2022 Annual Report

Radio Clubs: Strength in Numbers

Die

ARRL The National Association for Amateur Radio®



Amateur radio, also known as "ham radio," is a popular service and hobby with more than 769,500 practitioners in the US alone, and 1.75 million worldwide. The numerous activities that are possible on the amateur radio frequencies range from public service, to scientific experimentation, to sheer fun. There are federally licensed "hams" everywhere — in your neighborhood, in your workplace, in your schools.

The Amateur Radio Service is a core element of neighborhoods and municipalities across the United States. In times of disaster, amateur radio has repeatedly been the only means of communication into or out of an affected area, providing critical information to authorities at the time when it's most needed. Amateur radio operators serve their communities proudly, voluntarily, and without compensation.

Radio amateurs all share a basic knowledge of radio technology and operating principles, and they pass an examination from the Federal Communications Commission (FCC) in order to earn a license that enables them to operate on the amateur radio "bands."

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The American Radio Relay League (ARRL) is The National Association for Amateur Radio in the US. Today, with more than 151,000 members, ARRL is the largest organization of radio amateurs in the world. Our mission is simple:

To advance the art, science, and enjoyment of amateur radio.

In 2016, ARRL revised its vision statement to more incisively state the organization's intentions for our Second Century, which began with our centennial in 2014.

ARRL's Vision Statement

As The National Association for Amateur Radio in the United States, ARRL:

- Supports the awareness and growth of amateur radio worldwide;
- Advocates for meaningful access to radio spectrum;
- Strives for every member to get involved, get active, and get on the air;
- Encourages radio experimentation and, through its members, advances radio technology and education; and
- Organizes and trains volunteers to serve their communities by providing public service and emergency communications.

The execution of our mission is based on ARRL's Five Pillars: Public Service, Advocacy, Education, Technology, and Membership.



Celebrated inventor and entrepreneur Hiram Percy Maxim (1869 – 1936) created the American Radio Relay League in 1914 to help facilitate the relaying of messages via amateur radio. The resulting organized network of amateur radio operators helped send messages farther than any one station could reach at that time.

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A Message From the President



I'd like to tell you a story about a young boy who was born and raised in a small rural town. He didn't know anything about ham radio until one day he saw his first ham radio at a friend's house and learned that he could use it to talk around the world, which fascinated him. The boy immediately started studying for his Novice license.

The boy had heard about a radio club that met monthly in a small room at the top of the county courthouse. So one month, he rode his bicycle to the courthouse to attend a club meeting. The club was small, with 9 or 10 active members. They were adults, much older than the boy. In fact, he thought they were a bunch of "old guys." But they didn't turn the boy away; they took him in, worked with him, and taught him about the radio and operating. If he missed a club meeting, one of the members would call his dad on the phone the next day to ask if the kid was okay and if he needed a ride to the next meeting.

Those "old men" stuck by him, becoming his Elmers — mentors, as they are called today. He was active in the club through junior high and high school. At the end of every club meeting, they would fire up the old Viking Valiant transmitter and big Hammarlund receiver and make AM QSOs. The boy became a very active amateur radio operator known for handling emergency traffic, running nets, and working DX and contests.

Eventually, the boy left the small town and radio club to go to college. He graduated, went on to get a master's degree and a law degree, and then entered the world of corporate America. He was away from that small town for many years, until one day when he happened to be driving down the interstate near his hometown.

Some locals heard him on the repeater and recognized this grown man as the boy they had known years ago. They asked him to come through town, where his old club was helping a ham with an antenna. He had some extra time, so he drove to the house to find two or three of his boyhood Elmers assisting other club members. They were thrilled to see him. They were truly old men at this point, and he learned that his other Elmers had since died.

It struck him that the Elmers were not physically able to do antenna work — one was even in a wheelchair. The point was, they were there, showing their support and sharing their knowledge with the other club members who were there to help.

