Q8zbmWff6beBWZdaxG5eOGOSUsOGVTkgenasnTtdvrtgkuj3EVvj5pGZCBSdVJ2KVJ2udMlxtJDEkKOW2ggUq3SMSUJK47AE1i3msQ2aGOOGXysgiRYxsP4VHb+IIJlaMRSLxyykj8aParoP2bNaeRVchsjPTA5+lLHgMSTyOByAfpWD/wkEFxOIt9tlTh1kuR+Bwau3OpQrGzSeUI1GQwkznjoKXtoPVsr2clpYvib5mLF0HpnrTZCi85IHuw/KubTxdprQ5W/t0b+FZmbJ9ulRGzm1i4F1DftAVIIWFiqke+QaXt4y+DUr2TXxaHSiRSx3EEYGNzdfcUkl0oUYdQe+MAfTpWMsE8aTLdamJVYYXavzR8feBPeoo4bGPcPt9xc5GCpk3BunoMUe0fYORdzlfj0fM+Ht2xd4zHIpOGwGz8uD9M1ofD/AMTR6p4Z0q3coJIoI0eOM48vC45z9O1c98dtNey8ARRW0ckkL3SGWZpSwVT7emcV0Vnp8PgG1066ntl8gwKl9PDHgBSeJPcDjPoK4o8zrSl6HVLlVFL1Opk1CG3DZkbA9MmprbUI5gRGZG7fLGeP0p0luq5MQDcAnaCM/wD1qr3VsJLmKSS3kyo4eN3xjHoK7ffOO0SZrqQcKkhKjuBUE+rra7RO/wBmc8gvwKjuFhimRY4UIzy6sSfoKmubOC6tjHLBbyqxyVcFunY46VLcujGrdRsOuWjpu+0JIDyDkCis5o4IcLBp6JGBwFQ4orPmmXyxLN1ps9vh9gnXodrED6VVuLGS48t47Xao6yBgcnsOuKnWe124jtjOG43TszMOfSo22afIj/2U8xY4O5h931AqdDfUfZ6DfxN9pW4itTJwyFQ3Yc4rTvbGaS1jWW/jDLz5kUIU4/u1kQrfveG4ieSIM2fK3MQPbp/nFSzyXF1dD7XKxizk+XMEB9BxzVJLsGo2XzbOMIs1s5UExhlZ2bj/AGelNtdM1doUuZLWN2x/EigNyeeuak/4lqX27yrgeXjLKwAOD3z3qLUtQabzVVJBg4XyZckfianlQ+Zku3VrWFW+yWUUucKZogxPsKmWw16SEG9s7SZH+7H5S5OO45qvZau9jDHEbQiVlwrXHJf3qG61o3lx5VzctOmN6pana68dKmVNW3Gpu5ow31quy3uNGhTIyTbwgY981U+zzb/LsNMt1O/dskZVHXpkk1nNf6NDG626XMk+cmSaYgD27Zoj1i2TYbq2tyzjEXzEA/U9qy5XLR6GnMo6o6H7ZcWsg/4klu5ZclUvdqJ6/dpvnXc63CSolvZMuxFZmY5wecflgViyahDYwmYSxRjGPLWUk9PpW54YkXXPMe4uJXtLZPNld2JVB/ielP2PNpclVOXWxR09ToOvC5lgnkcuSWmJZSrYG5F52jkFu3BHTr6NoDHyyzzqpZlQyKMBueg4HAAP4147rvjzT7jxbDLNLbQW0haCMRyFmfIG0gdOCBkk9ARXQaD4gvtPvDFPbSO0LKx3EEvuwcf19smuaLjB8p3ypylFSaPVL2NlUOR5Ee4bIQwBHPJ9/SqVvfWqyRx27iaVnbaOxGCOfckGrs0jXCOFKzS8FGUYCrnkj8qz2jW1tSZpQJmzvO7naCcL6AmtZeRlTa2Zz+u+ZbrEFZisqyZZMlQFI5+nPHriuD1DXJ9HvpYYYInWQsvkZUFuM5KHpnPUHPArv7+YrGqyShfMPBzyc5+VR+H0Bya8b8RZ1oXc4laKeIuhghjDK+SOQeC2F6/4V4WIvF6H0uElGStI7PTvGSafbsYlhsLtuGmccjjkKc8YA6iqNj4lk1K8lukDvFGeBECS8h+VcAnJY5AHQKO1c/eadBp9qtpHcRl40DEyMS6rtzgrg4yQP5VveHhZ6XoskshjWJtso2khhlTuY8ZbOenqR6VzLmk7NnY/ZxXMkTMbjzooWnhiuXXfIjEFY4w2PLyM5xz9Tmo7XTm1CT7RNd/Jv3GeUeXGV3cqM9vU9Ogqpda3aaHYieYyG6mPlBXjVDCgXpjnC46d+9QeG9R/tmXTpL545bUyCXZHhmcZOyL9Dz0qNOazNfaNRuj2C1mazUyDyxDHCsRRRl3kOSGyOwGcCughjF5ocqxKyjYGaRlALHP8QHbr+YrgNB1APeTmf94LhnuNwJUlQpB9hwQFA9c12OirNY2MUcp2SSOryruPLE7iv06fka9enqeLVfLvudHYyeZpscvzIqsFCtwFyFAb8MDj2qZttxJKQnzLGCQvQ4IJ/Hv+NZljfK3+iuQ0cy7zknnCkk/UYH4VCdVXS5BuKiRICduRhsqWH9fzrtVrHlzk7uxQbUGhkgWJt0QdobiNue4w2PTb/SvPvF2oxSa7fyiCR3s1EYMDDA2kKyNn0OCp9CRWm+oNqGnzXkZSG9aFbqJZ2Kqw2kEexGf0rlrB5tR1KXUryVZZpo2QK67Vdc4w3bn+WM1w1asbanZRozk9i9pmhNcyadqc+VS3hhdY1AOcAbT+q59hVi81RWurmS3lJEkjAPgcqTkfyP5CoNW1oNHAsAZFWNcKoxnau3aPbAH5CseKSNmljcgR46HgBuOP1ryqlVfZPdoYeyvLU2rZkuGRwd4xn5mBH+etbFvqSNrEWkWstwLmPbc3D2wGIxuG1T9cE4+lefeL/HFh4D0g380qmONcrHkEuQfu4p/7P669qfhqXxXqAnW41a4+1A4wvlbv3a/giriu/LKftKyl2OTM6ip0HE99ljT+yXinjSWKX5Z1VcKcE/Nj3A7elec6immaZrT2FxJf6G6tiC4SVnglXHysM8j9cV6ioE2mxkAANAykHoGA/wDr159rMceta6ljPJiKSJo/LkAKHCo2fw3cY9a+4VGNW1z86TcG7EEmkzWLpdXTz6ijjEUiuXQ475Hy/wBayrvXP9NETzyK+eV4l7dOBgU7w34i/wCEO1i60m7FxbfvMFWl8xCuOPlP0FdldeG9F1aFbhALFyci4sh+6LY6laxnQcV7pop9zm1All3yTzwcAxxBFK4x9OvFZmpWrxskQ1iS4ssbpFkKlkYnoMYq74m0HVdBtftcYl1WJRzNb5lIGMcr1WvK28YS299PeLp0roDkRszbBjjdXBVqRho0dNGEp/Cz0C1up77yrG222yRnaHZWDHj+HOeahOgGSPyjJLfpjBjdwFHPfpXAN4+FxA3mM0d6zFowVEQUehPr/hV+HxpDfRxxKPJidcM/2gEuQBzlsbeax9vTk7G/sKi1Oq07S4rCMG1aZJYy2WeUOij+7jOK2Y4YWjgVUmuSfmYSTYP1+Xr9K8503W1lDifVMiP5UV5g+3/gIHNX7PxDaWquz36tLnK7ldW/Ba1hOFtjOVOVzbk8IaYmoFoo0JkOXZFJVfruOfwp+p+FbHULCO3l1O7cQtkRwkKoPYdKw28YjYd9vcSSr92VLVyCD9P61Ql8fXEksgsdKlEwTIdYmCnjkn3/AApOVG2qGo1b6M6VfBS2+oRSS3ctzEWzJHNNvBGODggc/StBLFLHclsAi+ZtBjnyo46ba8/j8ealcCCO405XnHG6d/LU/pVfUvE+v2se6HRohJGeQszMjjHX8KiNSjTV4x/At06s3aTO/uvBsV/KxkkuopSMcOCjdOOKsDSr2G2QKwniA2lfLXcuOO1cHo/jnUIZLZb/AERRHMQVeG6GB77T2rTt/HEM1zcrClxbSW5Cykj5EJOAPx4rSNWiyXRq7JGZ8aLe7stFsLZrlkh1Cf7O8bKMbCRz+g59q6FLhNWsdIlm1A3enyWcySjaACoAQjrz3ryv4s3VtrBQXmpXWnSRws1p56lreRxyRlclW6cH2rzjSfjBrfg+3s9LZ2uQu7yJEAbZu7g9Mc/pXlPFRpV5N7M9SWAqSw8T3b4M+K7m+XUPDdze51PSZGijWVuXgBwuD3x0/KvSrpJk/debtaQbtqscEfnXy14atYdW8UPr15cSR3sgEivbSAgycDk++Oa9D1Dxhfa1NBbQX93Ats/zfZFEbBgOhHVh1ru/tCjKPu6s8yGArR92WyPUpZNSt5glsTcIOJI54QCox1yp5qtgyM5Mtza3OOkYOzIP8Oa5UzI1uZrifXGbaoZQ5hAGB6dajudQbTVTFzfwwN8q7rgyMD67av2ml3HQFT7M7JmtG2tK888hHzPJGCT+RH8qK86m8SauxTzLe2m+UbZDbNlh6nJ60Vn7eH8pf1eXc6nT9YimupDdX8YROVRFZy3tV/8AtmGRin2WT94flV96mTFcbcapYWFiZnCu8JyojySM9/zpmneJYPEVrALu7iE6tmIKpLHPG3r9MVpzcvuoVnJXOtuvFpizElyqLGwPlqp3LyOMk1QHiIal57LbNOqH7zKURvfP4Vg6w1jokwWZpomm5jZIckt3PerNjcwMPMgmkMrDc5ZSvHc4xRq2GyLtv4qaa4FsqhJ2GAgl3ZNXrrUbmS38uSAyT5xHtwM4B45rL0nwvfNq4uI3sgkn3VVCJB+Vb2teBdZ1aGF4bO+nAYEJb25UADtuNWr22Jbjfc5a4e8nsUeeVbSON9paRwGPP3frTb7WoBeyAXCvIBlljkwT0+XA6V1dr8H/ABJf3ZlWwW0xh9j3Ua9O/U+lb/8Awqe7s2Cm5sLZZoy7opEpYdzwOuacaNSb0RPtqS6nn1tMHVM3TkzHeEaQ4OT0xiul07w3fapFIYdF1NFA2CR4tsfTqCcZr0fw74d0jwZb200+2/1JhuWa4Td5WRwkaev16VY8ZXnivVo44NNNtpxZcia5yzqPXHauiGFn1OeWITfunA6f8KdU8wSNp5ghX5i9yyiMAfj0qf4paxB4J8ErpFrPJbX8oMstzaSBR52PlyvXaOAK7Lwzo9xp+oQWWoahJe31wVeTLEiNVUbj15JPQdBXD/tCQx6hZpZR2yK7OBDJtAKtnuaudGNGnKTKpSnWqxSPkTxR4mmurrUY1K/vo/MlK8bXZRvwO2cfqa9y+B/xKXxJ4a8uWbOr6aVt7otkmRAvDZPcqOfpXz/4m0OSXVLi5gnx8qoVYDGBnjj6Gs34M+J5tF+IusAsdswWJlj+7kZ5/WvlpvlZ9hBc2jP0Y8Iay95psADYlYM0kjE87hyR6YxUmqMb5ZYYy2yZS0Z53cHr7f8A668a0rxzLNcFrSVokULHsJ3fKuML9OpOK9GtfGltcKh3F3S1HmMV2qu4j17c110cRGa5ZHn18LOnLniN8SX818skkUeJ9oiVjwWyq7senU8/UV5zr9idPkdA8qIjsEkj4JwVOODzgJ+IBr0vyVuZ3U4PnR5DLyNwIwp/OuXm06WRro+RiVY2JVmCjcOFz2749xxU1qKlqXQrOGh59DBJh7gOsssoDGRh8kuSozgc9P51v3lxJY6TavaSyJECYH8wFSVRgC30PP6Vbj0lNNgiubceY8hWQEc+Uqjqfp2+orOvIYL23W0d4rc5ZgrFtyc5x+fOPpXC6FkegsRzMj1rTZNU02SG3CShpWigMrckE4Zz353Ee+Biuu8O6WllLa2yAbba2yVCgFmHf1xyf0rMgv4obiUuzGCFFZVPAHAGPpySPw4q1a6nHbwyS27rCZpGVpCclVUD5R1A4zW0KEYu7MZ4iclZHa6Dax2liLiRxJKA0cagFgGJJwcd+B09DW5pN0fs87MyvK7gtnONxXpj8BiuT0PW7WO1QWm0QbQkeMnDbiu76kkAVBq/i2z0LTfJjnjkulMYkWM/MGIbn9K604QRx2qVJHQXHiZNPvmaDak8Y2IVPAOVzx2zxT/EevWd0twWlbJwd2MDheF9u1eNTa1LcSGaYtCV+YKD97J6n9PyoXXJVwxdnUjAYkZPHJrzqmJlsj1qWBWkpM7TU9ReVTHvVjt3GNQMDkn+pqjJqnk2+VkCK+QMZHzdPy/+vXNLftdSEMxfaTmPgD8v89KX7W/mDABVRjzGyccen4/yrzXc9iMVsaUd40ybkdZkQ45HzDnp9OKyNT8VW+jxSSyPsiU/KTyT16f0qhq2tRWNuzSvsTachSACPX26V474q186kzSk7Ldf9WnY+/8AhRCm5MqpUVNaFbxpqmofFrxVY6Jbuscd1N5arj/VR87mPvjNfenguFdD0Ow0oxKsHlrGhwOAFA/qPzrwj9nP4C3em2f/AAlOt2y2up3y5tYpW/exQ4BwB2ZsfXGK+hI1Wea3jjORCMsT6j/65Ufga+0y/DOlT5nuz4TMsUq0+RbI2dQia2tp7aA4LFWjbOMDIBH5E/lXjXjS/uYdZ09J4JBNHdwRwSW8wiJVoJE7+rIPbgV7NJcfaNLFwv34RuPr06fpXg/7RF5PH8Lb3WbQhHRbW7jlXIw8d0rBF9CAz59q92MlCDbPmrN1VZndyWtl4ksA2rQsZoUwLiRQsqr7leGX3HTuKZZwy+H1A0+ZrwMP+POQbmdfbsRXN6B4s/s7wLe6jPdvd+UUZVuPlYMQB8rgf7VYvgvxFY6l4mktbeeaCbLPJPFHhXUHowU7dg9gD3rbnp2s9ipRq291Hplx4klsrJb6zjWMYO1XkAK+qH/PpXIap4Pj+KllLLastnqMZ5k2mOGT1Gzqre/Q13GsWdpNZzPbWgcXAwI+u2dQcr/wID+VeYWfiHUtI1Z1DefJjb9lZiBAP9puo9hWMvZ1IcskZxp1Yy51Kxynibw/quh3dtYXsTC8TDRySAOhUEcg9D+FZDahaaXq80BYI7Y2pDGAh3E5JHbp+or2u41O08WeHZtN1S5MUn+st7lVVGt5B3QdGB6EdTWBZ/B+zmsZ9Zu9VivW2rsitMAHbkfMzDIPtivHqYafPyUz1qdZWvUOBaCzn2wW1m0T/eN0CQSuOjVn2rPNOIbfVVdGJVZGj5xnGBntXpOk+B7XxRpMsVpLJZOCwKTShAT6Bx/hXCah8I73wnHNb38V19iaQzISweOJv9h+OO5H1rmqYatTfvm0a9KWiHtIIJvIvrsTxISQsc21g3Y1Z168uI4bYm1ljiZQU8tRukX+9welYsljDJeW0E7zGGMbWk8ncOnc1e/cw3pWKJHhA2HaxVio7j1rL2c+5p7SPYlsbizvFCQJIjMMgStgNk9MfyqdFdNQiKT3CQ5wFjYFg3o3t1qlM7XEEkFuFRSdhXO5V9u4HaqtppN1YA+TfwxTvxv3HII5x7Gt1zbMxduhNrOn6TcqbXUEumlLNk2zbSc/7XSn/wDCL6PrUzPHr1xDE0YiZZ7UbhgDjj6DnHasq4tdRvJlmvLlruNzt81SpI7c4qy91fWCpBDMzNGNokiiIB9s8VlKEZayRrGpKOkZFyz+C8epQzre+IzqOneZ56Ryoc7sfe7c89vQVy2qfs6+HoWDnX1S7Vsq1wyoD7YroIdd1NtPHlyTpIWxhF46dOaqRatdXMxFwonymNrW4UnjryKh0aLWsDT6xXvrM4aTwdq3heZ4IzbkxOPJuoGLRMPTB7102k6xrul3i30CW/2powH82MbJjnleMc8DB960odTnZIgHScsciJlyvA6BMdas2/iZbcyxTWillHCpuPbrzXEsFGMuaLsdX1xyjyyR0tp46fWtN33uiujjBDKGzuwO/I/OsSa6tpNRMzSkSAkgRgBSP+BD/wCtUb6vJJbqiNKUkG4xpKMo344yKRbwNcR+bEIXbhmZ1P8A9b/9VelFO3vO558mn8KsVLeNLNCjyKCWLANIQQD9OKKZqViILnEDCKMqCFWVSPwop8sexN2dQPhlrF1eGX7NfTO+A+6x5YfTHsK04fhl4jhkLt4euhaqR87wlABx2AFexR+Lbm1ixd6vHe3u7CR20jCJOmOeMn6cVleJtRMcS3GpajNdXLDMNjFIdpPr6Y/SvUjgXu5HD9ZltY5i18Cy6TH9qvruw0S0UZLnDOfbbyc1inxN4WtWAudIvbtN2PMupo0O3Jz+7XHoOp71z3i7xBq00nnSOzleAI8bYvZf8TT/AAT4Rub2ZNR1eVnh6xW8nBbP8Te3FbQw8Oay1Lu7Xkem6X4xsFtIW/sa68L2dwMRXTeWqn0J2jofrWb4g1/UvD9i96dQW4jbmCe3m3o/t/8AWqfVNat4LF9Imtl1M30bKLAngjGN5/uKv9729a8lvL2LRZr7SNUMs8EbGeO7tUyspA2h1U9j3HqB6116QfKjmcdLnY+G/HF09hNLLKyiYeXAzE4Tn5h7c8j2rvNNvIYr5DJN54ht1jHl8ksSWb+leOLe6XNo1pc2morEIyBLDINkjdeFAznpXR+GNU8Q6rdS26odK04TFmHCPJGQMY/ibOMZ6VvGs78pHsVy3PSPDscviLWBrkvEETN5DMRtRegIHd/rwK2dW1+00i1aeR1SPogkOWlb1PsKgNxbaXp0ForLDDDGC6jjHHSvH/G3i5ta1ApE4CA7VVe3PAFYVJezVuo4x9o/I9N+HGqJq3iDVb9n8xoYNvGSdzMOP0NecfH7xBLpNtLcJFIjxEOY3XquRk/l/SvUfg3o40nw7eSt80rSgMw/vbf6ZxXCftEaPLqHhK/lhjJm2lVXHzHI+6PrxXBilJ0XY78G1GufL/im7s5F1DUIMfZpI47hSvTayA/hyCPwrxTwPJJHqb37A4mkLlu3JOBXf+JjLoHg29troIlxDHJbsscgcDd8yocfxAuRjtXD6RD9l0uFtmCqrkhN2BkDr/COR9eBXxtV6n19PufR3hHW0eKKRnAbG3I4IHpXdafrrQyTfKCzDy+5+Xjj6cV4h4D1TdamIhXKncVPcYH/ANavQbeUsu4PkHhW5GOOlczdmeioqS1PTP7ZurFtOuIMkKPLxngAEjGPow/KlvPE11Kx8raGiGY4lwVzngnv0zXDWOtPtSGYbolbIXPIOMVsrJb3CxyB1DZznaM/T9P5VvGpK1rnJKjFPVENx4ivFhnicAMxGW+mRtHYcH68VnNrDC8+6oLctIvVwe36j8qfqZWaTBKH7zAjktz6+tY7WxFxtAjKZJBdeR61XMzRQiuhtR6nEnlkSSOImOIzwp5Pzfh2qxJq0z2xgibYqHgYwDk46emK5vzkX90VET9iTxjB5/QUtlHLdSIVckZ4VWxxnpUO5Sir7HVW2sSQ2+2OWWJMjdtJA3KflIHqP61Tup3vt9w8jyzsxYyMMZYE4/mfypIGSyjdY49xxuTDdz/9anyMrLHgv13MC3B/z/SsW33OqNNbi72+z4A8wRjBYg8cdcVLGxurWMSjD7QCo5K8e3WqSDfKDuZBk5HUdK01h/0QyRyfvW4UOMDFYyZ1RgWLWNGizlgvdWX734/571V1LWI7WNjJKqRYyQGyOPT1/wDrVDqmtR2lowd1d4xgs2ADxXFXckmpJ9ovAsVopwsQ43+g+lJRuVJ8uxm65rEurB5WAjtV4jVhjzOev0pnwk0FviB8V9L09UFxBZn7XPxlQFxtz7bsflXLeLvECbZFV8DoFHAFfS37EvhSaz8K3viF7ICW+uWAll4Z4kAACe2S1epg6PtasY9DwcfX9jSlLqfQ/iGCeHw7tgy96pUo2/ZjHfODjgVk6Mpt8ksuZl8z5c7VHPyDPYHP1zmuh1VlZnQEeXs3Z+v/AOo1ylvcbIxgf6qQp/wE/wD6q+45U1zHwab1uaepasuj6fOCebgeXGP9puOP1ryn417Lf4Va7omzfu0pzBu5AbKNvP8A44B7muk8VXR1zxDb2MbkWtn888g6Dgbj+RCj3Y1hfGy6h1bw3L5JAM0bAxqMBVUdP++iB/wEVVSPucnc5aN51nPotDL8I3EepfAKCSQrNu+z5YjIP+rqL4XT/YvHEBULjEi/dGO5rH+GN+n/AAoO0RnVP30aEEjsyj+la/w9aKTxxAiyqXVpMgMMdGrOFuWNz0WviPYda0uW40+/tbKdraKeHzYljxvEysTtB7YHQ+hHpXlMPiLSriJrLVUME8bFRdRACYt/tj+M+9em6pqf2HX9EUttEtw0Y/78v/hXm3jLw1Br2sXUzr5WoDJjlC7ckAEf7yEY56jNacnK3ymMd/eOS1SS7FxHJOd9pjMTpymM8H64Ar0HwzfT31m8Df6Okw5kbjc2P1yB+leZ+Gpr/wAL6xt1e3Bid8nT7jO1z/e/2f5Guv8AGGuW+lrFc2Lbra4jysb87CDgofpgY/Copvllzs2qK65Ub6yw6Wy2ccvlIDubPU8/1rb0/wAYgH7E0sc9u42yQzxllI9MEYryLS7i/wBVglljhmkkZtrlFY89hmt7R7PUVmjhjFwWzllw2D+JrsdT2u60OR0lE7zVvAfhvWkSa3ifSp85DWL/ACj/AIA3+eK5vxR8MtT09Bd2U0Otw7drJAB5o99p6/hV57y60oNJeYt4Y+d1ywVSccAZ+n6VY025vI7ea+lmju2YZDRSB4x7fL06/pXFUw9OXwaMcJVI6t6HnFwf7LuDGbWSC2kj+dfJ8ohs9Gz9O3tUE1jZ+WNssluc7gynp9a9Z0nxgmswSQX8aXCx8BbsB1PTjcRkVdtPDPhfVFCHTja54zBM8ZPtzkVy/U520dzT26W6PCts8kklwkjiH08ogs3Y8D2qVs3DK99CGi6lhIQ24Djivd9S+DNjcWhGlahPbPjKxTYKn2zXmOufDvxBpiyw3NldBFO3fBCroVxwciuOVOUN0axrQl1OOms0mni2QNbw42osmSOe+atSWBGwASyTqmw7W+U/7WKWfRJZv3MZMUkYGGVsEe2Dz2/SrkkM9s0TOUEQONoByv0zzWat1NvQrrYQRxF3t3Rf+WjKMfiDUkbRyQW+y3e4Ukq53MoHHWrnlxrbNLdyxyw52BgGBI7DaPp1qtJcaf5b29s5tpY23MVZiWGPRj+oqfaR2Rfs5NXHS2kUaqFit1ZvlCSJlH4/h71n3FmI967LeODcF2ldxTA6cjpTrW4/0qZrWEvIeqswIbA96mNxb3WMM8J6GORiAOPbnFPmUloK1jKa4t4mKiVHA9Ni49sUUk2hXF4/nIY0DAcBDRXK60l9k6VTj/MeqeILiHRbcxWWoRXV3jEt0ygRx8fdQevtXk99qWqR6h5cBuPNkOMkljL9T/TpVrQ7W+8R3yW1i+xlG1orvPlRL6B+o/HNey+F/DulaVb/AGS4tj9tYfN9oA3P/uH0+lfVRjKrseZpS31OY8A2UFj+/wBcjEl2w+VVXdGn1Hc11uq31lqEklrpJhkvFGZpmbENouPvSe/onU+wrnddtlupZ4tGvVtbW3yLu/kwyRn/AJ5xf3pP0Xj6VyP9n3On2aPOjaXpUOZYt7fNNzzLI3cmt+bl92KMWr+82aEkJ029dLW4kktJji61O4IEk/Xgeif7PQVy3ijT7fxprlvDBudl/wBHtVgYrhP4pDj+Hj9Kl8XeJLrx9pcUFhEwiU+VHawja1wR39k/+vVvwno82kxie82wahs2bYuBGo/hFaRgo6SRxSnKtK0Oh0vh/wCE2j6PHCDLcXsseGDTsAuQOuAK7aOFLcb22jaOG7/SuLj1i9jwPtDDPrj8qtDVvs1rLc3MrO6qCqs3XPQfpVXhBXSOvV2RpeJbhI7HypXYvMd7hTgj0Fcxo/hexWG61q6cpbWoygYA5Yfl6j864m/1S91zWcJcSb5GyCrEbRnr9P8A61M8beNL3To4tJhuS1hZqrSq+CHlP3U/DgmvOdSMvfkjojTfwo+hvhnqVvpPw3OpanMsEbXc8z84HUYX8ABXl2vfEeL4seJX0jSIhcQWLbpFjBZg3qw6DHHWuE+I3j/UZPhH4d0uxaIDULGR5LgjOH3SGTaPXgDPatT9kewtfD3w713xLfzLBPrly1nbRspwFjwHfPpk4/4Ca86pVdSXs+h10qSgvaPc+ffjN4Tk8J/23ayp5cQlhuwF+7gsQxH6fpXA2UYmtURXXDBgpIZh90kfd75UY7dK+s/2kvC9l4u8M3d1ZSRyTLbyRYjYemR+GVFfDHhzxNPpLLGXbYpVkZWKshBzwR/nmvmcRDkqWPo6E+aJ6x4V1CSxvg4LY27h3B6V7HpswhtkYki3Zc4Izt9q8J86K1mRoCrInzI0LEqRjoCevBH5V6z4N1cXVmImYPEw3KGOCK4pnq0ZdDo5NPEe66UuNxyWHQfSlh1iawkEMoIDcKzDg+9ai2kkVgrp+/gU42ggEVSl02C+VMKwPIKNnislKx1OPMXo79b5gGZQEG0gYGeOlMkRVcl3GM8AHgjHQVgXdtLbqwVmdegDDBHtTYdWEKlecqc7W5I963Ujn5bG1NbxswLHd2GRwKtWJi5RvX5WBwB7Vzyah9py2Bu3cK2R+FXHv47dSVcA4+YE8/hTujZI3I7w+YeO/BC05Zo5mRS5Cqctngmubj1aGOMlNzknONpJNSrqWoyYEVtwzYG7AA98VizVM6ldTtbNS7lduOI1Xisa41m61aYpaRNLtOcrwo9iarixg8xHu5hK3Ux4+Uf54qWa9itrceW5Q9MDjjHSoNuYp3FtHbyeZeTCWUdI/wCEfhXJeJNcPkyJ5hIUYHHA9+lWtY1QjJZvnb8gPSuF1BLzxBqkGl6bFJcX9y2xVXgD1J9gOv0rWMXJpI46tVQTZufCf4Y6j8aPG0emQBotLtmWXUb3tFHnp7u3QD6ntX6R+GdHtPDej2lnYW0drZQRiGKFFACKBwK80/Z6+H+h/D3wbFpOnv5uoyAT3dy2CLibaMlT/dHQD0r1dpvLg+YY28kdO3SvuMHhfq8Pe3Z+e43GfWp2i9EZ2qSxxxyqSqJklnY4AUf5NeG+IviY0OtS2WlxxLDcJ+7uJ3O8kH76Rjr04z1ruvGt1P4g1KHQLFfNbO6dc4Un0f8A2BkZ9TgVj6lZWXh/yo7QRGQOWN9JF5k1zKOoiRfmbHTjgcV7Hu043keHzVK83Cnol1II7ObRdAQMd2pXrCSUSN9xcEqHPoMM7epGK4HXfEkU2n3atFJLFGpijckD5Rn5sepJJP1rsNVurj7Kwu0ntvOXEYulCyuDjdIygnaOAij/AHvWvO/EZtl0i4COhY7sAdfpXNJu3OelSpqmlBHK/DLUVuvhTMqOSkN7gk9R+9H+Nd58P4SfiDazZyFeQHPphv8A61eXfA/SX1TwH4nh3hYre580gtjPzqelew+DfDdxZ+OIJI2+RTISFbI+56Vx0ryUWdk7K6Ok8fX9zZ6/4c8mV9qz3D4z0xbSc/qK6HwbqQ8S+GNMluVVrmFPvYAJwThvY1xPj68f+3tELwsWWK8OY+hxD/8AXqHwXr0mk6bobrEwiaVI2G4Z2lXzx+Ir0KS/fnFWajR5mdf480EeJrDZJGv9oQj9zeRgCQYHccBhXi0dr4o0a++yBJpkzuSOGGR13E4Dfd68D9K9dXxxG11JHHErbTjdJ/hVGbxVdrrZTz1jTdCPLUYAysnI/HFa1qdNu6Jpzna1jnfDvhfxlPevesbjTztwDcXAtyfU7Vz/ACrevtL1aOH/AImfiFpYQOYreRw5OOm4nP5VMviMHUSJXySvG7kn8KW+ure6hIEbK3f5SMVUYRtoHNK+p5vDNG1xBMAzPGskEskzl3bByOW6cN+legeHQNW8NaxbQTm0uVtWlgnhbayMo6j864xtLea8vl8ny7ZbhWLdCdyn/CvSvAWnWd9by2sUoEzwSRYDAkZU9R+ArgUXqbSezPG9H+IGuWviA6Pera3YuZFUPJF5TDKjnMeM/iK9DfX9T0TSVuo7cCIyJEfIYsy7nCqdjcHkjvXleraXe2vi6wM0S/LPGVcKfYYr0Nhqkem2UcjERLe2oZWBBI81eMfj+lKg52dy60Iyseq+H9SuNQt0QCRpUYq0sjELG4PIK9ce3Y1ueI7W9ksYporjy/K4bynb5PfH8qwL63SPSbvXLZ3W5tZCJCuTvGQMMv8AEP1xiovDvigyTNps1o0jTKys7zDygw6eW3Vu2VI3KCO1dsJyjZtHhSo03JwvqW7W+sNccW15pi34UFUaaIBuMZbf97v+tcT47+GeoTYn0GVrxPvCCbCXMR6Yw33h9K7oQLHavOXwWOz5DlUx/CCPxrM03UZpNW/dtJKFXBgbJAHYYz35qMTgaeJTs7HXh60qDutkeOSNqjZS5LRSRhlKupDrg/TAxVtUEECzXIgnEiqXuLqMAn/ZXGTxXsHxC0e11zwve31wYbPVrWMOrRj5mXIG1u2eR+VeQ6lZyXFoI40aYMmFkYgNyPQCvm/qzwzcGexHEe3SexZh0l0095IyBF/rEkLMqD2BxzVb7PeKA7WxIzkhQcjPofwqU6k1vZxRxOvlqNoj3fMhA96kt490IubnfboF2yIWA57dM/5xTVtkxu5Wu5xby7UlMQ2g7PNQ4oqRtPGobZ7aAyxMOP3A+X2opk6nfaRcWOk6WlvPbQGzQZN1bsOOOWfPIrIv9QfXNPL2s/m+GWfaXb5Z7r/Zg7qP9vg+lS+INJtvEqi8vIGsrNzi0sFQia8bPEkq/wBzjhO/BNZl5Yv4R3a3q8gtpVGYvKAMS+g2ev8AKvruVVdIaHiOpKgrz1L9s0Vjbx3F+8dlploMW2k3J2iMdhkD5j9a5jxR4sPjC4+zXMLwW3W30kjEk/o5x/D7isvVvF8/iy5gl1m082RziytY0+U/7b+g/n9K6zSPB76G0d5dzi4nYbo71VDC2bH3Rj+Hsf8A61axp+yWpye1eLlaOiMXw/o974GvjdXaJLcTLgRoAFWP+4PQiuzi/sbxQN0bhLnuucOPwq21vFr1u0F0irMvPykHH+0vqK5+58G3dlzAqznOC6cEe+KjX5HoRjGKstDU/wCELbduF2Qg7MTWZq2raVpMRtor2ANn5pGYZLY9fwFLp8N9b+eZDOPLXaqTMQoOO/r/APqqPTtF1bxBqix743tYhvk3KAv0/GuarLpFGkV3ZZigsdB8NT6vdQQXt3c4W3TCtnP3en5n6V4x4m0e1vG8tBI85YkmNz88jHk8/h+QrqPiBrA1bVmdtKU21mGjga0BTLdHcFfpx+FYPhtSGudXinmKWI/dWV2wYSyY/hPXIFcErTfKdkfcXMJeaGmpeALXRYyW1PQTcWpZQArySEHC+uBJ09q9ENrZ6boukaTp4QWGn2qRRKq4B4yzfUsST9aZ4Ljsm8GabtKm/vrt79HkQr8xcBcEjkYUZx6mvT7jw5azW1olxYxCTywZNqbfmIz/ADJqZYa2qLp1r6M8Z1q00648P6v9tlaKVUUwohP7znBX9RX57+LNHk0DxFf2bIU8qVtnGMrn5f0Ir9RPGXg3SW0O5dImiY7Qu1zw28DFfE37UHw8Ol39vq0G10k3xyBcFkCuQN3+e4r57MKElqe1hKivY8a0PxJLaJ5LHfHngdx/nFeofDnxRtvFRpwqqc7W6V4ewMTdPatbSNamsJgynK9Cp6Y9BXh/Foz10+V3R9saH4m8sJGybDjC5zgjH5Vuxw215kusYc87gMEV83/D/wCOq6SsFpq1r9ps1I/eRAFx9R3r3Tw74+8IeLLdUgv44Z8/6p5fKP0AJrCUJI9CnWjLqWtU0mRVwoEvAwUNctqMe3PnAiUcAMCMV6VH4XguLcSWl3JHHjPzMGFY+raDdMDie3u0HHzDGPaoVzo0Z54u1pQAzBO6Z5NX7Xy0UAxKwHITsKt3mlXNtIyvAXTHATBAqjDb3W4lYDCc4yw4qibGnb3WOTGix44RVxUy6gvzjJUqMAdqzxp9xJkM+3tlcAD8azrv7NZRv9u1FbVEOC8jKAR6c0gukb0txC2S5DyYwB6+/pWJqniAxx7VfHbOeB71x+tfEzwpo8LxrfyahJjiO2UFR7E9K8u8QfFy91KRksoFsov4Sx3t/gK0UWYzrpI9A8TeIlgjclyB0VzgAn+v4V9Ifs8fBG98L+HbrxN4ntFgu9etDa2NpOuHghOGLyD+EvhRjsuc15z+w/8As/z+PtfT4i+KY5LrS9Pm/wCJfBdKWF1MM/vBngohH/fX0r6U+NnjjU7iT+ztJh82KBiZ7xDkDjGB6Dnk+xr6bLsLFWrVF6HyOZ4yc17Gmef/AAF+Jmnt8RPEvgqK+fFvdGTTXkYdz90Hv82RjsMV9S3F6Psv2mUjasH2iQL0GFPH6foK/N/4F3zzftKJNBb7oLWVt7be3mKNx9MnH6V+gt9dRw262QIeWQeZ5WfmKdh9Cdq/nXtYOUqsHfoz5/EwjTq6dUjn1X+zdOiXbM15esrXJtl3SuzjcsK9hgZLE8DmuM8eeLr7RdSj0vQba1t/EFyipc6h/rBZQFtqwxZ6sACT23Enmth/E7+H4Z0lH7/zGhtVi5cxE/POx7FiuFHZcV5Xq3iY3Xi5zaW7xHy4QXfBI4c/nzXRP3tWzalBU1yo9k07wnbrosUcpllnIBknlkLu5x1JNcZ448H2raXJHC5U45DAEVLa311boSs0udq87yM8c1y/iXxfqNvbuWkW5QL92RRnoe4rqqShGFrEwjJyvc87+D/m+E/Dvie2jRJTdW8kgHOBtPX9BXr/AMNvFy3XjK0W6jVC0eRIvKj90OteO/Bt5vFl1e2e2O2RdOmbPJJ5P/1q9K8I+H7jT/EGnTIfORrb5tqkEfuz/hXl0L2VtjsqJa3PQfiFLZDxDpEki27D7HfsGJGP9SvP61zc+vaVb2fhS1DxlGnDNtQkD5B/jXFfESSRvE+mEc7re8ReT/zxH+BqZtH1C6/4RVjb+UrPlRIQp+4tenRn++dkeZjIL6vqaV9mDUphCvmH73HC+tU7601CXU1mAYLJBuBj4G6Jg/U+wNehaLp9h/wj+mXVwIUufIUSCRh94DGcfhWL4w8SadYw2Uvm+eYZwpWLkbWBQj9aqtTsrtl4efNFWLWh6DFpd48tw6scZ5Y4+pNdAdX0OGElUR+2Y4yfwryo+IbrWFsR8yoqKhROSWUbcn34/Wux0/wvqN5bglktlI4Vm5/Kqpy6QRc49ZM5fxp4i+03WpxWaeQjRRSbmwGwDg4x061d+Gy3ljfW10sEiIkoYvt6Kcf41d1rw7ZaPfStcyiSWSyLKz8DcG/hH4VoeEdWMUwxaXbR5/1ghyDXJKHv+8Xze7ZI8413xhb2viKGOdJI3huF3bACpxJ1/Suv8Z+Kv7Q2RWCGNzd25EkmAR++Xp+VcJ8WvC8q+Mr2WzaMwSSiRRnGAWz/AFruJtBi0Oa2vL2SMyx6hbMN5GxF8wDGT9aVPnakjWXLaLR1nhrxFcweEdWNy7XCCckq3O5d4z/n2rZ8Garp0lvckpGXW8kO1+CGwOR780y01DTrzwv4ghMsMnzzGNcgN3Py/pWLoOkpczarCjqYm8mYb+DuKnvXq0YXpWPnK8ksVFvsbuuaPoeqB1uYpLYMdxksrnyTuwRuIHB6+lbPhe1XwrpAht55LiWX5jcXGDLs/hBOK80k8K3q6tEr3ty1orb38smQlQQdu3rycfrWjc6PqH2yXUdJvmubkcyR4EcwHps6EUuWDdnodNWcor3VzI9Q+xR65Y3NvKFHnRFCWUEDI/z+VfLmrXGv22uXekNJJaSW0u1oTAcL9D3HQ19H+APEB1aOe3uUEd5GMEKCAffB+6emR9Kr+PPAsev6DcTLxqtgrTKxGRIgHzIe54BIrxcdh3LVdDtwmIilfoz59tdAtdQPmz3QDwfeaORkJPrxWnDpVkXQJqbS7geJWG1uufx4rE1KC7u1WS3t4TBIcRtGBEUYd+etRaUmotZ3Gbu0by1BYMoznngkZ9PSvD5Y9j1+d9zet1FuhSOS3VAxwPMzgUVyd6lvfTCWW5tRIVG7bdBB+Q6cYootHsLU+ibyWPwnbS61q8hudRmyFQYyP9lR/WuD1Ca68R6pE9xGbnUZDi3sRzHAD/Ew/p+dVpNfuvFGsLJuF1q8/wDqLUjC2sf97B7/AMutejeHvDcPhm1LZE99NzLcNyx/+tX30VGkvM+Qk54udtomJpnw9tvD8EtzHMf7WmGZZPvJz/Dj0rPtNUm0+eWKVGSHdsmt8fLHn+NfY13Eg8zljVC60O21JhI26KReBImAfp9KXNfSR1+wVNfuyha6LJ5YMRS7tusbRSBZY8/3TVbVvEFzpLR20Ts93McRw3UIJH+1uT/Cq/iDTbrS4F8jy7uZztijjBikY+23isrw/aanbSTXV88oDDJecAl2/uqf7i/qfpWU7RXus1jKUn7yKXiKS+MPzW884UZ++FJ9Tj3/AMKxtW1qXwX4VMaveafql8fLUMSVGR17Hhf5iuy0W1Osa0isu+OM+bIT0IBGB+PFcj8Rtc/t7WLlgVlgt82turAFT/fb/PtXnSq2TZvHDuT3PNrXWtX1K4isrO7gu8kQwq5wW5x7V2/jGa2tvDf2GNPsl3Yx/MwwC7d2/Enj8K3/AIX+ArC4tbnV7i0TCjyLcAY+b+Jx/L865LxL4Ym1L4heH9DiDzwTXS3DHPJiR8+WfYsP0qYRXJd7sqbnGXkeh+JbO88O6VptpPIs9paxQoFjxmFlA+YenOa9DW61y+0mC8t5dLuYJoVdGbzEYqOPzryXxNfPp2oXKzJKkbN+8tZG34XP3l9RV288VLofh/TLaA+ebpcReUhwiHd87NnrwTjHbtWtb92PDz9o7dTe8XeILyzs30+SytZLll8xUEhYccjPAwMgV4nZ/wBn/EqM6FqBEGoXUbQ3VpdDy2MrHnbkYwD0I9q7LbPqN4ILRvPmYgtM2SI/r/hXW2fh/RLaPyrpE1O7ccrJCHIPHc8J+debKk6z12PWU1TVj8/Pi58FNf8AhTrMtnq9lIlszH7PeAZjmXJwQw4zx0rzjyzC2OnpX6leJ9Pi1Lwle6LqVjaarp064jhupxMYsjGVPqOSOc5xzX59/GP4ar8P/Fc9lZ3J1HS2+a2uihRiO6MOzr3H0r5nGYL6u7rY9bDYn2i5ZHBq37vGCPocUi3c8PRmxnp2qJlMZKk49m4qRHyACOMdq807zVsfG+qafjyr26h9fLmdR9ODXRWHxw8Tadgxa1fZXp5jBx9ORXDtGrcgfh0pn2MNjA5+mKPeKUrdT0yb9orxPcf63UVYY6fZY/8ACqFx8efEkylFu0QYxuWFA38q4D7D8wGcfWnfYD6H9KnXsae0/vG7qXxH17Vsi41O6dcfdExVfyFYM+pSztl2Z2/2mJpGtQvUgY7VE21cADnpgClqib3Bpnk6nI9q6X4Y+Crn4kfEDQvDNo3ly6lcrC0vaKPrI/0VAx/CuX2MSPlwPyr6Q/Yf0PzfH3iLWMosum6NIsMjkBUkmdIwc/7pf860ox9pUjEyqyVODkfblv4iht9G0/wn4Qtm07Q7G2W0jO35ygO3j0zyffJrL+K2kx6LatpkM+wvESypkFFAB2se7N3+gFdh4R0NfDNt/bWoSfu0hUWkTLhpW2/eI7AEnH51wXxOvLWHQ9U1fUpW/cW5ZUU5LuSOD+lfdR92PkfGVLyeh4d+ynpb6x8XPFWrLEDbRNH8ykBiRIW6Y5HA/SvsG8kgvbyeVVkt2mQRtcL8rmJFO7Z6dTz6kV4T+xvob2nhPWNRuoPIi1G83Q3GwglTjP4YHH1r2S91qC3uWt5onjlHysI4mkcxg/KGwDjPXb9KvBx5aaj3Mq9qlbm7HM32g6prGpXF6bJYYmASKJXAEcaqAq/gAP1rkdE8GvN42unvMBI5FUxK2c7Yxx/49Xqz+ILJIMeXeKcZANnKP/Za4PRb57vxJfzF3022NzIRJIgMj/cGFU9Pu9TXdKnBOI4zlZndX3hfTGtsC3ELbcboyVPSvN/GXgAf2fO9vd7NsTcSLnGFPpXoFw1w2TZauLg44gv4gAePUYNc14svNTj0W836ZE58iQborxcfdP8AeANVWUHHVCptpqx5F8FPD8/h3xNbCLF5cXVlIgTIRANx5JP+elen/D++lj8TaELyFbYtBtWRXDRvhWG3Pr7GuG+GsU194z0mG8MNnF9gY4jl3N/rDyTwBXU+FbUWOvaOsRW+tT5qtDJhgcF/8K82iuWKsdVRpt3Oo+JljEuraDMkSozzTRFlUD71vIP6CuEm8TG4XwiLRGu3iLK7KQqqwQcbjxnitz4kSWBudCdbCeQpqkEfkvO7R7X3Ljb+NcNdW9xLpXh5rh1s7SC9lhSNcKE4b/Cu6Emq9kcOJivq2p6TJpc+reDtGu4bd2lW3AkVcNjDHnjrn+lcr4g8J395pd6q2zRbE3BpPlAxg8V6L8LbiF/AOnNbz/alRGDwKQWHzHkVJrF4kyywx2l5O7K0e3yGXqCOrYHeuqrTUr3MsLUtTikcV4Z0CHS/NupZVdxKzhhwiKyq+f8Ax4/lXULrTra+YXWzgI4aRd0rjPVU7fj+VcdpOoXMsMSXKRo7wx+XaIwdmZCyZftxgcfSumiOm6bvm1KcT3f3ihBcj8PSsae1oHVNpayOe1rULi41+zNvEYUuI5LU3E/zMcgjGcYHUdBVbwrNC0sXn6k0Fx3OQMMOlQfEDxFNrGjmSxtzaw2zLKLh+COcED8+nsK5zQbK4uNUne3t4yjSsWkueS+e/wCtcsotVPeIdZOPuGh8Yri8s9ccpFBdboI2BWYIenXBHt2rfv3m1q+0zzHhdzdWjLHGdyQZkX52Pdv0HNcT8YYbezbTDqAMEpt9qmNiVIDHp+dakN82raVoiaXbsUWWxkZclRIQ6jJPpVQi+aS6FuouRPqesvHfQ+FfEbO0OowLJMWjkUHAwelcj4V8QeTq9zaRXOoWLtZRSMGgWdRwvHIzjmtf+z9Q03T/ABGPsTqu58tZyFh908EHtXnlj4g1m11Cxa2trgXN1ZNEzqo3nBIzx6bR+VerTioUm0z5+pUc8TFOJ6vCtl4iV4bieDVJYztkJCqU/wCAr92uP8YXsvguSFpbq5+x5xa6mzF3sWz/AKuU9WiPZj05B7V5/DqV14VuW1KCV4p43+ZZFKMD/cdT2OK9L0HVrb4iXFvd2rZR1zLF1MRHVT/n0rxXV+sPl6n0qp+yV+h6b4BgN5p51G8WL7ZJFskmtyDHMvBSRT+BrUj1yW3vV+yus4U4IYgOPasLUL6y8EWlrpsIW0tr0eaIk4WI52nA/hDce2R71lahJLZXkTr8wYArt6OOMGu2nBuPvHB7jk+UyPiN8E2mgOq+F1jFo0hnlsWVmeNifm8vn17flXiOoXbrM1tPOt3bQnLeWGiZWGRgqPmP16V9qeGXL6egc7psZZQf8815Z8evhfDr1qPE2mGO3v7BWN3bNAGE8fHz4/vDHPrmvBxOH9ndxO2jX1UZHzekeiakomujIsuMYZR09sDpRXU6dqVi1qA0tjCy8FTYbe3pmiuLlR28zPZvDXw7tdJtTcXQzqsx3yzqeR/sirtxc3GjyDz2M9sxwJNvzJ9aKK+yb1ueNTioxSRdXbOqlMMGGQV6GpZvLsbdWkBZmO2OJcZdvSiitBsp2ulG8ke6uGViwKkp0xn7i/7Pqe/0rm/F+oL9oKAgLGu0KMAD/P8ASiisK+lPQdPWZDNJ/wAIr4LnuiSt7fALGvcMwIUfgOa8guI5Lq+gs4f3jbhEg7sxPJ/OiivLqfEkelSWh9E2elxaHoFpYx8LbxBSemWxyfzzXAfD9P7Z+JEurbcxeRLJAfSFP3aH8WLn8qKK9B7xRydGXPHNgurShdxilVsrIoBI9vpXO32mtFpkUepWAuoIyI4/skmzd6e475x2oopVYpxdyIrld0UZPiZrel+HDHp1pZ+GICWjjhjtSZCgAw+7k889ay9E+O/iJtHuZNai0/VNNtSQ8duBBK6gZJ9CfwoorzeZrbsUpO7O80Pxh4O8VaTFq+jGc2Eh8u6tJlIktZMDgj8unBrxv9qjwjY+IvBP23T43F7p8on37eHjwQw/UGiirxFONTDNyXQunWnGukmfGbRliQ4VvTijybfdgx4OMfKcGiivibI+vuJ9nj8vJZgewGDil8tBkLI3twKKKVkF3YTy145ycdStQyEcgO34CiipkXEZsUjhWc9MnpULK3UIF/Kiis2tCxhQnqW9PSvtf/gnfo9hb6P4z1nUrcXMTXVrZxRnB3MA7/0FFFduAS9vE48a/wBwz6t1K4vdduprqYBIliYxqvQAdh+leY/Fe4lTS737LEos1cFpG5DSMMRxD35yfpRRX2UorkPmI7m54H0zV/DOg2FpC6lFj8yK3Lq6BSQAT6fdLfiBXSWaayyqvnqjMcs2R69aKK9CnFKCscN3dlm8h1lcp9sXAGMk/wD1q4PwnNY2upXkupSm5uGuHKqoz/G3/wATRRWnKnNXJlUcabaO0vm0bVPuTrbEDG0kKRx7/SuK8YaZplvol839olisLYUSLk8UUVVanHlYqNWTseeeA7W1bxLYJaxNqEhtV3RowP8AG3BIrd0Ce60HxbpzR2/2GVb2aPbKxMTrvPGe3WiiuKjFcqXmaVm7uR1vxG8QagbWCQ6QYzDfWsgmc4XPnKM5/H1rynxFcXN1HFG5EskGrMot4/8AVjLNyT+IoorqlFRq6HDUnKVGzPXPhJpN9/whtmywWpKl12xsVcYbkV0mpaeL6PKanJGinmJ2wy/7NFFdfxLUih+7S5Tza1ms9D1S4htyJ72OWaIMTuCK21936GtjR9NvruFpLOyjZWzm5u+S3v8A5FFFc9OKjHQ6qj9pPUivvBjXkcg1S7a4ZlZViXhFyDx/KsHT1a1uLc4IkaJA+OACOP6UUVw1/iPQowUY6DfjXo0mteBbLUEYJLZz+WxIDDa44P5r+tWPA+nrpfw5sr9mZ3jlsnkc9wJlGPpzRRRT+KXoPlWh7FbxmS68SWmVIY5APP3lPH8q8O/tK4sf7OeDZBLH9ohACgj76nP6kfnRRXTUk44aVjzpQUsVC5H8R5U8WeG49TSLMlqfIvFjGS4x8r/8BIH4E1xHg77V4Zk/tHzZIBkf6VE2F9lGP5UUV4X2uY+gXw8p73N4rt/HFvpB1CLyRHaLuuLdgZIGLkBiv9xgB7VesUufD9xDFqqebpyndBJGMlB/fX1QcZXqPpRRXs4KTmuWR85mUVQaqU9Gdpb6ktnateeeptwvmCZGyCvqK0PDfiAazg6oiyi4BEcTLgxxkY5+o6/Wiit60ItM0i/dUj5i8feANZ8M+K7+yfR7y4gDl7aaBAUeEk7COD24/CiiivjrHuxk7I//2Q==)***From the Section Emergency Coordinator Bret Stemen – KD8SCL EC***