In that moment, it dawned on him just how important those Elmers had been to him when he was a boy, and even after he left the town to strike out on his own. As years passed, he would often hear of one of his former club members asking about him, his schooling, his career, his family, and his radio achievements. He realized how fortunate he had been, to have had that support — support that was having a positive impact even decades later. That club made an investment in that kid. They took him by the collar and put him on their shoulders and carried him.

For you see, the little kid who walked into that dusty room in the county courthouse all those years ago went on to do a lot of things in the wonderful world of Amateur Radio, including becoming President of ARRL.

Yes, that kid was me. I tell this story to emphasize the profound and positive impact that little club had on me. Like many other clubs, they had their ups and downs over the years, but they stuck together and had a lot to be proud of, including the legacy they gave to me and the other hams they helped.

It's so important for today's clubs to step up. They need to do their part in their community in ways that will assure that the Amateur Radio Service, this wonderful hobby, this great avocation, will grow for years to come. In this report, you'll read about the new ways ARRL is supporting clubs, to aid them in this mission, so that someday years from now, another adult will be able to look back and say a club helped them, the way my club helped me.

73,

Rick Roderick, K5UR President

Annual Report of the Chief Executive Officer

Let me begin by thanking you for your membership, your participation, and your patience in what was a pivotal and important year for our ARRL. We've worked very hard this past year to begin building out the foundation for the digital transformation of our member association so it can continue to service our needs as well as provide us with a dynamic and flexible platform from which to keep supporting the needs of future members.

I want to share with you the highlight of 2022 for me personally. I had the opportunity to not only attend, but to address, the Donor Recognition Reception at Dayton Hamvention[®]. This was a first for me. I have given to ARRL in the past, but never to a level where I could have attended such a prestigious event. My address to the donors was themed "The Good, the Bad, and the Ugly," which was a recap of what I had learned about ARRL from the inside, out — from behind the curtain. I did this to own up to and apologize for the sins of the past, and to look forward with enthusiasm and excitement to the future. The address was very well received, and the response to it at the event and in the many weeks after was inspiring — so inspiring, in fact, that my wife, Laura, and I decided that we would increase our donation to ARRL and join the ranks of Maxim Society members. If we're talking about 2022 in terms of "The Good, the Bad, and the Ugly," this tops my list of "the Good."

As for "the Bad," a rough part of 2022 involved "going live" with our new association management system. The system was selected some years ago, and it took considerable resources from staff to train on its new features and functionality, while also trying to get it to interface with other systems that are decades old — including our website! The implementation was not smooth, but was probably about the best we could hope for with such a small team. The new system lacks some of the features we enjoyed with the largely bespoke system we used to run on, but it provides us with a path forward for new features and support that we sorely lacked. Today the system is running well — not perfect, but pretty well. We continue to iron out little issues the system has thrown our way, as we begin to imagine what look and feel and features our new website might have.

The toughest part of the year — "the Ugly" — had to be reaching the conclusion that ARRL and amateur radio at large are in a very bad place when it comes to volunteerism and leadership. We have been watching everything from smaller clubs to larger events die off as the people who might have led them into the future were never developed, or never raised their hands to step up. It became clear that a determined effort is required to put a spotlight on this issue and provide the inspiration and leadership that are needed in order to make progress in this area and ensure that amateur radio pursuits and the community that enjoys them continue to grow and thrive. We have work to do in this area, and the work is just beginning.

To close out my letter, let's circle back to "the Good." I discussed in my letter last year that we had established a partnership with the Amateur Radio Digital Communications (ARDC) foundation to get significant funding out to clubs, to revitalize them or give them the funds necessary to pursue projects larger than their budgets could support. Although we had \$500,000 to fund these initiatives, we received grant applications for well over \$2,000,000! We completed two rounds of funding during the year, and we will be working in 2023 to follow up with the grant recipients to learn from their experiences and share them on our website (arrl.org) and YouTube channel (youtube.com/@ARRLHQ). Watch for them and be inspired!

Very 73,

David A. Minster, NA2AA Chief Executive Officer





Investing in the Future by Promoting and Protecting

Throughout ham radio's history, amateur radio clubs have recruited, licensed, and trained new radio amateurs, and have provided a community setting in which radio amateurs have been able to continue their education and training. ARRL has long recognized that it is in the best interests of amateur radio to encourage and support amateur radio clubs, and made that the organization's focus in 2022.