[KD8SCL@gmail.com](mailto:KD8SCL@gmail.com)

**March 2025**

Recently, I had the privilege of attending several club meetings, one of which was not a ham or ARES meeting but rather a presentation about ham radio and ARES. I encourage your club or ARES group to consider engaging with non-ham groups to promote ham radio and ARES. For inspiration, consider clubs such as the Kiwanis Club, Lion’s Club, and Sertoma Club. Additionally, you may want to reach out to your local fire department, police department, township trustees, and other relevant organizations.

Perhaps you could collaborate with your Emergency Management Director to invite these groups to a countywide presentation at a centralized location. Several years ago, the Licking County ARES conducted a presentation to county officials, which received a positive response and high attendance. This event was sponsored by the Licking County EMA.

Spring is on the way!

April 26th marks another significant event in the Ohio Section, the Ohio NVIS Antenna Day. As you are aware, this day presents an opportunity for enthusiasts to gather and evaluate their antenna configurations. Kicking off at 10:00 AM, while this event is not a formal competition, its primary objective is to simultaneously engage multiple counties in Ohio, testing their antennas and facilitating communications among them.

We anticipate that this gathering will provide an enjoyable platform for camaraderie, experimentation, and testing within our beloved hobby.

The most important thing we can do until spring breaks, is TRAIN! Our past activations when the 911 service dropped for six Ohio counties, several tornado outbreaks, derechos and severe storms showed that it ~can~ happen to you and when it does it’ll come quickly! Our county EC’s and volunteers did a great job, ham radio was absolutely a star in this real-life event that paralleled our last SEC almost to the letter. So, bring in your EMA Directors, Red Cross managers, LEPC, safety officers and get some training in stuff that happens when there is a disaster! We should know how to operate radios, but we’ll be much more useful if we are familiar with NIMS, ICS, and our local officials.

This is also a great time to make contact with the representatives of the public service activities that we cover. Make sure you have email, telephone and other contact information up to date, get the right dates for when your activities will be held this year, and make an early contact to get in on their planning process!

Here's a reminder to get your severe weather spotter training in! Sessions are being held online, and generally require you to register. Check on your local NWS office website for details. It’s nearly time to get serious about participating in your local Skywarn net this Spring!

Upcoming Events:

NVIS DAY, April 26th

Hamvention, May 16th – 18th

Field Day, June 28th - 29th

OHIO SET, October 4th

Hamfests, throughout the year. Check the [Ohio Section](https://arrl-ohio.org/hamfests/) website for more information.

Local exercises and events

We have engaged in numerous discussions regarding the significance of ARES and its potential as a valuable resource for EMA and other served agencies. Additionally, we must prioritize retaining and expanding our teams. It is crucial to recognize that when volunteers depart from training sessions with the perception that they have acquired valuable knowledge and a clear understanding of their role within the organization’s broader objectives, they are more likely to apply their acquired skills and feel a sense of purpose. This fosters a positive cycle, leading to increased volunteer attendance and improved meeting participation. Furthermore, a well-engaged and motivated team is essential for the organization’s overall success.

I recommend that you consult with your Emergency Management Agency (EMA) Director to identify their ten most frequent headaches, as this is a FEMA-mandated list of the top hazards for their county. Based on this list, you can structure your training accordingly. Additionally, you should request that your local officials receive training on some of these topics. Utilize your communications director to learn MARCS, collaborate with your police and fire officers, and involve your health department planners. I am willing to identify individuals or deliver the training from SEC/ASEC/DEC/ADEC personnel. Furthermore, you could consider hosting joint training sessions with multiple counties. This comprehensive approach will enhance ARES capabilities across Ohio. It is imperative that we do not neglect our training and assume that we are adequately qualified. Instead, we must actively engage in training and practice to demonstrate our proficiency.

I extend my sincere gratitude for your unwavering dedication to serving your neighbors and the Ohio Section.

Bret KD8SCL

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A person with red hair

Description automatically generated with low confidence***Elizabeth Klinc, KE8FMJ***

***OHIO Section Public Information Coordinator***

[ke8fmj@gmail.com](mailto:ke8fmj@gmail.com)

Next in our series is the chapter on Writing for Magazines. From ARRL’s PIO [Handbook](http://www.arrl.org/files/file/2005-PIOHandbook.pdf):

[Note: ARRL has replaced the PIO handbook with the PR-101 course. It is a large downloadable file with a lot of good information. I suggest checking it out.]

Magazines are a somewhat different "animal" than newspapers and broadcasters, but can be equally effective media for promoting Amateur Radio and your group's activities. Two of the biggest differences are that magazines tend to be monthly or even quarterly, rather than daily or weekly; and that they tend to focus on specialized groups of readers rather than the mass "general public." They also tend to be regional or national in scope, and it's much easier to get your story into a national magazine than onto a network newscast.

One group of magazines is different from the rest for our purposes. The editors of these magazines don't have to be introduced to Amateur Radio or persuaded that an article about Amateur Radio fits their "mix" of articles and will be of interest to their audience. These magazines, of course, are the Amateur Radio magazines. Despite the fact that their readers already know what ham radio is and why it's important, they can still be a good resource for you to publicize your group's activities or to share lessons you've learned with other amateurs.

Because the ham magazines are a special case, we'll break this chapter into two parts --

Writing for:

* The Ham Radio Magazines.
* Non-Ham Publications.

**Writing for the Ham Radio Magazines**

(Adapted with permission from CQ magazine Writers' Guide.)

Amateur radio has a rich tradition of hams sharing their knowledge and experience with each other, both on the air and through the pages of ham radio magazines. Those who share your interest want to learn how someone else did it, find a way that they can improve their stations or operating techniques or share an experience in which ham radio provided a service to the public or their hobby.

Some magazines report on topics that are of interest to people just getting their ham

tickets as well those who have been in the hobby for years. Others specialize in specific areas of the hobby such as contesting or experimentation. It's important to have a basic knowledge of the type of articles that are published in each magazine.

The primary purpose of writing an article is to communicate an idea and to exchange the author's experience or accomplishment for the reader's time. Therefore, whatever is published or written should be worth the time it takes to read it. Every article passes

through four very important sets of hands -- the author's, the editor's, the art director's,

and -- most importantly -- the reader's. If the first three do their jobs well, then all the

reader needs to do is relax, read, enjoy and learn.

Your main job as an author is to write an article that communicates your ideas clearly,

concisely, and accurately. You also want to make the article interesting. A magazine isn't a textbook and no article is required reading. So your first job is to capture -- and hold -- the reader's attention. Your next challenge is to make sure you're neither talking down to the readers nor writing "over their heads."

Every successful writer knows his/her audience and writes to and for that audience. Some magazines' audiences are a broad spectrum of people with a shared interest in ham radio. They come from all walks of life and have technical knowledge ranging from nearly nothing to leading edge. In addition, ham radio has many specialty areas, so even a longtime ham with significant experience in one area may be a complete "newbie" in another. What this means is that you should not assume that every reader will bring a particular level of prior knowledge to your article's topic. Because of this, you should try to explain all concepts and define all terminology as you write. This will provide a roadmap for the newcomer and assure the old-timer that you know what you're talking about well enough to explain it to someone who doesn't.

**Structuring Your Article**

While there's no set "formula" for ham magazine articles, there is a certain structure that is followed by most successful writers. It's the same basic outline used by teachers in a classroom: "Tell them what you're going to tell them. Tell them. Tell them what you've told them."

Let's get more specific. First there is a form of introduction. The introduction is some

method of defining the objective or problem to be solved by the article. It establishes the need and the method of satisfying the need. This is also where you need to grab the reader's attention, so it's vital to keep this section interesting. Tell a story that shows why the reader should care about the widget you've written about. Think of yourself sitting around a table at a club meeting, telling a group of fellow hams about your trip, construction project, etc. You've got to keep their interest or they'll go listen to the guy at the next table, telling his own story. If you don't "hook" your readers at the beginning of your article, they'll just turn the page and look for another.

The main body of the article develops the theory, construction techniques, the basic

"how-to" information, or "how we did it" type of data. Here you relate how the piece of equipment or gadget is built or how you got to some island and set up that extraordinary station. It's the place for anecdotes, hints and kinks, and the personal touches.

The concluding part gives the reader a summation of what was accomplished. In the caseof a piece of equipment or gadget, you would include the results you achieved by using it and how the reader can use it if he /she builds it. A DXpedition concludes with the number of contacts, recapping the adventure, possible plans for another one, and finally the ship or plane departing as the sun sinks on the horizon.

Footnotes, addenda, and "thank-you's" tail-end the manuscript. If everyone does their

jobs correctly, the reader has an enjoyable experience. He knows "what it feels like" to build the whatever without actually building it, or has taken the trip with you in spirit.

Please pay particular attention to the "flow" of your article. Does it "travel" in a logical progression from beginning to end? Does the article generally follow a chronological sequence? Or do the paragraphs "bounce around," both in terms of topics and time? This is a very common problem. Please double-check your final copy to make sure it flows smoothly, and that you have good transitions between topics. It's always a good idea to have someone else look it over before you send it in. If he or she gets confused or dozes off, you've got more work ahead of you.

**The Manuscript**

Before you start to write, send the magazine a query outlining your proposed article (e-mail will get the quickest response). That way, you'll know whether there is any interest. Next, be original. You must let the magazine know if you are submitting your article to more than one publication at a time (this is generally considered poor practice, by the way), and as soon as one publication accepts it, you must notify all the others to withdraw it from consideration.

Now, let's move on to the manuscript itself. If you think of the manuscript as a term

paper, you won't go wrong in terms of structure. Include a title page. The title page

simply has on it the title you have selected, your name and call, and your mailing and e-mail addresses. Leave plenty of space between each.

The main body of the manuscript should be typed (or printed) double-spaced on 8 1/2" x 11" paper. Leave considerable side margins. The margins will serve as work space for the editor should your article be accepted for publication. Be sure to leave plenty of room. If you plan to footnote material, indicate the proper reference number by raising it over the word or phrase that is footnoted (for example, Marconi1).

Spelling and grammar count (just like on a term paper). You won't be graded, but an

article that's full of misspelled words or grammatical errors reflects poorly on your

credibility. Be sure to spell-check, but don't fully trust the spell-checker. A word that's

misspelled into another word won't be caught. Use your eyes, and a dictionary if there's any doubt.

One exception to the term paper analogy: A magazine article should be less formal and more conversational than a term paper. Term papers don't have to be interesting.

Magazine articles do (assuming that you actually want people to read them).

**Computer File Requirements**

Every magazine has specific requirements for submitting text. Many magazines publish this information on their web site. If you are still unsure about format requirements dropthe magazine a note.

Articles and columns on disk or via e-mail save a lot of grief for everyone. There's no

"re-keying" required, so the editors can't introduce errors in the process. All artwork and photos should be sent as separate files. Never embed the photos or artwork into the article. Leave that up to the editors.

**Some Do's and Don'ts**

Do number your manuscript pages consecutively, and if you feel ambitious you can also add a key to each page. For example, you could also type in at the top right-hand corner of each page your name and the page number (i.e., Smith, 2).

Do try to avoid (wherever possible) the excessive use of formulas, exotic math, and

esoteric references. Unless the article is in the form of a tutorial, the beauty of an

equation is strictly in the eye of the writer.

Don't leave holes in your text for insertion of photos and don't embed diagrams at a

specific location in the text. The art department will take care of layout.

Don't assume that your manuscript will reach print intact, including the title. Magazines

try to present material to their readers in the best light, and will often change the title and rework the text. You may be asked to supply additional materials as well.

Don't be pompous. Fancy words intended to impress generally don't. Stick to clear,

straightforward English.

Don't insult your readers. People don't buy magazines to be told how stupid they are.

They buy magazines because they want to learn ... and you're the teacher. Do define and explain.

Don't rest on your laurels. If you can write and have written, write some more. People for the most part are innately curious and like to find out what others are doing. Don't keep it a secret.

Do look for interesting topics. If you check the literature and find in the course of a year or so eight articles on logic probes, then it isn't too likely that the world is waiting for the ninth. See what isn't being covered and cover it.

Don't forget to include an SASE with your article with sufficient postage to ensure safe return should your article not be accepted. While an SASE is not mandatory for most magazines, it is a polite consideration. Some authors also tend to include a self-addressed postcard with their manuscript so that the editor can quickly acknowledge the receipt of the article and perhaps inform the author of a quick decision of acceptance. The use of these cards by editors varies; some use them and others don't.

Don't forget your reader. If your article is published, there is the likelihood of your

getting mail from readers. The amount of mail will vary from perhaps one or two letters to scores. Try to answer each letter. Most people who read your work will never write telling you whether they feel positive or negative about your article. Don't assume indifference or lack of interest on their part; it's just the way it is. After all, when was the last time you contacted an author?

**A Few Notes on Style**

When mentioning a ham radio operator by name use the ham's full name (first name last name), a comma, and callsign. An example would be Hiram Maxim, W1AW. On the second reference use the person's last name. One exception to this would be when

referring to two hams with the same last name. Use parentheses on first reference, e.g., "George (W4AA) and Martha (K4AA) Washington." The second reference to one of the two people should be by first name, call. This may vary a bit for different publications. While we're on the topic, the words "amateur," "ham" and "ham radio" generally are not capitalized. Exceptions: when referring to the Amateur Radio Service (as in the FCC's rules), with or without the word "service." So you'd capitalize "Amateur Radio came to the rescue once again..." but not "...as area hams helped coordinate evacuations." Never write HAM in all-caps. The term "ham" is neither an abbreviation nor an acronym. Check with each magazine for its specific style.

**Photographs**

Every publication has standards for the type of photographs they will accept. In general color prints, slides, and digital images are acceptable.

A digital image will be accepted if the resolution is sufficient. Generally speaking, this means using at least a 1.2 megapixel (or greater) camera with the image resolution (sometimes referred to as "image quality") set at maximum. This is usually the setting that allows your camera to store the LEAST number of pictures. For digital images, the resolution must be at least 300 dpi when the image is sized at 4 X 5 inches or larger. Generally speaking, a 1280x960 pixel image will reproduce well in print. For a more detailed explanation on resolution see the chapter on imaging or consult your image- viewing software. It should have a "properties" function that will give you the specifications of any image.

All photos, digital or otherwise, must include captions. Tell the editors (and ultimately

the readers) what is going on in the photo, where it was taken and so on. If people are

shown prominently in the photographs, you must supply their names and/or call signs.

Type photo credit or descriptive information on a piece of paper and tape the paper to the back of the print, or use adhesive-backed notepaper.

If it is a digital image include a list of photographs at the end of the article. Include a

caption, the photo credit, and the image file name. Here are a few things not to do.

DO NOT send images captured from Web sites, or scanned from magazines,

newspapers, catalogs or other media without obtaining the written permission of the

author, Webmaster, company, etc.

DO NOT send prints made on color laser or inkjet printers. The color quality is not

sufficient for us to use. If your camera has a date-stamping function that adds the date automatically to every photograph, TURN IT OFF when shooting photos for possible publication.

DO NOT write on the backs of pictures with felt-tip pens. Most of the time the ink will either "bleed through" or come off on the picture behind it. It is almost impossible to get the ink off. Don't use a ballpoint pen, either. The pressure of the point will mess up the front of the photo. Do write or print descriptions on labels and when you're sure the ink's dry, apply the labels to the backs of the pictures.

**Working With Columnists**

So far we have covered what should be done if you are writing a full length story on

some event. Often the story you have to tell is part of a larger event. Here's where you

can work with the various magazine columnists or section editors and help fill in the gap. Most magazines will report on Field Day. Yet each magazine will report on a different aspect of the event. For example, every club may go out in a field and set up their equipment. If the Governor of your state visited your site, that's news and supplying information about his visit would be of interest to readers. Another club may have made contact with the International Space Station. This is a different part of the Field Day story. Sometimes a unique photo is enough to catch the editor's eye. Two examples in recent years include a helicopter raising a long wire antenna or solar panels supplying electricity. Often the editors wish they had just one photo to go with the story they are writing. You may have the right picture. A note from one club PIO to the public service editor of a ham magazine said, "I took over 100 Field Day pictures. Would you like them sent to you?" The editor replied that he was looking for a particular photo of a digital station. The club PIO met the editor's need and the photo made it into the article.

Large scale disasters, such as a flood, can prompt many stories. Sometimes a quick e-

mail to the public service editor with information on how your group helped out will

allow the editor to tell the story of hams providing critical communications in many

areas. Remember that there may be a two or three month delay from the time the event happens until it actually appears in the publication. Magazines like to get current information out as soon as possible or while the event may be fresh in someone's mind.

Finally consider placing the editor/columnist on an e-mail list of club happenings. Many editors have club newsletters mailed or e-mailed to them. The information in the club newsletter may provide enough information to have an editor contact you for a story.

Remember that hams want to read about their hobby and there are many ways of tellingyour story if you take advantage of it.

**News Releases and Event Announcements**

Most of the major ham magazines run announcements of special events, hamfests,

conferences, etc. Be sure to get these in at least three months before your event to be

certain of making the deadline for correct issue.

If you are sending out a news release on an event or activity, be sure to include the ham magazines. Follow all the guidelines for releases you'd send to a newspaper or broadcast station.

**Getting Double Mileage**

Many local newspapers consider it newsworthy when an area resident has an article

published in a national or international magazine. If a member of your club has an article in a ham magazine, consider sending a news release to your local paper(s), with the member's permission, of course. This provides you with an opportunity to highlight amateur radio and your member's unique experience or technical expertise. If you can, include a photo and a copy of the article or magazine (with the article marked).

**Writing For Non-Ham Publications**

(Adapted from the previous ARRL PIO Handbook)

A key means of inviting non-hams to learn more about Amateur Radio is by writing

feature articles for non-ham publications. Writing for non-hams is different -and

sometimes more difficult - than writing for hams. Here are some tips.

**Target your story to the audience**

What's unique about the group you're writing for? What facets of Amateur Radio will

interest them the most? Fire, police, and similar personnel will naturally be interested in the public service and emergency aspects of amateur radio, but don't forget to mention how much sheer fun it can be, too.

It doesn't have to be "Why you should become a ham." If you're writing to government or public service officials, give them specific examples of how amateurs have served their communities, and tell them how to find hams in their area to set up emergency preparedness teams.

**Article Ideas**

Here's an easy exercise. Stop for a moment and ask yourself these questions: What

profession am I in? What other hobbies do I have besides Amateur Radio? Do I belong to civic or charitable organizations? What family or other activities am I involved in?

Your answers will almost certainly provide the springboard for several articles-ones

which will be fun and easy to do because you're already familiar with the subject matter and the audience you're writing for!

Some of those activities will have a natural link to Amateur Radio, such as travel buffs who'd be excited about talking to people in other countries, or businesspeople who are on the road a lot and would enjoy the ability to meet new friends in the cities they visit.

Here are some ideas to get you started:

Teachers. Teachers are always looking for ways to motivate students, so they'd love to

hear how you use Amateur Radio in the classroom to let your kids meet people in

different areas of the country, to teach world geography, or to practice a foreign

language. Parents would be a prospective audience for the same reasons. You can also

mention what great after-hours relaxation it is for yourself.

Outdoors enthusiasts/private pilots. Probably very few of these people know about the

availability of small, lightweight HF and VHF/UHF Amateur Radios. Lives have been

saved because people had such radios with them when they were stranded in a semi-

remote area.

Health Care Workers. Do health professionals and volunteers know how Amateur Radio can brighten the day of someone who's homebound or in a nursing home? You can tell them.

History and genealogy buffs. These people can have a marvelous time talking with people in states or countries that hold special interest for them. The same with retirees, especially those living away from their former homes.

Science and technical professionals, and hobbyists. Some professions and hobbies are a natural match with amateur radio. Many engineers could pass the Extra class theory

questions with their eyes closed. Amateur astronomers might enjoy Amateur Radio

astronomy and professionals can pass the time while a spectrogram is exposing!

Computer professionals and hobbyists can contribute their talents to the new world of

digital Amateur Radio-as indeed has already happened.

Those are just a few ideas for members of professions and hobbies that seem to have a

natural link with Amateur Radio. But what about the ones that don't? Does that mean

those people wouldn't be interested? Of course not; you're in some of those groups and you're a ham, right? Maybe there's a link that isn't obvious. Look around your club. Is there an unusually high number of members from any particular non-technical field, such as law? If so, look at journals in that field that may be interested in profiles of group members' outside activities.

**Do's and Don'ts**

Do communicate the excitement of the hobby-and try to target this for your audience. For instance, technical professionals might be amazed to learn that we're using sophisticated digital techniques, and that we have our own satellites. Liven up your article with direct quotes from people in their own profession/hobby who are excited about Amateur Radio.

Do give a "call to action." Tell your readers how they can find out more; e.g., give the

ARRL HQ address, or a local contact if you're writing for a local publication.

Don't go into details that are inappropriate for your audience. Talking about the Amateur Radio implementation of the ARPA Internet protocol suite would be fine in Computer Networking magazine, but not in Astronomy Today. (But do tell the astronomers about Amateur Radio astronomy!)

Don't get defensive about the common public confusion between Amateur Radio and

citizens' band. A brief, unemotional, informative statement is okay, such as: "Amateur

radio offers more privileges than other public radio services, such as citizens band or the Family Radio Service. In return, we're required to take a test and obtain a license from the Federal Communications Commission."

**Target your story to the magazine**

Get familiar with the magazine(s) to which you want to submit your article. Here are

some questions to think about as you read them:

*How long are the articles?*

One page? Two? Four or more? It will probably vary, and may be quite flexible. There may be a section that's perfect for your article-such as "First Person" or "In My Off Hours"-that's always a certain length; if so, make sure you write to that length.

*From what viewpoint are they written?*

Is everything in third person, or does the magazine seem to run a mix of third person and first person articles? First person can be fun because you can write directly from your own experience, but be sure to include interesting anecdotes from other hams in the same profession/hobby. Second person is good for "you-yes, you!--can do this and have fun" articles. For third person, you simply describe your interviewees' activities.

*Do they include photographs?*

If so, figure out a way to get some-and make sure they're of good quality. Does the

magazine use black and white, color, or both? Black-and-white-photos should be printed on glossy (not matte) stock, have borders, and be at least 5x7 inches in size (preferably 8xl0). Make sure the picture has good contrast. For color, slides, prints or high-quality digital images are acceptable at most magazines. Check writer's guidelines (see below) or ask the editors for each magazine's preference. Whatever media you use, make sure the picture is clearly focused and not "busy" with too much in it. If possible, crop out any distractions on the edges before submitting it.

*Does the editor expect a query letter first?*

A query letter is a proposal to a magazine for a story. Commercial magazines almost

always want them, but professional and hobby magazines often have looser policies. Ifyou aren't sure, you could go ahead and send one, or check the magazine's listing in the annual Writer's Market.

*Does the magazine have writer's guidelines?*

Again, the type of magazine we're discussing here may not have such a beast, but it's

polite to ask. These guidelines (usually just a couple of typewritten pages) will include formatting requirements for submissions, and often include hints on the style preferred by the magazine.

**How to make professional submissions**

Your mother was right: neatness counts. Make sure your article is professional in

appearance. Double space, and use wide margins (at least one inch on all sides). Either use a typewriter with a fresh ribbon, or a computer with a laser or high-quality inkjet printer. Good-quality photocopies are fine. Many magazines today prefer submissions on a floppy disk (with hard copy attached) or via e-mail. Again, check with the magazine.

Put your name, address and daytime phone number at the top of the first page, center the title about a third of the way down, then leave a few lines before beginning the actual article. On subsequent pages, include the page number, article title, and your name.

Don't try to do your own layout or embed photos in the text. The magazine will only redo your layout in its own style.

Write a cover letter. This doesn't have to be fancy. Just write a concise, professional letter that briefly explains your article.

Include return postage and envelope. If you don't want your manuscript returned, mention that in your cover letter and forget the postage. If you do want it back, send a self- addressed, stamped envelope (business-size for short articles, 9xI2 for thicker ones).

Copyrights. What you write is yours. When you submit an article to a publication, it's

generally assumed that they will have only one-time rights to use it. However, this a

complex subject, so if you're concerned about it, read the section on rights in Writer's

Market or some other good freelancers' book.

**Personality Plus**

Your article doesn't have to be a "hard sell piece" on newspapers are looking for

personality pieces-and heaven knows, there are plenty of personalities in Amateur Radio!

How about your coworker who recently won recognition for her help with public-service and disaster-relief communications? What about the seemingly ordinary doctor in your local medical association whose idea of a fun vacation is dragging a few hundred pounds of radio equipment halfway around the world for a DXpedition? And don't forget the high-school student whose interest in Amateur Radio helped earn him a college scholarship. Try local sports figures, newscasters, and other celebrities. With 400,000 hams in the United States alone, there are a lot of fascinating stories out there just waiting to be written.

The point is that there are innumerable angles you can use to make Amateur Radio

interesting to all sorts of people. Let your mind explore the possibilities, and you should have enough article ideas to keep you going for a long, long time!