Most notably, that support came in the form of the new ARRL Foundation Club Grants program, funded by the California-based foundation Amateur Radio Digital Communications (ARDC), which made \$500,000 available to radio clubs, with individual grants of up to \$25,000 awarded for club projects that made it easier for clubs to provide and expand their important services.

The ARRL Foundation evaluated the grant proposals, with a key criterion being how the project would advance amateur radio in the grantee's community. In the first round, after the difficult work of selecting the grantees from 128 high-quality proposals, with requests totaling \$1.74 million, the Foundation awarded 24 clubs a total of \$270,000. The second round of applications to award the program's remaining funding brought in 85 proposals, with requests totaling \$1.08 million, and resulted in 21 grants that totaled more than \$240,000. Grantees reported successes and lessons learned in projects such as a workshop for new hams, licensing classes, and acquisition of equipment that furthers a club's ability to educate hams.

To shine the spotlight on clubs even more brightly, the August 2022 issue of *QST* carried the launch of a new column, "Club Station." Written by clubs, for clubs, each month "Club Station" showcases a different club activity or project, from its inception through its execution. "Club Station" topics thus far have included strategies for growing membership, revitalizing a dormant club, hosting inclusive activities and events, and more.

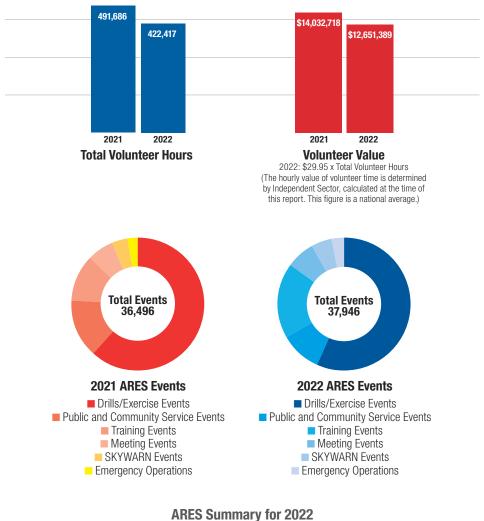
QST also began running a monthly list of new and renewing Special Service Clubs, which earn that designation by completing special projects, holding licensing classes, and working with local groups on events and activities. The "ARRL Club News" monthly e-news-letter also ramped up in 2022, giving clubs another outlet for highlighting their work in — and beyond — the ham radio community.

The Year in Review

Emergency Management

The Amateur Radio Service is most well-known for providing communications services at times when other methods are inoperable, through ARRL's Amateur Radio Emergency Service[®] (ARES[®]). Members are active in 50 states and territories.





Total Sections Reporting: 269 Total ARES Events: 37,946 Total Volunteer Hours: 422,417 Total Volunteer Value Provided: \$12,651,389

Interfacing with the Public

The Emergency Management Department is involved daily in assisting membership with concerns, questions, challenges, and other public-facing issues by way of phone calls, emails, and even occasional onsite discussions regarding EmComm, ARES, and other public service issues. Director of Emergency Management Josh Johnston, KE5MHV, and Emergency Management Assistant Ken Bailey, K1FUG, assist many individuals, both members and non-members, in issues surrounding the EC and PR courses we offer online and assist with any technical issues they may have.

This public engagement has gone a long way in helping the department understand what is needed and expected from ARRL and ARES. The opportunity to interact with local EmComm volunteers is important, and it's helpful to hear about their issues and successes. The interaction with the ARRL Sections continues, and the department will be providing information and guidance in engaging potential volunteers to work within their local groups.

Relationships and MOUs

In 2022, ARRL completed a new MOU with FEMA, and by year's end, it was being reviewed for approval. The department held several meetings with DHS CISA AUXCOMM Manager John Peterson, N4KEA, and continued ARRL's relationship with Army MARS via communications with Paul English, WD8DBY.