--

Elizabeth Klinc, KE8FMJ AuxC

OHIO Section Public Information Coordinator

District Emergency Coordinator, D3 Ohio ARES

Assistant Emergency Coordinator, Greene County

ARRL - The National Association For Amateur Radio™

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

A person with a beard wearing a headset

Description automatically generated***From the Ohio Section Youth Coordinator***

***Anthony Luscre, K8ZT - SYC***

[*k8zt73@gmail.com*](mailto:k8zt73@gmail.com)

**Three Events- One for Students, One for Teachers & One for Hams-**

**Students-**

STEM Radio Day

at Williamson Innovation Park

Free Northeast Ohio Event for 5th to 8th Grade Students-

A black and red logo

AI-generated content may be incorrect.A qr code on a white background

AI-generated content may be incorrect.The Youngstown State University College of STEM will host a free Radio Day STEM event for 5th-8th grade students on **Saturday, April 26th**, from 10 am-3 pm at the Williamson Innovation Park!- pm at the Williamson Innovation Park!-

[*tiny.cc/ysu-radio-day*](http://tiny.cc/ysu-radio-day)

Through fun and hands-on activities, attendees will examine how radios work, learn different ways to use them, and get an introduction to the electromagnetic spectrum. Activities include building a Morse Code Key to take home, learning Morse Code and tuning in radio signals from around the world to make two-way radio contact using Amateur (Ham) radios!

This program is free, but students must pre-register to attend. The Williamson Innovation Park is located at 8399 Tippecanoe Rd, Canfield, OH 44406. We hope to see you there!

**Also, mark your calendars for the**

**Wireless Summer Day Camp from June 16 to 20th**. Details will be available later this spring.

Please pass this information on to your local clubs, families and friends- [*PDF Flyer Link*](https://drive.google.com/file/d/189WNSI2kDGg3vD5o6n087Tghpvnj_gPR/view?usp=sharing)

--------------------------------------------------------------------------------------------------

**A group of people standing on the side of a road

AI-generated content may be incorrect.For Teachers & Educators- 2025 ARRL Teachers Insitute on Wireless Technology**

**2025 program dates are now listed:**

A table with a list of events

AI-generated content may be incorrect.

|  |  |  |
| --- | --- | --- |
| Applications for [*TI-1 Sessions*](https://arrl.informz.net/z/cjUucD9taT0zMjYxOTI2JnA9MSZ1PTUyMDM1NzIyNSZsaT0zNzAwNTE3OA/index.html) and [*TI-1 Electives*](https://arrl.informz.net/z/cjUucD9taT0zMjYxOTI2JnA9MSZ1PTUyMDM1NzIyNSZsaT0zNzAwNTE3OQ/index.html) are now available on the ARRL website.  For more information on the program, check out the [*Teachers Institute*](https://arrl.informz.net/z/cjUucD9taT0zMjYxOTI2JnA9MSZ1PTUyMDM1NzIyNSZsaT0zNzAwNTE4MQ/index.html).  [*CLICK HERE to Apply Now*](https://www.arrl.org/teachers-institute-on-wireless-technology?utm_source=Informz&utm_medium=Email&utm_campaign=ARRL&_zs=H4wwl&_zl=HKeF3)   |  |  | | --- | --- | | A logo for a teacher's institute  AI-generated content may be incorrect. | About ARRL's Teachers Institute: Our goal for the TI program is to equip each teacher with the necessary foundational knowledge through hands-on learning and demonstrations to inspire teachers to continue exploring wireless technology and adapting relevant content into their classroom instruction. |   -------------------------------------------------------------------------------------------------- |

**For Hams-**

If you want to get your Amateur Extra Class License, the Cuyahoga Falls Amateur Radio Club ([*www.cfarc.org*](http://www.cfarc.org)) will hold free online classes live via Zoom starting March 23rd. I will be one of three instructors. For more details and to sign up visit- [*tiny.cc/beahamx*](http://tiny.cc/beahamx)*.*

That’s it for this month; I hope to work you on the air soon!

73,

Anthony, K8ZT ([*k8zt@arrl.net*](mailto:k8zt@arrl.net))

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A person with a beard and glasses

Description automatically generated***From the Section Traffic Manager***

***Dan Rinaman, AC8NP – STM***

AC8NP@AC8NP.COM

Greetings! I thought I would share the information about the delivery of radiogram messages. This section of the MPG Chapter 8 you can go here to download the complete document.

**8.1.2 DELIVERING MESSAGES, STYLE, EXAMPLE**

Messages are important to both the addressees and the originators, and, because our free public service is a novelty to many, we have an opportunity to serve the public and make a good impression on the people we encounter. Much of what people know about Amateur Radio will be learned from the experience of receiving a message, and how well (or poorly) the delivering amateur presented himself or herself.

In today’s telemarketing world, the first consideration in delivery style is to make immediately clear that your call is not a sales pitch or solicitation. Ascertain if you have reached the correct residence or location then explain who you are and why you are calling.  
Use care to explain that you have a greetings message so that the party on the phone does not jump to the conclusion that you are bearing bad news. People naturally think a "radiogram" is used only for the worst kind of news.  
If the message is bad news, extra effort has to be made to soften the blow. Explain that the message might not be good news, and you wish to help them understand the content clearly. This is a difficult and delicate matter requiring serious tone, calm voice, and sympathetic attention to the reactions of the party on the line. Messages concerning death or serious illness might be better handled if you contact the local American Red Cross or police for assistance.

**\* MESSAGE DELIVERY EXAMPLE**:

A good way to deliver a routine message might be as follows:

**"Good (evening), is this the (addressee last name) residence? (on the affirmative) May I speak with (addressee name) please?".**

If asked, identify yourself and your purpose without revealing the message contents (reserved for the addressee). When contact is made:

**"Good (evening) Mr. (Mrs., Ms.) (name), this is an Amateur Radio operator here in (city). We are the Hams you hear about who help with communications during emergencies. We also send radiograms for people as a daily free public service, and I have a greetings message here for you from (place of origin). I will read it through for you and would be happy to repeat it if you care to write it down."**

This allows the person to ask you to wait until they get a pencil and paper before starting, if they wish.  
Read the message text slowly and clearly, using plain language (translating ARL messages with blanks filled properly), and saying "period" for X-RAY as needed, etc., then say:

**"... and the message is signed by (signature) from (place of origin) at (time filed, if present)**

**on (date).”**

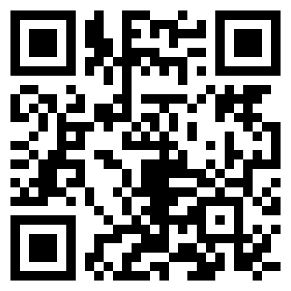
Reading the message preamble, prowords, OP NOTES, or full addressee information, is not done unless there is some information contained therein which might need to be discussed to verify the correct delivery.   
Ask if they would like you to repeat the message again to permit them to write it down, or simply to hear it again. Repeat the message, if required. Offer to send a message back, or perhaps a message to another party of the addressee's choice. A reply may have been requested in the text by ARL SEVEN, or in the preamble by HXE. These requests are honored differently. See the later sections below. Recipients may or may not ask about how the message system works. This is your chance to talk about Amateur Radio. They will be amazed to hear your story.

National Traffic System

Traffic and Message Handling

For Skill, Service, and Fun!

The ARRL got its start to organize message delivery to get messages delivered efficiently, accurately to its destination by different radio stations. This tradition continues today using CW, voice, and digital.

* Why practice traffic handling?
* It teaches operator good skills.
* It gives you valuable skills in times of emergency passing health and welfare messages.
* You learn how to operate under adverse conditions without power.
* You create friendships and camaraderie.

Any license class can handle traffic even with a basic HT. Ask a mentor, club, or go to nts2.arrl.org for more information. There are nets you can join to learn and practice this skill. Consider Traffic Handling as part of your Ham Radio experience!

**Ohio Section Nets**

If you have traffic you need to move, take it to a VHF net or HF via the OSSBN. Here is WHERE TO FIND AN HF OR VHF TRAFFIC NET IN OHIO.

**OHIO SINGLE SIDEBAND NET**

|  |  |  |  |
| --- | --- | --- | --- |
| Morning Session | 10:30 AM | 3972.5 kHz | Every Day |
| Afternoon Session | 4:15 PM | 3972.5 kHz | Every Day |
| Evening Session | 6:45 PM | 3972.5 kHz | Every Day |

**OHIO HF CW TRAFFIC NETS**

|  |  |  |  |
| --- | --- | --- | --- |
| HF CW NETS | NET TIMES | FREQUENCY | NET MANAGERS |
| Buckeye Early | 6:45 PM | 3.580 MHz | N2LC |
| Buckeye Late | 10:00 PM | 3.590 MHz | WB9LBI |
| Ohio Slow Net | 6:00 PM | 3.53535 MHz | N2LC |

All CW net frequencies plus or minus QRM

**OHIO LOCAL VHF TRAFFIC NETS**

|  |  |  |  |
| --- | --- | --- | --- |
| VHF NETS | NET TIMES | FREQUENCY | NET MANAGERS |
| BRTN | Monday, Thursday Saturday 9:30 PM | 145.230 MHz PL 110.9 | KD8GXL |
| COTN | 7:15 PM DAILY | 146.970 MHz PL 123.0 | KV8Z |
| TCTTN | 9 PM Sun, Tues, Fri | 147.015 MHz PL 110.9 | WB8YYS |
| TATN | 8:00 PM DAILY | 146.670 MHz PL 123.0 | WG8Z |

If you have a net in Ohio, you would like to list here please send me the information. [ac8np@ac8np.com](mailto:ac8np@ac8np.com).

Thanks For All You Do!

Dan AC8NP  
Section Traffic Manager

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**A person holding a sign

Description automatically generated**

**Amanda Farone, KC3GFU**

**ARRL Ohio Section | Affiliated Club Coordinator**

[Afrone926@gmail.com](mailto:Afrone926@gmail.com)

330-509-4095

As members of the vibrant amateur radio community, we all share a passion for communication, technology, and connection. But have you ever thought about how your involvement can significantly impact not only your experience but also the future of your local amateur radio club? Today, I want to emphasize the importance of stepping up and actively participating in your club activities!

**Why Participation Matters**

*Strengthening Community*: When you participate in club events, meetings, and activities, you help foster a sense of community. Engaging with fellow members creates bonds, encourages collaboration, and builds friendships that extend beyond the airwaves. Your presence is vital in making the club a welcoming and supportive environment for everyone.

*Sharing Knowledge and Skills:* Every member brings unique skills and experiences to the table. By participating, you have the opportunity to share your knowledge with others and learn from their expertise. Whether you’re a seasoned operator or just starting, your contributions can inspire and educate fellow members, creating a culture of learning and growth.

*Keeping the Club Vibrant:* Active participation is essential for the club’s vitality. When members step up to organize events, lead discussions, or volunteer for projects, it keeps our activities fresh and exciting. Your involvement can help introduce new ideas, initiatives, and events that keep the club dynamic and engaging for everyone.

*Advocacy and Representation:* Being an active member allows you to represent the interests of our club within the wider amateur radio community. Your voice matters! By participating in local and national events, you can advocate for the club’s goals, share your success, and help promote the benefits of amateur radio to the public.

**How You Can Get Involved**

*Attend Meetings:* Join them at regular meetings! Your input is invaluable, and it’s a great way to stay informed about club activities and initiatives.

*Volunteer for Events:* Whether it’s helping with Field Day, organizing a workshop, or participating in a special event, your support makes a difference. Don’t hesitate to step up!

*Share Your Skills:* Consider leading a workshop or presentation on a topic you’re passionate about. Sharing your knowledge can inspire others and enrich the club’s offerings.

*Mentor New Members:* Reach out to newcomers and offer your guidance. Your experience can help them feel welcome and encourage their growth in the hobby

Every member plays a crucial role in shaping the future of your local amateur radio club. By stepping up and participating, you contribute to a thriving community that celebrates the shared passion for radio communication. Let’s work together to create an engaging and supportive environment for all! I encourage you to get involved and make your voice heard. Together, we can ensure that our clubs continue to flourish and inspire future generations of amateur radio operators.

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

A person sitting in a car

Description automatically generated

***John Myers, WG8X***

[wg8x.radio@gmail.com](mailto:wg8x.radio@gmail.com)

330-936-5021

Hi everyone, the days are getting longer, and slightly less bone-chilling. That’s good. Before too long, it’ll be time to put the snowblower away, and begin servicing the lawn mower.

Last month, I talked about websites. I don’t feel that a website is an option either more, but rather a must have for your club.

I’ve built quite a few websites and will be the first one to admit that I’m not the most technical person you’ll find. But one thing I have some experience with is how to create a basic website.

It starts with a domain and a hosting account. For my sites, I use qth.com. The folks there have been so helpful when I have any issues. I apologize up front if this column sounds like a sell job for them, but they have treated me right. Also, they give back to the Ham community.

Your domain is your club’s unique address on the web. It should let folks know who you are by the web address. For example, the ARRL Ohio Section is arrl-ohio.org. Or, you can use your clubs callsign. My local club (Alliance ARC) does that (w8lky.org). Whoever you choose for web hosting should have a search box where you can try out various domain names to see if they are available. If you choose a ‘.org’, or a ‘.net’ domain it will likely cost you less than $25/yr. Opt for the domain privacy. It costs you a few bucks a year, but is worth it.

You can get web hosting pretty reasonably by shopping around for the best deal. I like the “Best Value” deal from QTH.com. It’s about $120 per year, or half that if your group is a 501C3 non-profit. They are happy to help should any problems arise. Whoever you choose make sure that they will supply your SSL certificate for no additional fee. Yep, QTH.com does that.

Once the hosting & domain are set up, you can decide what platform you will use to create your corner of the web. There are several Content Management Systems (CMS) available. I have the most experience with WordPress, but there are others, such as Drupal, Joomla, Wix and others. There’s no right or wrong choice; use what you like.

Unfortunately, that’s all I have time for this month. Next month, I’ll take you on a tour of a WordPress site, and we’ll learn about plug-ins.

Lastly this month, let’s have a look at the arrl-ohio.org web stats from the last 30 days.

The top 4 sites (after the home page) are:

* 1. Swap & Shop ([arrl-ohio.org/section-swap-shop/](https://arrl-ohio.org/section-swap-shop/))
  2. Hamfests ([arrl-ohio.org/hamfests/](https://arrl-ohio.org/hamfests/))
  3. Ohio Section Newsletter ([arrl-ohio.org/ohio-section-newsletter/](https://arrl-ohio.org/ohio-section-newsletter/))
  4. Ohio ARES ([arrl-ohio.org/ohio-ares/](https://arrl-ohio.org/ohio-ares/))

And that is it for this month. See you in the April issue. 73 DE WG8X

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***National News***

*(from ARRL and other sources)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | |  | | --- | | A logo with white text and a red swoosh  AI-generated content may be incorrect. | | | |  | | --- | | **NASA Newsletter** | |

|  |
| --- |
|  |

|  |  |
| --- | --- |
| |  | | --- | | In this week’s newsletter, explore the new set of [**NASA science and technology instruments on the way to the Moon**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXAXLp3Z1MDom81JYFiJO0tyhYQoJdG2oBXaNlg-up0R6GEpGimFiEfAbZ3EHBt2M77FldtnH60wCWYI5LnE1RLnBnLCbwGbNSCv-Eq5-JSvEmMiDdveWYGRTF2buoJdn44rnR4zQtMweT6Zq-3a_te8BpWetYQZkjp4gpKBGyOcXADym-b5DFuFOadN89pA_US13Gal7HIL8crp_t1XSiKAHRRui6ryO2YgCmd7PLyfBjiZ54uq0cr68kX44CfDUs3CTIKEN95OwScroVSTmXzFg6Jb3hOZxjLWbOviMAs0r1epOUbalIOM=&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==); discover how to [**watch live coverage of Firefly Aerospace's Blue Ghost lunar landing**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXAXLp3Z1MDomVnYx3y36guLZitcQbr_e_hCNyJ3CJf7SAAVuyhBSAeIUnvtgb-8GLgmnnkzn9Y5mndk0IXdLj1i29at3SMV6McFg3dHIo7oaNYovr7yL7aLdDacM3kEk7mvj07AfgtYfDnjd5bo07q4nE81JC7KpVSLEJC7Y1IN82odqbcfEOFE9JLUtccgT-GAlmVW91D2PFjiOXUkPEOn3nnoWk7fzb1SdkUhOH0Ud_yUfiNsUWQlE14QkBL8R_UN_PsQtAF3iPvx60tljymOGdKGklgRO9gcDV36iNnLbcDgOZFvEuir89WFeA3S29w==&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==); and find out which water-rich iron mineral may be [**the main culprit behind Mars’ reddish dust**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXAXLp3Z1MDomAt_tKYs2twJ0USQvjml-hDYbjbNDRssz_Fg-123NjNIna_Ket6pGmbJ6ijw4ah8fhWJ6gMEchLbiftzAF_wSQLcs6Xcp27_R1RZA-5aKil8qq8PhOBax_fLj4ApUDBPo3TjNVSiB3NXDK_CqppcGLoUxWTgQ6aLr-6HzDUCI1selWOTNL3mRhI8sTd0ousMcM0DrJHm_eMyO0ua-A0EQY9lRa4lBBvTSIc-9-UzL0-mCQrKsDXDWR7E_0k8WacpkAxy7R0PitiT4RvdBgCHw3S3YfCZHn-2zgLj5r_kKRA-AgKD4FB1ncTFd5xXfNjX1&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==). Plus, more stories you might have missed. | |

|  |
| --- |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| |  | | --- | | COMMERCIAL SPACE  **Moon Bound Technology** |  |  |  | | --- | --- | | |  | | --- | |  | | |

|  |  |
| --- | --- |
| |  | | --- | | A new set of NASA science and technology instruments is on the way to the Moon, where they will gather data about Earth’s nearest neighbor and help pave the way for American astronauts to explore the Moon and beyond.  The Intuitive Machines’ IM-2 mission launched at 7:16 p.m. EST on Wednesday, Feb. 26, aboard a SpaceX Falcon 9 rocket from Launch Complex 39A at the agency’s Kennedy Space Center in Florida. Once on the Moon, the instruments will test novel technologies to learn more about what lies beneath the lunar surface, explore its challenging terrain, and improve in-space communication.  NASA’s Lunar Trailblazer spacecraft, which launched as a rideshare with the IM-2 mission, also began its journey to lunar orbit. The mission will help scientists better understand the lunar water cycle and inform future human missions as to where supplies of water may be found and extracted as a resource.  [**MISSION UPDATES**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXKEzy3bBcVOfyeaXdtsQg7ptNyX8XqwlzvkApRtghphIC8Y-3-Rou8207OqD3DlTJrTmig11FeDvK09HuY4jKPWurl9ZN4dIveasFTM8HdWbC9IkVCJrgny8vEMNWNGsaZHStDMzdw61l-cO8L7viCdeC5gI3NgrYsMR5NvhPk8VnQkeSiPLHae6qi78_8mRWFO25sfmHHn_dWbYVVDWwYM=&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==) | |

|  |
| --- |
|  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | |  | | --- | | A close-up of a moon  AI-generated content may be incorrect. | | | |  | | --- | | COMMERCIAL SPACE  **Lunar Landing**  With a suite of NASA science and technology on board, Firefly Aerospace is targeting 3:34 a.m. EST on Sunday, March 2, to land the [**Blue Ghost lunar lander**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXA-ujVgYDG8xcUF7dDGKjfNTXUaOjma1c6VJQwm9IfKJfLxjrvJk8WxjUouGRTWi6j58qo6p0TK0iXQedf3-YxjUGhPTw1IsmeHAvAKTBDFEepe1o5xktS7W-BRDsrO-K9bWhT1oOHk5x8hEFkW27uPeK7fjWK0sLmn8WQIMUOlwSPWMZGYokq0CElxH2kkJXfGZPIsofL5EsFOk5o65jFyLsgZ2sXjfZw9lhX4yeartpwSU_1pBOpE=&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==) on the Moon. Live coverage of the landing, jointly hosted by NASA and Firefly Aerospace, will begin at 2:20 a.m. EST.  [**STREAM ON NASA+**](https://aasxhp5ab.cc.rs6.net/tn.jsp?f=001F-AvgbpayWs3IQz5A-5ax6bJ6BG2NnW8WvRNCQxyc2gi8PA54GoNXEdOZ-gjk0ecRiH577CRYvVQpfG9s4lPHyG5BzdaPzOOnS8pVrMEDe9vY2FdVikEFl9vHGu8hV6EmGAgiRLA4BbHgw_kQZZglj6s5FcI28eWXphdXQo1WnG0XGZSTLOoh-9N_g-Nu0uePHYuHaYMG4AvX2MP4bfBloxJ_jLfOJINC4RiD6b3w_iBe9DfnpSDE77EKAPNGNoB0yLa_oY0TAWwqHf7jSpSlzBQ8Op2GptDl4jQ9KmH1aHojBIZe7QrGkUMkQ-sHAVLy460ahTJh7g=&c=DyL1qMD7a1ctoEzOcZlc7UdQvTMXieEbhCV2CpJat-c1KZhy3K_VuA==&ch=jD0LmOr8blFU60VM5A9wJ5HIfnRxXYi90lvTM39naQBvOsfa7rHDbw==) | |

**HAMVENTION!**

A compass with a mountain and trees

Description automatically generatedHamvention 2025 Theme: Radio Independence The Hamvention team is pleased to introduce our 2025 Theme, which is Radio Independence. Radio Independence means a great deal to us. In the age of Parks on the Air (POTA), Summits on the Air (SOTA), YouTube, and International Communications, radio is moving beyond its past limitations. In the course of history radio has been heavily regulated and, in some instances, banned altogether. We are fortunate to enjoy these freedoms, and for us at Hamvention we are proud of our Radio Independence. What does Radio Independence mean to you? See you at Hamvention 2025. 73, Hamvention Executive Committee November 1, 2024

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Registration is now open for the 2025 Dayton ConTest University (CTU) to be held all day on Thursday May 15, 2025, at the**[**Hope Hotel**](https://arrl.informz.net/z/cjUucD9taT0zMjIyMjk2JnA9MSZ1PTUyMDM5NjA3MSZsaT0zNjQwMTkyMQ/index.html)**on Wright-Patterson Air Force Base the day before Hamvention® opens in Xenia, Ohio**. 2025 will be the 16th year for CTU Dayton. Eight different countries have hosted CTUs, including the USA, Australia, Russia, Germany, Italy, England, Brazil, and Finland. Over 10,000 students have attended these CTUs with more than 100 CTU professors sharing their contesting experiences. The 2025 CTU Dayton course outline will be posted once all have been confirmed. Each presentation is carefully prepared with up-to-date information. CTU professors are experienced contesters who will share their knowledge, and participants can ask questions and learn new ways to enjoy contesting. Videos and PDF presentations from past CTUs can be viewed at [contestuniversity.com](https://arrl.informz.net/z/cjUucD9taT0zMjIyMjk2JnA9MSZ1PTUyMDM5NjA3MSZsaT0zNjQwMTkyMg/index.html). There are scholarships (registration fee paid) available for CTU through a grant from the Northern California DX Foundation for students aged 25 or younger. Student registration information is on the CTU website, [contestuniversity.com](https://arrl.informz.net/z/cjUucD9taT0zMjIyMjk2JnA9MSZ1PTUyMDM5NjA3MSZsaT0zNjQwMTkyMg/index.html).

|  |
| --- |
| **ARRL’s “On the Air Live” Continues to Grow** |

|  |  |  |
| --- | --- | --- |
| |  | | --- | | [[A black handheld radio on a wood surface  AI-generated content may be incorrect.](https://arrl.informz.net/z/cjUucD9taT0zMjY3NjIxJnA9MSZ1PTUyMDM5NjA3MSZsaT0zNzA4Njc3NA/index.html)](https://arrl.informz.net/z/cjUucD9taT0zMjY3NjIxJnA9MSZ1PTUyMDM5NjA3MSZsaT0zNzA4Njc3NA/index.html) | |  |   ARRL is equipping the next generation of radio amateurs with the knowledge to get active on the air. “On the Air Live” is a monthly interactive webinar series that does deep-dives into topics aimed at the new and intermediate ham. It complements material found in *On the Air* magazine. February’s event had nearly 130 people in attendance.    The events are hosted by ARRL Education Specialist Wayne Greene, KB4SDF. “OTA Live” has seen rapid growth and good engagement in the two months it has been going. “The most recent ‘On the Air Live’ covered programming a handheld radio, and we got a lot of good questions,” said Greene. “Being an interactive webinar, we have the opportunity to spend time discussing things on which members need more information.” |

|  |
| --- |
| “On the Air Live” is accessed through the ARRL Learning Center at [learn.arrl.org](https://arrl.informz.net/z/cjUucD9taT0zMjY3NjIxJnA9MSZ1PTUyMDM5NjA3MSZsaT0zNzA4Njc3NA/index.html). It is a benefit of ARRL membership, and members must be logged into the web site to access it for live or archived sessions.    The next “On the Air Live” is Tuesday, March 25, 2025, at 8:00 PM Eastern. It will focus on advanced functions of handheld radios, including getting them on digital modes. “We’re going to take the handheld radio and expand its capability by attaching it to a soundcard,” said Greene. Those who attend will learn how to use APRS and VARA (including Winlink).    “We had a great time with members on the last one, and I hope more people will join us in March,” said Greene. |

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Club Corner***

This is YOUR corner of the newsletter. Send us what your club is doing, and we’ll make sure that it gets in. Got a special event or club project that you want everyone to know about? Send it to us!. Need help with a project? Send it to us.

Let us know what you club is up to. Are you going to have a special guest at your meeting or are you having a special anniversary?

Send it to: [webmaster@arrl-ohio.org](mailto:webmaster@arrl-ohio.org)

**VE Sessions**

**The following information is for *ALL* exam sessions:**

It is now an FCC requirement to have an FCC FRN; active email address and active phone number before taking any exam. Please bring your FCC FRN, original license, a copy of your license (if a licensed ham), a valid photo ID and $15.00 - Cash preferred.

Effective April 19, 2022, the FCC will charge a $35.00 application fee for amateur radio licenses. The fee will apply to new, renewal, rule waiver, and modification applications that request a new vanity call sign. License upgrades will not have a fee applied. The fee will be per application. *VE's will not collect the fees at exam sessions.*

**AE8FP Amateur Radio Test Team** administers ARRL-VEC testing in the Central Ohio area. Our test dates for 2024 are as follows: Januray 20, April 27, July 20, and October 19. Time and location for these dates are 10:00am at the Westerville Fire Station #111, 400 W. Main St in Westerville, Ohio. The listed dates are co-sponsored by the Central Ohio Radio Club (CORC).  
  
Pre-Registration is required, and open the 1st of each testing month. All information is available at [www.ae8fp.net](http://www.ae8fp.net/) <<http://www.ae8fp.net/>>

**Alliance Amateur Radio Club**

The Alliance Amateur Radio Club holds quarterly VE testing, at the Christ United Methodist Church in Alliance.

Upcoming Exam Dates are:

Saturday, March 15th, 2025, Saturday, June 21st, 2025, Saturday, August 16th, 2025, and Saturday, October 25th, 2025

The address is 470 E. Broadway St, Alliance, OH (<https://maps.app.goo.gl/prDyEPp6siJun2ibA>).

Registration begins at 8 AM, and testing at 9am.

More information can be found at [www.w8lky.org/licensing/ve-exams/](http://www.w8lky.org/licensing/ve-exams/).

**All Things Amateur Radio Association (ATARA)** hosts testing sessions every second Tuesday of the month in Lancaster.  Our testing sessions use Examtools, a digital testing platform, and administers the exams on tablets. Simply sign up for a free account at <https://hamstudy.org/register> and then search for our session and register through the Hamstudy website. Reach out with any questions to Jarrod – KE8MBL at hamexams@atara-w8atr.fun.

**CARS**

VE testing from CARS - Cuyahoga Amateur Radio Society - at Elmwood Recreation Center, 6200 Wisnieski Parkway in Independence, Ohio 44131  Time: 9:15 AM (Walk-ins allowed) Always the 2nd Sunday of the odd month. Go to CARS  [www.2cars.org](http://www.2cars.org/) for detailed map of location.  Call Metro W8MET 216-520-1320 for details

**Clark County Amateur Radio Association (CLARA)**  What: CLARA sponsored A.R.R.L. VE Testing - Walk-ins allowed. Pre-Register via email preferred. When: On every second Saturday of each even numbered month starting at 10:00 AM Feb  
8th; Apr 12th; Jun 14th; Aug 9th; Oct 11th; and Dec 13th, 2025.

Where: Springview Government Center - Emergency Operations Center; 3130 E Main St; Springfield OH 45503 This is US-40 aka "old national road". From Route 40 enter Old Columbus Road, at the fork stay left driving straight onto Ogden Rd, then immediately turn left into the parking lot behind the EMA. Walk to the door with the "Employees Only" sign.

For more information contact Roland W. Ude, W8BUZ, (937) 605-4951 Email: [buzz@baylorhill.com](mailto:buzz@baylorhill.com)

**Cuyahoga Falls Amateur Radio Club VE Testing**

Exam sessions are held on monthly. For a complete list of upcoming sessions, locations and registration, visit [*https://cfarc-edu.org/registration*](https://cfarc-edu.org/registration)*.*

**Dayton Amateur Radio Association (DARA)** If you are interested in testing for a new or upgraded license, please come see us at the DARA Clubhouse. If you have questions about testing, please email [exams.w8bi@gmail.com](mailto:exams.w8bi@gmail.com)

**The Findlay Radio Club**

The Findlay Radio Club sponsors an Exam Session the second Saturday of  
every month except September when we have our Hamfest. The Exam Session  
takes place at the Findlay Radio Club, 1333 West Sandusky St., Findlay  
Ohio  45839. The session begins at 9 AM. Pre-registration is  
recommended, but not required. You can pre-register at [hamstudy.org](http://hamstudy.org/). We  
can also give Exams remotely on-line on your schedule if you can't make  
to a session.

The club has meetings on the first and third Thursdays at the clubhouse at 7:30 PM. The meetings are also available on Zoom. Contact N8ET if you would like to log in. All are welcome.

We also meet at the club on Sunday afternoon from 2 until 5 (or later!) to talk about anything Ham Radio. The sessions are geared toward new Hams. Everyone brings their questions and equipment they would like to show off or learn how to use. This Sunday we are going to install and learn to use Flgigi, Flmsg, and Flamp. In past sessions we have built antennas, fired up new rigs, and generally had a good time!

**Geauga Amateur Radio Association (GARA)**

Amateur License exam sessions are offered for all license classes (Technician, General, Extra). Walk-ins are always welcome - no prior registration is required. No fee for the exam.

The GARA schedule of exams are these Sundays at 2pm. Dates for 2024 are Jan 14, March 10, May12, July 14, Sept 15, and Nov 17, 2024. All sessions are at 2:00PM each month

Exams are held at the Geauga County Department of Emergency Services and Emergency Operations Center, 12518 Merritt Road, Chardon, Ohio 44024. The EOC is located just south of the University Geauga Hospital and just east of the Geauga County Safety Center (Sheriff's Office), off of State Route 44 between State Route 322 and State Route 87 on Merritt Road.

Please arrive a few minutes before 14:00 to allow adequate time to process the necessary paper work and take your test. Bring your 1) photo ID, 2) email address, 3) FCC FRN, 4) a printout of your current license if taking the General or Extra exam.

Additional info may be obtained from Jackie Welch, N8JMW by email [n8jmw2@gmail.ccom](mailto:n8jmw2@gmail.ccom) or calling at 440-228-2716. More information is available from the Geauga Amateur Radio Association website <https://geaugaara.org>

**Huber Heights Amateur Radio Club**

Huber heights amateur radio club does ARRL VE testing the second Saturday of each even numbered month. Feb, Apr, Jun, Aug, Oct, Dec. 9:30-11:00 For more information contact Jim Storms – AB8YK at [ab8yk@hotmail.com](mailto:ab8yk@hotmail.com)

**The Lake County Amateur Radio Association**

The Lake County Amateur Radio Association is holding its **2024** Amateur Radio license exams at the **Kirtland Library**, 9267 Chillicothe Road, on the following dates:

Saturday. February 3 Saturday, August 3

Saturday, April 6 Saturday, October 5

Saturday, June 1 Saturday, December 7

This bi-monthly schedule is the first Saturday of every even-numbered month (e.g., February being the second month, etc.). They are held at the Kirtland Library, 9267 Chillicothe Road. It is 1.7 miles south of I-90 on Route 306 (Chillicothe Rd). The library is on the left, just beyond the Marathon gas station. The tests will start at **12 noon.** Please arrive a few minutes earlier.

To register, you will need a NCVEC 605 Form, which will be available at the test. If you would like to complete one ahead of time, be sure it is the Sept 2017 version or later. You can find it by Googling “NCVEC quick-form 605” and clicking on the url for a pdf of the form. Please note **the FCC requires you to provide a FRN** (FCC Registration Number). Social Security Numbers are no longer accepted. If you are new to ham radio and don’t have a FRN, Google “New FRN” and follow the fcc.gov link.

If you are currently licensed, be sure to **bring a copy of your license to the exam.** The cost of the exam itself is $15.00, and if you wish to pay by check, it should be made out to the ARRL/VEC. Identification with your picture is also necessary, such as a driver’s license. If you have any questions, please contact Scott Farnham, KO8O, at (440) 256-0320, or [scottfarnham@roadrunner.com](mailto:scottfarnham@roadrunner.com)

**In addition** to the $15 test fee, the FCC now charges $35 to add you to the Amateur Radio database. The FCC will e-mail successful candidates instructions for payment directly to them. Payment must be made within 10 days of the e-mail. This charge does not apply to upgrades.

**The Lancaster and Fairfield County Amateur Radio Club (LFCARC**)

The Lancaster and Fairfield County Amateur Radio Club (LFCARC) hosts exam sessions on the first Saturday each month at 10:00 am in Lancaster Ohio at the Fairfield County EMA, 240 Baldwin Dr., Lancaster Ohio.

To register for an exam, [Click Here.](https://hamstudy.org/sessions/LFCARC/all)

Questions: Contact me at ve\_testing@k8qik.org.

**Lisbon Area Amateur Radio Association**

The Lisbon Area Amateur Radio Association VE schedule for 2025.

Feb 8th; Mar 8th; Apr 12th; May 10th; Jun 14th;

Aug 9th; Sep 13th; Oct 11th; Nov 8th; Dec 13th.

At the Columbiana County EMA at 215 South Market St, Lisbon, OH 44432.

Check in at 1 PM, testing at 1:30 PM.

Make sure you have your FRN number from the FCC.

Contact NN8B at [nn8b.oh@gmail.com](mailto:nn8b.oh@gmail.com) for any further information**.**

WE CAN ALSO GIVE THE TEST AT OUR REGULAR MEETINGS  
THAT ARE NORMALLY ON THE 3RD THURSDAY OF EACH MONTH.  
LAARA MEETINGS ARE HELD AT THE COLUMBIANA COUNTY  
EMERGENCY MANAGEMENT AGENCY AT THE SAME ADDRESS AS ABOVE. SEE THE [K8GQB.COM](http://k8gqb.com/) WEB SITE FOR UPDATES.  
MEETING TIME IS 6:30 PM.  
WE HAVE ACTIVITY MEETINGS ON THE ODD MONTHS AND  
BUSINESS MEETINGS ON THE EVEN MONTHS.

**Madison County**

The Madison County Amateur Radio Club Laurel testing group offers testing on the first

Thursday of January, March, May, July 10, September and November. Tests are held at 7:00PM

at the Madison County EMA located at 271 Elm St. London, OH. There is no Fee for testing.

Pre-Registration is not required but preferred. Walk-ins are welcome. You are required to have

proper ID, an email address and a copy of your FRN or current ham radio license. For more

information or to get pre-registered send email to [Exams@mcarcho.org](mailto:Exams@mcarcho.org) .

**The Milford Amateur Radio Club (MARC)**

VE testing is held the third Thursday of each month at 6:00 PM.  Location;  Miami Township Civic Center located at 6101 Meijer Drive, Milford, OH  45150.

 Please pre-register at [www.milfordhamradio.org](http://www.milfordhamradio.org/)

**Northern Ohio Amateur Radio Society (NOARS)**

Six VE testing sessions in 2025.  Registration is appreciated but walk-ins are welcome.  Contact Elaine, KC8FOS for more information or to register.  [ewilkinson1951@gmail.com](mailto:ewilkinson1951@gmail.com) or 216-337-

4235.

January 4,  March 1,  May 3,  July 5,  Sept 6,  November 1.

Sessions are held at the Fairview Park Library, 21255 Lorain Rd., Fairview Park 44126.

**Portage County Amateur Radio Service (PCARS)**

The first Saturday of every even numbered month -10 am – at the PCARS club site in Ravenna. Please visit the PCARS web site and check out the information about VE testing in the latest newsletter at [www.portcars.org](http://www.portcars.org) .

If you have any questions, don’t hesitate to contact me at KB8UUZ@gmail,com

**Tusco Amateur Radio Club W8ZX**

VE Testing sessions are held on the second Saturday of every even numbered month at the Dover Faith Church, 420 N Wooster Ave, Dover, OH 44622. Pre-registration is not necessary. Doors open at 0830 for registration, exams begin at 0900. Cost is $15. You are required to have an email address and a copy of your FRN or current ham radio license. For more information please go to [www.w8zx.net/exam](http://www.w8zx.net/exam) or email [VETEAM@N8BAG.NET](mailto:VETEAM@N8BAG.NET).

**Silvercreek ARA (SARA)**

Holds six exam sessions per year for all license classes. Pre-registration requested but not required.

**Exam sessions for 2024:**

Saturday, December 7th - Sharon Center UM Church (Wadsworth/Medina Co.)

**Exam sessions for 2025:**

Saturday, February 1st - Smithville Brethren Church (Smithville/Wayne Co.)  
Saturday, April 5th - Sharon Center UM Church (Wadsworth/Medina Co.)  
Saturday, June 7th - Sharon Center UM Church (Wadsworth/Medina Co.)  
Saturday, August 2nd - Smithville Brethren Church (Smithville/Wayne Co.)  
Saturday, October 4th - Sharon Center UM Church (Wadsworth/Medina Co.)  
Saturday, December 6th  - Sharon Center UM Church (Wadsworth/Medina Co.)

All sessions begin at 10:00am. For directions and test information visit <https://w8wky.org/license-exams/>. Pre-Registration to expedite paperwork is requested, but not required at <https://w8wky.org/sara-ve-registration-form/>. Sign up and if you aren't ready or can't make it, just notify the VE team lead.

**West Chester Amateur Radio Association (WC8VOA)**Exam sessions are held one Saturday each month at 10:00 AM-Noon at the VOA Bethany Relay Museum located at *8070 Tylersville Rd, West Chester, Ohio 45069.*For more information and links to register, please see our website at <https://wc8voa.org/licensing/>

**Ham Radio License Classes Start March 1 and March 3**

The OH-KY-IN Amateur Radio Society and the Queen City Emergency Net will again present training for all classes of ham radio licenses.  The sessions for **Technician** and **Amateur Extra** will take place on Saturday mornings starting March 1st and continuing through Saturday April 5th.  Tech sessions will run from 9:00 AM until 11:00 AM and the Extra sessions will run from 9:00 AM until noon. For those wishing to upgrade to **General** Class the sessions will take place on Monday evenings from 7:00 until 9:00 PM starting on March 3rd and continuing until April 7th.