Ham Aid Program

The department continues to maintain the Ham Aid emergency equipment program. There are now 27 Ham Aid Kits at ARRL Headquarters. Four of those have been updated to include PACTOR IV modems. The inventory also includes several pre-positioned kits, with 10 in Texas, four kits each in the SFL and WCF Sections, and two kits each in the WWA, OK, LA, and MS Sections.



Largest SM Orientation Ever

One of the most important roles at ARRL has to be that of our Section Managers. Although these volunteers are elected by their members, they are the leaders of a Field Organization that reports to and is coordinated by ARRL Headquarters. The investment we make in creating and inspiring these volunteers so that they can deliver positive and supportive leadership to their members cannot be understated. To that end, in September 2022 we held the largest orientation for new Section Managers so far, with 22 attending because the COVID-19 pandemic didn't allow us to conduct in-person training during the previous 2 years. These 2 full days of seminars and meetings in Connecticut — including a visit to ARRL Headquarters allowed all participants to gain insight into their new leadership roles in the field.

Volunteer Monitoring Program

The Volunteer Monitor (VM) Program was established pursuant to a formal agreement made in March 2019 between ARRL and the FCC. It was developed to reenergize enforcement efforts in the Amateur Radio Service by replacing the Official Observer program and allowing for closer FCC cooperation. The FCC proposed the program after closing numerous field offices and reducing field staff. FC

Under the VM Program, serious violators are first contacted by the Program Manager or issued an advisory notice. If such efforts are unsuccessful, cases are referred to the FCC Enforcement Bureau. The FCC prioritizes cases developed by the VM Program above those submitted via the online complaint process.

2022 was the second full year of monitoring by approximately 175 volunteers. Many volunteers were lost due to COVID-19, but they have been replaced by those in the reserve pool of applicants established in 2019. The volunteers reported 47,605 monitoring hours on all amateur bands, including VHF, UHF, and above. Incident reports from that effort resulted in 120 advisory notices.

There were 22 Good Operator commendations issued in 2022.

Most complaints were resolved through advisory notices. However, 13 cases were referred to the FCC for enforcement action. The FCC also referred several cases to the VM Program for fact-finding.

Thanks to ARRL volunteers John Loughmiller, KB9AT, and Bruce Horn, WA7BNM, monitor hour and incident reporting became fully automated, and the original VMTRAC system was discontinued. The new system enables auditing of VM performance and permits more time for the Program Administrator to focus on substantive compliance issues.

Incident reports from volunteer monitors during 2021 raised concerns about Technician-class licensees operating on FT8 on 40 meters, as well as other operators using unauthorized frequencies. During 2022, those cases slightly subsided. Most of the FT8 operations on 40 meters by Technician-class operators were inadvertent. About six cases of deliberate interference on 40 and 75 meters are now with the FCC, as advisory notices have been unsuccessful.

In 2022, repeat violations by those who have received advisory notices (other than the six aforementioned cases) were less than 1%.



New England ARES, SKYWARN Mobilized for Major Winter Storm and Blizzard

In January, amateur radio operators across New England were active for a major winter storm and blizzard causing several feet of snow, hurricane-force wind gusts at the coast, tree and power line damage from the combination of wet snow and damaging winds in portions of East Coastal Massachusetts, particularly Cape Cod and the Islands, and minor to moderate coastal flooding at the time of the high tide cycle. The blizzard broke various records and placed in the top 10 of major snow events in the cities of Boston and Providence.

Western Massachusetts ARES and SKYWARN supported a Western Massachusetts Emergency Net on 3944 KHz, open to all amateurs in New England, with more than a dozen nets yielding close to 100 reports of snowfall and other conditions.

The New England Echolink and IRLP reflector system was also utilized, with many SKYWARN reports relayed on that system. Close to a dozen repeaters had rolling Amateur Radio SKYWARN Nets gathering snowfall reports, damage reports, and current conditions from around the region. DMR was utilized for SKYWARN efforts both in Southern New England and across portions of the state of Maine.