An exam session will be held on Saturday April 12th.   All of these sessions will be held in the Red Cross building, 2111 Dana Ave., Cincinnati, OH 45207  
  
Additional details:  
<http://ohkyin.org/wp/club-activities/classes/>  
  
Mark Landis  
KD8ZLD

**Cuyahoga Falls Amateur Radio Club Extra Class License Prep**

Free online Extra Class prep sessions will begin March 23rd. All sessions are held online, live via Zoom. Classes are on seven Sundays from 1:30 to ~ 4 PM- 03/23,

03/30, 04/6, 4/13, 04/27, 05/4 & 05/11/2025. They will include reviewing materials, clarifying concepts, conducting Q&As, and providing practical information for getting on the air and using your license privileges. For more information and to register, visit- [*tiny.cc/beahamx*](http://tiny.cc/beahamx).

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**DARA University Classes**

Is it time to upgrade your license?  DARA has scheduled classes for all three amateur licenses.  The Technician classes will begin on Saturday March 22nd from 9:00 a.m. to 1:00 p.m. at the DARA clubhouse, 6619 Bellefontaine Rd, and run for four Saturdays.  The textbook will be the ARRL License Manual which can be purchased locally or you can get a copy at the DARA meeting or during the first class meeting.

What about General?  The General class will begin at 9:00 a.m. on Saturday April 19th at the DARA clubhouse and will run for four Saturdays.  The testing for these classes will be conducted on either Friday or Saturday at Hamvention.

What about Extra?  The Amateur Extra classes (called Extreme Boot Camp) will held at Hamvention on Friday and Saturday morning.  Registration instructions are found on the Hamvention Web site.  The cost is $100 and includes a copy of the ARRL License manual, a syllabus, and a study schedule.  Can you pass the exam with only two days of instruction?  Definitely yes, because you’ll be following the study assignments prior to the Hamvention classes.  The testing will be on Saturday afternoon at Hamvention.

Do you already have your license but would like to expand your knowledge of general radio theory?  Plan to attend one or more of the license classes.  It’s a great way to learn or re-learn some new radio concepts.

73,

Bob Neben/K9BL

**Medina County Amateur Radio Club**

**Upgrade to Amateur Radio General Class License:**

**PREREQUISITE: FCC TECHNICIAN LICENSE**

**Pass on to Technician licensed friends…**

**Amateur Radio FCC General Class Licensing Instruction offered by the Medina County Amateur Radio Club.:**

Will prepare you for the FCC Element 3, **General** **Class License**exam,  
35 multiple choice questions to get your upgrade!

**March 5, 2025 begins *nine*Wednesday** **classes, 7:00-9:00 pm**

No charge for classes. Last class is exam session – walk away with an FCC General Class License.

Required purchase of current ***ARRL General Class License Manual,*Tenth Edition,** available on Amazon…  
**MUST READ CHAPTERS 1-3 BEFORE FIRST CLASS**

Jane@K8JGR.radio for more info, or [*https://www.W8EOC.org*](https://www.w8eoc.org/)

Location:  
Medina County Career Center (JVS),  
Room 246,  
1101 West Liberty St, Medina, Ohio  44256

**\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**From the Geauga Amateur Radio Association**

|  |  |  |
| --- | --- | --- |
| |  | | --- | |  | |  |   Future “Elmer “sessions will be held at the Geauga County EOC, 12518 Merritt Rd. Chardon, Ohio on 4/13/25, 10/12/25, and 12/14/25Starting at 2 PM. There will also be 2 Outdoor sessions held at the Chrystal Lake Picnic Shelter in Headwaters Park, 12265 Old State Rd. in Claridon and Huntsburg townships on 9/8/25 and 8/10/25 also starting at 2 PM.  Everyone is welcome regardless of your radio experience so please join us in sharing the knowledge.  For any questions please contact Dale Byers K8DOB at [k8dob@outlook.com](mailto:k8dob@outlook.com)  GARA will also be offering a 7 week Tech class beginning April 4th. All classes are Fridays from 6:30 to 9:00PM. Contact Jackie Clay for more info [n8jmw2@gmail.com](mailto:n8jmw2@gmail.com)  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Win a Kenwood TS-590SG** |

Tickets are now on sale.

For more information, or to purchase tickets, please go to

<https://www.w8lky.org/fundraisers/hf_rig_raffle/>

**Your Club news should be listed here!**

I know you’re out there doing things! Send me a write-up (MSWord please) and some photo’s (.jpg please) and we’ll get your club hi-lited here for the other OH Section Clubs to see! Send to [WB8LCD@ARRL.ORG](mailto:WB8LCD@ARRL.ORG)

Important Links

ARRL Home: [www.arrl.org](http://www.arrl.org/)

Find an ARRL Affiliated Club: [www.arrl.org/clubs](http://www.arrl.org/clubs)

Find your ARRL Section: [www.arrl.org/sections](http://www.arrl.org/sections)

Find a License Class in your area: [www.arrl.org/class](http://www.arrl.org/class)

Find a License Exam in your area: [www.arrl.org/exam](http://www.arrl.org/exam)

Find a Hamfest or Convention: [www.arrl.org/hamfests](http://www.arrl.org/hamfests)

Email ARRL Clubs: [clubs@arrl.org](mailto:clubs@arrl.org)

A person sitting in a chair

Description automatically generatedDX This Week – #322

Bill - AJ8B **(**[**thedxmentor@gmail.com**](mailto:thedxmentor@gmail.com) **/** [**www.aj8b.com**](http://www.aj8b.com) **)**

Have you ever worked 60 meters? If not, would you like to find out about 60? I have several sources of information. The first is via the “godfather” of 60M, W8GEX, Joe Pater. Joe has over 200 entities confirmed on 60M. I know that the ARRL doesn’t count those entities, but the 60M group does and offers some awards to prove it. You can check out the group at :

F**acebook:**[https://www.facebook.com/groups/347995275954755/](https://60metersonline.us12.list-manage.com/track/click?u=99836838adcf6cb21aec9049a&id=e9f171b2c0&e=2f511515ce)**60m website:**[www.60metersonline.com](https://60metersonline.us12.list-manage.com/track/click?u=99836838adcf6cb21aec9049a&id=804f3d50e7&e=2f511515ce)

Joe also has a 60M newsletter that you can subscribe to. (W8GEX@aol.com) Excerpts from the most recent one is below:

Current 60 Meter activity:

* Costa Rica: TI1RRC now active on 60m. Feb. 19 to 25
* New Zealand: ZL4OL and ZL2CC have been on around 0700z. Watch your 60m packet cluster for all the activity.
* UN: 4U1UN is on 60m from time to time so keep an eye out for that one.
* Some of the rare DX has been heard lately includes FO5QB, 7Q6M and T77NC, A51AE

Don’t forget to have a look at our website  [60metersonline.com](https://60metersonline.us12.list-manage.com/track/click?u=99836838adcf6cb21aec9049a&id=bbcea57623&e=2f511515ce).  Check out the leaderboard to see who’s on top. Also look at our station pictures so you can identify a picture with a call.

Finally, the DX Mentor had a show all about 60 meters. On YouTube it can be watched at <https://www.youtube.com/watch?v=Mq7YN6euHHM&t=243s>. Via you podcast player, you can search on 60 meters under the DX Mentor on your podcast app.

DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH

**This section of DX News comes from Bernie, W3UR, editor of the DailyDX, the WeeklyDX, and the How’s DX column in QST. If you would like a free 2-week trial of the DailyDX, your only source of real-time DX information, just drop me a note at** [**thedxmentor@gmail.com**](mailto:thedxmentor@gmail.com).

The **VK9XU, Christmas Islan**d operation underway, with caveats. As of February 21, the VK9XU German-Australian DXpedition Group is on the air, but only on two bands and only on digital modes. A bag containing antenna mast poles went astray. However, the missing ski bag with antenna poles arrived at Christmas  
Island on Thursday. They began preparing the low band antenna but couldn't finish in the dark. It should be ready for use by now.

KB8NW, Tedd Mirgliotta, of the Ohio-Penn DX Bulletin, reports that IV3FSG, Elvira, is QRV as **D68Z** from Moroni, **Comoros Islands** until March 18. Activity will be on various HF bands using CW, SSB and FT8/FT4. Logs will be uploaded to Club Log. QSL via IK2DUW or LoTW. More details will follow.

G4BUO, Dave, will be in 5W, **Samoa**, until March 4 using the callsign **5WØUO.** Activity will be holiday-style and mainly CW.

The DX India Foundation is mounting a trip to **Arnala, India** (IOTA AS-169) May 29-June 1. They hope to obtain the callsign **AU2M**. According to VU2RS, Sarath, Arnala is the most wanted IOTA entity in India. The DX India website has a news release with full details, including operators, QSL information, and donors and sponsorships.

The Rebel DX Group DXpedition to **Nigeria, 5N9DTG**, reports high noise levels (S9+20 dB) on 160M, making communication impossible. They hope the noise will decrease. They also learned that the country’s telecommunications authority had denied them permission to operate on 60M.

We have an update on the **V73WW** DXPedition to the **Marshall Islands**.   
The V73WW DXpedition has officially surpassed 100,000 QSOs, marking an incredible milestone in our journey. A huge thank you to all the hams who have made this achievement possible — your enthusiasm has fueled some tremendous pileups over the past days!

As we near the final stretch, the team has started disassembling antennas and infrastructure, with logistical operations well underway. However, some high-band antennas are still active, keeping us on air for those final QSOs before we wrap up.

We also bid farewell to Jamie (M0SDV), who has now left for home.

A huge thanks to our supporters and every operator who has worked us — your contributions and QSO efforts have made this expedition a success!

Here is more information on the newest IARU member society. Last week, we reported that the International Amateur Radio Union (IARU) Region I had welcomed the **Libyan** Communications Amateur Society (LCAS) of Tripoli, Libya, is now an IARU member, bringing its total membership. This decision was made unanimously.

LCAS was founded on May 12, 2024, and has seven licensed amateur members. Its officers are 5A21MB, chairman; 5A21ZX, deputy chairman; and 5A21AF, president of the General Assembly.

The Board of Directors of the Yasme Foundation is pleased to announce the  
following grants.

\* A supporting grant of $7,500 to the World Radiosport Team Championship (WRTC) United Kingdom 2026 organizing committee for general expenses and a second grant of $3,000 to fund the Ham Widow's Ball for spouses in attendance.  The board encourages other organizations and individuals to support this global event.  Further information about WRTC 2026 can be found at [wrtc2026.org](http://wrtc2026.org/).  
  
\* A grant covering the expenses of Hamvention 2025 space rental for HamSCI and YOTA/HR2.0  
  
\* Grant to the Ethiopian Amateur Radio Association for a club construction  
project of a QRP Labs QMX+ 160-6m, 5W multi-mode transceiver kit.   
  
\* A grant of $7,500 in support of YOTA 2025 (June 15 - 20) Summer Camp in Denver.  The board encourages other organizations and individuals to support this growing event for youth in North America and amateur radio.  Further information can be found at [youthontheair.org/denver](http://youthontheair.org/denver)  
  
\* Supporting grant to Contest University (CTU) at Hamvention 2025 in Xenia.  
  
Submitted by Ward Silver, N0AX, President  
The Yasme Foundation

From the VU7 Student Project Program, we have the following to share.

Dear Student Amateur Radio Operators around the world.

We are thrilled to invite you to join the VU7 Project DXpedition as student participants! This is a unique opportunity for you to learn from experienced and eminent amateur radio operators, gain hands-on experience, and be a part of a thrilling adventure.

About the VU7 Project: The VU7 Project is a DXpedition aimed at activating the Laccadwip Islands, a remote and rare entity located in the Arabian Sea. Our team of experienced operators will set up stations, antennas, and equipment to make contacts with the global amateur radio community.

Student Participation Program: As student participants, you will be immersed in all aspects of the DXpedition, including:  
  
- Setting up antennas and equipment  
- Learning about radio propagation, antennas, and transmission techniques  
- Making contacts with amateur radio operators worldwide  
- Understanding the logistics and planning involved in a DXpedition  
- Interacting with experienced operators and learning from their expertise

By participating in the VU7 Project, you will:  
  
- Gain hands-on experience in amateur radio operations  
- Develop skills in teamwork, communication, and problem-solving  
- Learn from experienced operators and industry experts  
- Be part of a unique and exciting adventure  
- Receive a certificate of participation and a special QSL card

The DXpedition will take place from 16th January 2026 to 31st January 2026. You will be required to join the team for the entire duration.

We will provide accommodation and food during the DXpedition. You will need to bring your own personal gear, including clothing, toiletries, and any necessary medications.

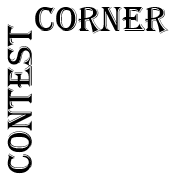
To confirm your participation, please reply to this email by 1st May 2025. We will provide you with further details, including the itinerary, equipment list, and other necessary information.  
  
We look forward to having you on board!  
  
Best regards,  
  
Sarath, VU2RS  
VU7 Project Team

[sara@vu2rs.com](mailto:sara@vu2rs.com)

A new podcast episode of the DX Mentor dropped this weekend. It was a great conversation with Michael Walker, VA3MW, all about his ham radio journey. He will also talk about what’s new from FLEX radio! Of course, Joe, W8GEX, will be with us also! You don’t want to miss this!

If you want to make sure you won’t miss an episode, join TheDXMentor facebook group or follow us on “X”.

DAH DIT DIT DIT DAH DAH DIT DIT DIT DAH

 Below is a list of upcoming contests in the “Contest Corner”. I think this is important for someone who is trying to move up the DXCC ladder since entities that are on the rarer side and easiest to work in contests. Some of my best “catches” have been on the Sunday afternoon of a contest when the rarer entities are begging for QSOs. Of course, the gamble is that if you wait until Sunday, conditions may change, or they simply won’t be workable. However, it is not a bad gamble. Of course, why not work the contest and have some fun!

This is some contest and DX information. The CQ Amateur Radio Hall of Fame was established in January 2001, to recognize those individuals, whether licensed radio amateurs or not, who significantly affected the course of amateur radio; and radio amateurs who, in the course of their professional lives, had a significant impact on their professions or on world affairs.

The CQ Amateur Radio Hall of Fame was created and controlled by Richard Ross K2MGA (sk) and Rich Moseson W2VU of CQ Magazine fame. CQ Magazine has discontinued but the [Heritage CQ Amateur Radio Hall of Fame](http://hamgallery.com/HOF/AmateurRadio/) will continue to honor select qualified individuals. “Hamgallery” will be the new steward of this award with blessing from Cathy Ross (wife of K2MGA). It will be controlled and reviewed by a select and diverse group of amateurs. Nominations will be accepted from January 1st thru April 15th of each year. [Please read nomination procedure here!](http://hamgallery.com/HOF/AmateurRadio/procedure.htm) Send your nominations to Tom Roscoe K8CX at [k8cx@hamgallery.com](mailto:k8cx@hamgallery.com). Make sure to put "CQ AMATEUR RADIO HALL OF FAME" in the subject line. You will be notified by April 30th if your nomination was accepted or declined.

The Contest Hall of Fame and the CQ DX Hall of Fame is also taking nominations (until March 1st). [Visit their website for more information!](https://contesthof.com/nomination-process/)Thanks & 73,  
Tom K8CX

On March 9th, from 0000Z to 0359Z, the North American RTTY Sprint will be held. I am going to give this one a try this year. The challenge is that, unlike other contests where you can park on a frequency and just run stations, you must make one QSO and then move to another frequency. It takes some coordination and focus, but it is fun, at least on the CW side of things. I will give this one a try. You can get details by checking the wa7bnm.com website or by dropping me a note at [thedxmentor@gmail.com](mailto:thedxmentor@gmail.com).

If you are interested in RTTY but not looking for a contest, you might try the weekly RTTY test held every Thursday between 0145Z and 0215Z. Check out radiosport.world/wrt.html for details or contact me. This weekly contest has gotten my back in to RTTY.

|  |  |  |
| --- | --- | --- |
| **Contest** | **Start  Date** | **End  Date** |
| YB DX RTTY Contest | 3/8/2025 | 3/8/2025 |
| Idaho QSOP | 3/8/2025 | 3/8/2025 |
| Oklahoma QSOP | 3/8/2025 | 3/8/2025 |
| Wisconsin QSOP | 3/9/2025 | 3/10/2025 |
| Virginia QSOP | 3/15/2025 | 3/16/2025 |
| CQ WW WPX Contest, SSB | 3/29/2025 | 3/30/2025 |
| SP DX Contest | 4/5/2025 | 4/6/2025 |
| Louisiana QSOP | 4/5/2025 | 4/6/2025 |
| Georgia QSOP | 4/12/2025 | 4/13/2025 |
| New Mexico QSOP | 4/12/2025 | 4/13/2025 |
| Holyland DX Contest | 4/18/2025 | 4/19/2025 |
| Michigan QSOP | 4/19/2025 | 4/20/2025 |
| Ontario QSOP | 4/19/2025 | 4/20/2025 |
| SP DX RTTY | 4/26/2025 | 4/27/20256 |
| 10-10 Intl. Spring Contest, Digital | 4/26/2025 | 4/27/20256 |
| Florida QSOP | 4/26/2025 | 4/27/20256 |

**OHIO’S** A white sign with black text

Description automatically generated

There is an old saying “time flies when you are having fun!” Well I must be having a lot of fun because it seems Christmas was just over and I’m already writing my March Section Journal column. After this winter I am glad that Spring is just around the corner even though it is still several weeks away. Although I look forward to a season change, there are some aspects of Winter I will miss. One is relaxing on the couch, with a hot cup of coffee in hand watching the snow fall. Often that features local deer wandering through the woods or even onto the porches of the houses across the street. Another is using the snow as an excuse not to have to go somewhere because of road conditions or event cancellations. And for a ham, winter opens up more time to operate, work on projects and bone up on something new that is radio oriented. Yes, time flies. But soon we will be complaining about how hot and rainy it is.

Most South 40 clubs operate on a calendar year basis. As March is upon us, I’m certain they would like to wrap up their membership renewals in order to get their annual ARRL report submitted to Newington. So if you are not certain you have renewed, check with club officials to determine your statis. I’m certain they will appreciate your action. Remember, it is true you don’t have to be in a club to enjoy ham radio. But sharing the mutual interest with like minded men, women and kids sure makes it more fun.

The **Lancaster Fairfield County ARC** starts a Technician License class on March 10 and running through the 14th. It will run nightly beginning at 6 each evening and conclude around 9. Although there is no charge to take the course, there will be some processing fees. You must register to participate by contacting Tim Lentz, KD8QCA at 740-684-2787. Classes will be held at the Fairfield County EMA Training Facility, 240 Baldwin in Lancaster.

For many years the **Grant RC** has held their annual Christmas dinner in March and 2025 is no exception. This year the dinner will be March 20 at the Country Inn in Mount Orab. It will get underway at 6 PM. It’s an enjoyable time with great friends and good food. They often have some neat door prizes too.

Each Sunday morning at 8 the **Vinton County ARA** holds a gathering of the area hams at the Smoking Beans in McArthur. On March 8 three amateur groups will hold their monthly gatherings. The **Bainbridge Area Hams** will meet at the Dutch Restaurant on SR 41 South. They start gathering between 8 and 8:30. Then at 10:00 the **Highland ARA**’s Brunch Bunch will congregate at the Hillsboro Burger King, across from the hospital in Hillsboro. About 20 attended the February gathering-including a couple brand new hams. In the Cincinnati area the **OH-KY-IN ARS** will meet at the Bob Evans Restaurant at 5245 North Bend Road. 1:00 is their starting time. On March 15 the **Lancaster Fairfield County ARC** will have their monthly breakfast at the Scramblers Restaurant in Lancaster. Also on the 15th, the **Fayette ARA** will meet at 10 at the Our Place Restaurant in Washington CH. Rounding out the month, the **Clinton County ARA** meets at Sam’s Meats and Deli in Wilmington at 8:30.