Eastern Massachusetts ARES Section Emergency Coordinator and SKYWARN Coordinator Rob Macedo, KD1CY, said,

The amateur radio nets provided a tremendous amount of situational awareness regarding snowfall accumulations and the high rate of snowfall that was occurring, storm damage and wind gusts that were reaching hurricane force gusts across East Coastal Massachusetts, Cape Cod and the Islands, and moderate coastal flooding at the time of high tide. Over 115,000 customers were without power in Massachusetts, with outages centered over Southeast Coastal Massachusetts and especially Cape Cod and the Islands where the combination of wet snow and damaging winds caused the most damage. The information was shared with the National Weather Service, Massachusetts Emergency Management, and the media, providing an up-to-date situational awareness picture in near real time of what was occurring as the blizzard affected the region.



Oklahoma Tornado Outbreak

On May 4, 13 tornadoes occurred in the central and eastern parts of Oklahoma. To help with emergency communications support following the tornadoes, the Oklahoma Department of Emergency Management and Homeland Security requested support from Oklahoma ARES. Seven amateur radio operators (including James Strauss, AA5PD, pictured above) were active for 8 hours, providing voice communications between chainsaw and debris removal teams from their base at Seminole State College's volunteer center.

High Park Fire Response in Colorado

ARES Region 2 Emergency Coordinator and ARES PIO for the ARRL Colorado Section John Bloodgood, KDØSFY, reported that Colorado ARES provided operators for the federal Type 1 Incident Management Team fighting the High Park Fire reported on May 12 in Teller County, Colorado. Due to other deployments, no National Wildfire Coordinating Group-certified radio operators (RADOs) were able to answer the call for several days, leading ARES to supply 12 operators who supported as RADOs, not using amateur radio. Their duties involved radio operations on the Command channel, inventorying, cloning, issuing, and receiving radios. ARES operators also helped establish and remove a fire radio repeater and an amateur radio repeater on nearby Mt. Pisgah to fill in coverage.

Additionally, when the fire initially started, some residents reported not having received notifications. As a result, the Teller County Sheriff and Sheriff's Office PIO requested that members of the Mountain Amateur Radio Club, which operates several repeaters in



the county, disseminate information about evacuations, closures, and shelters via ham radio, with the hope of getting information into the hands of other local operators who could in turn get this information to their neighbors.

One of the ARRL Colorado Section PIOs worked initially with the Sheriff's Office PIO and then with the incident JIS (Joint Information System, an ICS function) to help get the word out via social media, as most of the local news media and many local hams already follow the local ARES accounts.

The incident transitioned back to local control on May 20, and ARES stood down from the RADO role at that time. The Mountain Amateur Radio Club did continue to disseminate information after that. The initial COML and COMT were extremely pleased with the support. Total person hours were about 320 hours.

Hurricane Ian Response

As Hurricane Ian and the subsequent tropical storm crossed Florida, amateur radio operators provided communications support for weather updates and requests for assistance.

The hurricane made landfall at 3:00 PM Eastern time on September 28, 2022, just south of Tampa, as a Category 4 hurricane with winds of 150 miles per hour. Millions of residents were without power, and damage was reported as extensive along the storm's initial path.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, was in regular contact with ARRL Section Managers and Section Emergency Coordinators in Florida and throughout the southeastern US. Johnston said ARRL was also in touch with national-level partners, including FEMA and the Cybersecurity & Infrastructure Security Agency, should any requests for direct emergency communications via amateur radio be needed.

Johnston said many ARRL ARES® volunteers and their groups were involved across Florida, Georgia, and South Carolina and that there were ARES members serving in the state Emergency Operations Center at the request of the Florida Division of Emergency Management. Many ARES groups were also operating in several shelter locations.

ARRL had previously deployed Ham Aid Kits in the region. The kits include amateur radio equipment for disaster response when communications equipment is unavailable.

W1AW, the Maxim Memorial Station at ARRL Headquarters in Connecticut, activated its Winlink station to handle PACTOR III and IV messages and traffic, as well as its SHARES station, NCS310.