We have learned plans for the **Athens County ARA**’s annual hamfest are progressing. That hamfest will be at the Athens Community Center on April 27. As in past years, the admission will remain at $5. All of this crappy weather has given the **Portsmouth RC** the opportuntiy to prepare the flyer promoting their August 16 hamfest in New Boston. It’s always an enjoyable event. So get the date posted on your calendar.

After serving several terms as the President of the **Cambridge ARA,** in February Jim Shaw stepped down to become Vice President. Sonny Alfman, W8FHF, was elected to fill the big shoes Jim vacated. Evelyn Barton, KA8NZS, was elected Secretary with Marilyn Phalin, KD8ZMG, elected Treasurer. KA8NZS along with Dick Wayt, WD8SDH, will serve as Trustees. Lyn Alfman, N8IMW, will continue as the Information Officer and newsletter editor.

As it had been a bit since the last amateur radio license had been issued in the Ohio South 40 Region, I had begun to think some of the stuff happening in Washington had reached into the FCC and slowed down the license issue process. However Ted Jacobson, W8KVK, eased my mind by informing me that a fellow I have known for decades had been issued the KF8DMU call sign by the Commission. Let’s welcome Dick Burba of Hillsboro as the newest area amateur.

The **Athens County ARA** will conduct an ARRL License Test on March 17 at the Red Cross Building in Athens. All license elements will be available. Contact Jeff Slattery to register for the test.

Congrats to Steve Stuckey, AC9GK, for placing 16th in the 8th call district as a SSB entry during the recent CQ Worldwide Contest. Steve is a member of the **Bainbridge Area Ham Group** and the **Highland ARA**. Steve is also in the final stages of wrapping up his 5 Band WAS as well as a 6 meter WAS. He has just applied for his WAZ certificate.

It’s getting that time of the year when the National Weather Service offices serving the South 40 region counties begin holding weather spotter training. The Wilmington Office will hold virtual sessions on March 18 and May 13. Then on March 19 they will hold the first in person training in Wilmington. On April 9 they will have a session in Springfield Township in Hamilton County and the on the 15th in Logan. To date the Charleston Office has not posted any Ohio location dates and the Pittsburgh Office has posted only one for New Philadelphia.

Speaking of “that time of the year”—it’s time for the annual start of Daylight Savings Time. Although the folks in Washington keep kicking the doing away with it it is still going to happen this year. In the wee hours of Sunday, March 9 your clocks need to be moved forward an hour until November 2 when you get to set them back the same amount. So before hitting the sack on the 8th, move your clock forward or you may get to church just as the preacher is concluding his sermon, you miss your usual Sunday morning net or you miss the early bird special at the diner.

Until next time ENJOY THE MARCH and become radio active.

**John**, W8KIW

[jlevo@cinci.rr.com](mailto:jlevo@cinci.rr.com) or [highlandara@gmail.com](mailto:highlandara@gmail.com) or 937-393-4951 (landline-leave a message)

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ARLD009 DX news**

This week's bulletin is made possible with information provided by DF4GV, KC1XX, The Daily DX, 425 DX News, DXNL, OPDX, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

NIGERIA, 5N. Members of the Rebel DX Group are QRV as 5N9DTG. Activity is on 160 to 6 meters using FT8 and FT4 with Superfox and MSHV modes. QSL via OQRS.

MALDIVES, 8Q. Mamoru, JH3VAA and Takio, JH3QFL are QRV as 8Q7VA and 8Q7FL, respectively, until March 5. Activity is on the HF bands. QSL to home calls.

SIERRA LEONE, 9L. Peter, VK3HEX is QRV as 9L/VK3HEX until March 7. Activity is in his spare time and he has been active on 10 meters using SSB. This may soon include being active on 12 meters as well. QSL via operator's instructions.

COMOROS, D6. Elvira, IV3FSG will be QRV as D68Z from Moroni from March 3 to 18. Activity will be on 160 to 6 meters using CW, SSB, RTTY, FT8, and FT4. QSL via IK2DUW.

IRAN, EP. Hamid, EP4HR has been active on 17 meters using FT8 around 1700z. QSL via IZ2RZQ.

MARTINIQUE, FM. Yuri, VE3DZ will be QRV as TO4A as a Single Op/All Band/High Power entry in the ARRL International DX SSB contest. QSL to home call.

COLOMBIA, HK. Matt, KC1XX is QRV as 5K4X from Medellin as a Single Op/All Band/Low Power entry in the ARRL International DX SSB contest. QSL via LoTW.

REPUBLIC OF KOREA, HL. Special event station HL100IARU will be active from March to April to mark the 100th anniversary of the International Amateur Radio Union. QSL via HL1IWD.

PANAMA, HP. A group of operators are QRV as 3F3RRC until March 3. QSL via M0OXO.

ST. LUCIA, J6. Steve, NY3B is QRV as J68SS until March 4. Activity is on 80 to 10 meters using CW and SSB. He and other operators will be QRV as J62K from Soufriere, IOTA NA-108, in the ARRL International SSB DX contest. QSL J68SS to home call, and J62K direct to K9HZ.

DOMINICA, J7. A group of operators will be QRV as J75A as a Multi/Two entry in the ARRL International SSB DX contest. QSL via LoTW.

GUAM, KH2. A group of operators will be QRV as NH2C as a Multi/Op entry in the ARRL International SSB DX contest. QSL via LoTW.

HAWAII, KH6. Gary, N7IR will be QRV as KH7M as a Single Op/All Band/QRP power entry in the ARRL International SSB DX contest. QSL direct to KH6ZM.

EAST KIRIBATI, T32. Ken, KH6QJ is QRV as T32AZ from Kiritimati, IOTA OC-024, until March 3, and then again on April 18 to 20. Activity will be on 80, 40, 20, 15, and 10 meters using SSB. QSL to home call.

GABON, TR. Roland, F8EN is QRV as TR8CR from Libreville until April or longer. Activity is mostly on 12 and 10 meters using CW. QSL via F6AJA.

COCOS (KEELING) ISLAND, VK9C. A group of operators will be QRV as VK9CU from March 4 to 11. Activity will be on 160 to 6 meters using CW, SSB, RTTY, and other digital modes with three stations active around the clock. QSL via DL2AWG.

CHRISTMAS ISLAND, VK9X. A group of operators are QRV as VK9XU until March 4. Activity is on 160 to 6 meters using CW, SSB, RTTY, and other digital modes with three stations active around the clock. QSL via DL2AWG.

BERMUA, VP9. Les, N1SV is QRV as VP9/N1SV until March 3. Activity will be on 30, 17, and 12 meters. He will be active as VP9I in the ARRL International SSB DX contest. QSL VP9/N1SV to home call, and VP9I to WW3S.

ALBANIA, ZA. Mark, W4CK will be QRV as ZA/W4CK near Tirana from March 2 to 8. Activity will be on 80 to 10 meters using CW. QSL via LoTW.

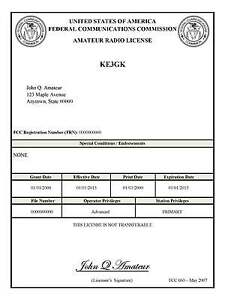
**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

******[***Upcoming Hamfests***](http://arrl-ohio.org/hamfests.html)

We **DO** have hamfests scheduled for 2025!!

|  |  |  |
| --- | --- | --- |
| ***Ohio Hamfests*** | | |
|  | | |
| ***2025*** | | |
| **03/09/2025 -**[**Northern Ohio Amateur Radio Society Winter Hamfest**](http://www.arrl.org/hamfests/northern-ohio-amateur-radio-society-winter-hamfest)  **Location:**Elyria, OH **Type:** ARRL Hamfest **Sponsor:** Northern Ohio Amateur Radio Society **Website:** <https://www.noars.net/hamfests/winter-hamfest/> [**Learn More**](http://www.arrl.org/hamfests/northern-ohio-amateur-radio-society-winter-hamfest) | | **03/16/2025 -**[**Toledo Mobile Radio Association Hamfest and Computer Fair**](http://www.arrl.org/hamfests/toledo-mobile-radio-association-hamfest-and-computer-fair-3)  **Location:**Perrysburg, OH **Type:** ARRL Hamfest **Sponsor:** Toledo Mobile Radio Association **Website:** [http://www.w8hhf.org](http://www.w8hhf.org/) [**Learn More**](http://www.arrl.org/hamfests/toledo-mobile-radio-association-hamfest-and-computer-fair-3) |
| **04/05/2025 -**[**Cuyahoga Falls Amateur Radio Club 69th Hamfest**](https://www.arrl.org/hamfests/cuyahoga-falls-amateur-radio-club-69th-hamfest)  **Location:**Cuyahoga Falls , OH **Type:** ARRL Hamfest **Sponsor:** Cuyahoga Falls Amateur Radio Club, Inc. | | **04/26/2025 - [Tusco Amateur Radio Club's 2025 Hamfest, Computer & Electronics Show](https://www.arrl.org/hamfests/tusco-amateur-radio-club-s-2025-hamfest-computer-electronics-show" \o "Tusco Amateur Radio Club's 2025 Hamfest, Computer & Electronics Show)**  **Location:**Dover, OH **Type:** ARRL Hamfest **Sponsor:** Tusco Amateur Radio Club **Website:** <http://www.w8zx.net/hamfest> [**Learn More**](https://www.arrl.org/hamfests/tusco-amateur-radio-club-s-2025-hamfest-computer-electronics-show) |
| **04/27/2025 -**[**Athens Hamfest**](https://www.arrl.org/hamfests/athens-hamfest-12)  **Location:**Athens, OH **Type:** ARRL Hamfest **Sponsor:** Athens County Amateur Radio Association **Website:** <https://www.ac-ara.org/> [**Learn More**](https://www.arrl.org/hamfests/athens-hamfest-12) | | **05/10/2025 - 05/15/2025** [**RV Radio Network Rally**](https://www.arrl.org/hamfests/rv-radio-network-rally-1)  **Location:**Navarre, OH **Type:** ARRL Convention **Sponsor:** RV Radio Network [**Learn More**](https://www.arrl.org/hamfests/rv-radio-network-rally-1) |
| **05/15/2025 - 05/18/2025** [**Four Days In May**](https://www.arrl.org/hamfests/four-days-in-may-2)  **Location:**Fairborn , OH **Type:** ARRL Convention **Sponsor:** QRP Amateur Radio Club International **Website:** <http://qrparci.org/fdim> [**Learn More**](https://www.arrl.org/hamfests/four-days-in-may-2) | | **05/16/2025 - 05/18/2025** [**Dayton Hamvention**](https://www.arrl.org/hamfests/dayton-hamvention-8)  **Location:**Xenia, OH **Type:** **Sponsor:** Dayton Amateur Radio Association **Website:** [http://Hamvention.org](http://hamvention.org/) [**Learn More**](https://www.arrl.org/hamfests/dayton-hamvention-8) |
| **06/07/2025 -**[**FCARC Summer Hamfest**](https://www.arrl.org/hamfests/fcarc-summer-hamfest-5)  **Location:**Delta, OH **Type:** ARRL Hamfest **Sponsor:** Fulton County Amateur Radio Club **Website:** <https://k8bxq.org/hamfest> [**Learn More**](https://www.arrl.org/hamfests/fcarc-summer-hamfest-5) | | **07/20/2025 -**[**Van Wert Hamfest**](https://www.arrl.org/hamfests/van-wert-hamfest-9)  **Location:**Van Wert, OH **Type:** ARRL Hamfest **Sponsor:** Van Wert Amateur Radio Club **Website:** [http://w8fy.org](http://w8fy.org/) [**Learn More**](https://www.arrl.org/hamfests/van-wert-hamfest-9) |
| **08/02/2025 -**[**Columbus Hamfest**](https://www.arrl.org/hamfests/columbus-hamfest-6)  **Location:**Grove City, OH **Type:** ARRL Hamfest **Sponsor:** Aladdin Shrine Audio Unit **Website:** [http://columbushamfest.com](http://columbushamfest.com/) [**Learn More**](https://www.arrl.org/hamfests/columbus-hamfest-6) | | **08/09/2025 -**[**Cincinnati Hamfest℠**](http://www.arrl.org/hamfests/cincinnati-hamfest-4)  **Location:**Owensville, OH **Type:** ARRL Hamfest **Sponsor:** Milford Amateur Radio Club **Website:** [https://CincinnatiHamfest.org](https://cincinnatihamfest.org/) [**Learn More**](http://www.arrl.org/hamfests/cincinnati-hamfest-4) |
|  | | **08/16/2025 -**[**Portsmouth Radio Club 2025 Hamfest**](https://www.arrl.org/hamfests/portsmouth-radio-club-2025-hamfest-1)  **Location:**New Boston, OH **Type:** ARRL Hamfest **Sponsor:** ARRL, Jett Fire Equipment, Shawnee Computer and More **Website:** [http://www.portsmouthradioclub.com](http://www.portsmouthradioclub.com/) [**Learn More**](https://www.arrl.org/hamfests/portsmouth-radio-club-2025-hamfest-1) |
| **08/17/2025 -**[**Warren Hamfest**](https://www.arrl.org/hamfests/warren-hamfest-2)  **Location:**Cortland, OH **Type:** ARRL Hamfest **Sponsor:** Warren Amateur Radio Association **Website:** <http://w8vtd.com/hamfest> [**Learn More**](https://www.arrl.org/hamfests/warren-hamfest-2) | | **09/07/2025 -**[**Findlay Hamfest**](https://www.arrl.org/hamfests/findlay-hamfest-12)  **Location:**Findlay, OH **Type:** ARRL Hamfest **Sponsor:** Findlay Radio Club **Website:** [http://w8ft.org](http://w8ft.org/) [**Learn More**](https://www.arrl.org/hamfests/findlay-hamfest-12) |
| **09/28/2025 -**[**Cleveland Hamfest**](http://www.arrl.org/hamfests/cleveland-hamfest-5) **Location:**Berea, OH **Type:** ARRL Hamfest **Sponsor:** Hamfest Association of Cleveland **Website:** [https://www.hac.org](https://www.hac.org/) [**Learn More**](http://www.arrl.org/hamfests/cleveland-hamfest-5) | | **10/04/2025 -**[**Northwest Ohio Amateur Radio Club (NWOARC) Hamfest**](https://www.arrl.org/hamfests/northwest-ohio-amateur-radio-club-nwoarc-hamfest-1)  **Location:**Lima, OH **Type:** ARRL Hamfest **Sponsor:** Northwest Ohio Amateur Radio Club **Website:** [http://www.nwoarc.com](http://www.nwoarc.com/) [**Learn More**](https://www.arrl.org/hamfests/northwest-ohio-amateur-radio-club-nwoarc-hamfest-1) |
|  | | **08/16/2026 -**[**Warren Hamfest**](https://www.arrl.org/hamfests/warren-hamfest-3)  **Location:**Cortland, OH **Type:** ARRL Hamfest **Sponsor:** Warren Amateur Radio Association **Website:** <http://w8vtd.com/hamfest> [**Learn More**](https://www.arrl.org/hamfests/warren-hamfest-3) |

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Print an Official or Unofficial Copy of Your Amateur Radio License***

*(By Anthony Luscre, K8ZT)*

As of February 17, 2015, the **FCC no longer routinely issues paper license documents** to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS). The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one.

Licensees also will be able to print out an official authorization — as well as an unofficial “reference copy” — from the ULS License Manager. I’ve created a set of instructions on how you can request an **“official” printed copy of your license\***

https://arrl-ohio.org/wp-content/uploads/2024/07/print\_your\_license.pdf

***Final… Final***

I’m going to give you a break! Everything I have to say will show up next week’s in Post Script.

However, I want to THANK everyone who sent me an email stating that they had received the PostScript announcement last week via the ARRL Section Managers messaging system. I received over 100 confirmations – I appreciate that very much. The first one showed up in my email within 5 minutes of the announcement going out. I appreciate all of my friends in the Ohio Section!

Share the Magic of Radio!

73,

Tom WB8LCD

***“Swap & Shop” on the website***



Hey Gang,

Have you taken a look at the **Swap & Shop** page on the Ohio Section webpage yet?? Here’s a link that will take you there…

[http://arrl-ohio.org/section-swap-shop/](http://arrl-ohio.org/sm/s-s.html)

Do you have equipment that you just don’t need or want anymore? Here’s a great venue to advertise it, and it’s FREE!!

Is your club doing a fund raiser to help raise money? After a lot of thought, it was decided that the Swap & Shop webpage could also contain these types of items as well.

The same rules will apply as do for the For Sales and Give-A-Ways and will only be posted for a month at a time. Please see the Terms & Conditions on the webpage. You might want to list your location so that prospective buyers know where you’re at.

If your club is doing a fund raiser and wants more exposure, please forward the information to me and I’ll advertise it on the Swap & Shop webpage for you. Now, I still want to remind you that it won’t be listed in this newsletter because it would take up way too much space, so your ad will only appear on the website. It is there for any individual to post equipment Wanted / For Sale or Give-Away as well as for Club Fund Raisers. No licensed vehicles/trailers or business advertising will be posted.

Postings are text only (no pictures or graphics) will be posted for a maximum of 1 month from date posting and require a contact phone number or email within the posting. Send your Wanted / For Sale or Give-Away post to:  [swap@arrlohio.org](mailto:swap@arrlohio.org)

***Back Issues of the PostScript and Ohio Section Journal***

Hey, did you know that PostScript and Ohio Section Journal (OSJ) are archived on the website? You can go back and look at any edition simply by clicking:

<https://arrl-ohio.org/ohio-section-newsletter/>

Ohio Section Cabinet

|  |  |
| --- | --- |
| Section Manager – Tom Sly, WB8LCD | Section Traffic Manager – Dan Rinaman AC8NP |
| Asst Section Manager – John Levo, W8KIW | Asst Section Manager – Alan Andres, KD8ZBS |
| Section Emergency Coordinator – Bret Stemen KD8SCL | Section Youth Coordinator and Asst Section Manager – Anthony Luscre, K8ZT |
| Technical Coordinator – Jeff Kopcak, K8JTK | Affiliated Clubs Coordinator – Amanda Farone – KC3GFU |
| State Government Liaison – Bob Winston, W2THU | Public Information Coordinator – Elizabeth Klinc - KE8FMJ |

***Chit – Chat, and All That!***

Do you know someone that’s not getting these Newsletters? Please, forward a copy of this Newsletter over to them and have them “[Opt-In](mailto:Opt-In@arrl-ohio.org?subject=Opt-in)” to start receiving them. Heck just have them send an email to: [webmaster@arrl-ohio.org](mailto:webmaster@arrl-ohio.org) to be added.

We now have many thousands of readers receiving these newsletters weekly. Quite impressive, I’d say! I urge all of you to make sure that everyone, regardless of whether they are a League member or not, get signed up to receive these weekly Newsletters.



You can always “Opt-Out” at any time if you feel this is not what you were expecting. It’s fun and very informative. All of your favorite past newsletters are now archived too.

You can go back at any time and read them. Just go to: <https://arrl-ohio.org/ohio-section-newsletter/>

The pictures on the front page and throughout this newsletter are from various newsletters, Facebook posts and/or were sent directly to me in recent weeks. Take a good look at them, you just might be in one of the pictures! “SMILE… you’re in the Ohio Section News!!”

*The Ohio Section Journal (OSJ) is produced as a comprehensive look at all the programs within the Ohio Section. I sincerely hope that you have enjoyed this edition of the* *OSJ and will encourage your friends to join with you in receiving the latest news and information about the Ohio Section, and from around the world!*

[TOP^](#TOP)