Bobby Graves, KB5HAV, Net Manager for the Hurricane Watch Net (HWN), said the net continued operations for days, initially receiving weather data, then transitioning to gathering post-storm reports that included information about damage and flooding. He pointed out that FEMA's office in the National Hurricane Center (NCH) looked at the reports in order to get help and humanitarian assistance where it was needed.

The VoIP Hurricane Net was active as well. Director of Operations for the VoIP Hurricane Net and ARRL Eastern Massachusetts ARES Section Emergency Coordinator Rob Macedo, KD1CY, said the net supported WX4NHC, the Amateur Radio Station at the National Hurricane Center in Miami, Florida.

The Sheriff's Tactical Amateur Radio Communications (STARC), W4HSO, activated from September 26 through September 29, 2022. STARC has amateur radio equipment in five of the Hillsborough County Sheriff's Office locations, as well as a Homeland Security office. Over the course of the 4-day activation, 16 STARC volunteers worked 24 hours a day passing information for aid and assistance through the sheriff's office using WebEOC, a web-based emergency management information system.





Frank Torres, WP4QNQ, served as net control station in the Caribe Wave tsunami exercise. [Photo courtesy of Angel Santana, WP3GW]

Puerto Rico ARES, Radio Amateurs Take Part in 2022 Caribbean Tsunami Exercise

Once again in 2022, radio amateurs in Puerto Rico took part in the annual Caribe Wave exercise, conducted on March 10 by the UNESCO Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions. Its major objective is for countries, emergency managers, and communities at risk to test, validate, and update their tsunami response plans. In Puerto Rico, Caribe Wave is conducted in coordination with the Puerto Rico Seismic Network (PRSN) and other agencies.

The plan used various radio systems, first creating a message on a radiogram form and then converting it to IC-213 format for use with the other radio services to be disseminated. Exercise coordinators planned with the PRSN and ARES Zone 5 Emergency Coordinators to pass the messages sent from the PRSN via Winlink on HF and to GMRS systems of various Municipal Emergency Management Agencies of the Zone. Later, it included sending the messages to US Army MARS and the National Guard via Automatic Link Establishment. They were also sent on 40 meters so other ECs around the island could receive and process the messages.

The Federación de Radio Aficionados de Puerto Rico (FRA) conducted a special VHF/UHF net to collect information from amateur stations on how they received the alert.

Winlink Exercise in FEMA Regions 4 and 6 Was a Major Success for At-Risk Areas

The states in adjacent FEMA Regions 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) and 6 (Arkansas, New Mexico, Oklahoma, and Texas) jointly participated in a communications outage exercise May 31 – June 1 with a cyber-attack scenario run in four major metropolitan areas: Charlotte, North Carolina; Dallas, Texas; Miami, Florida; and Little Rock, Arkansas.

In addition to Winlink, with CISA SHARES and amateur radio operators providing Field Situation Reports to be exercised by the states in the two FEMA regions, were the following additional emergency communications systems: FEMA National Radio System, National Warning System, MSAT G2 (Multi-State Satellite talk groups), and Multi-State linking of P25 statewide trunking networks.

The scenario and task for Winlink operators were simple: cities in the two Regions were suffering communications outages, and affected emergency management agencies needed "ground truth" information. If an operator was not in the affected cities, they configured and reported on specific configuration data for the Field Situation Report and sent it using RF (over the air) modem protocols or Telnet. If the operator was located within the affected cities, they were tasked with reporting outages on the Field Situation Report by using RF only.

There were a whopping 997 responses from operators, which provided adequate information regarding the locations of the cyber communications issues. The exercise led to major enhancements in Winlink Express regarding statistical information from resulting input from the mappable forms.

Cascadia Rising 2022

The Cascadia Rising 2022 (CR22) preparedness event presented six preparedness activities in the Pacific Northwest in June 2022 to prepare for the next full-length rupture of the Cascadia Subduction Zone (CSZ) fault, which will necessitate response efforts continuing for weeks to months, and a recovery period stretching into years.

Activity #1: Washington EMD Workshops

The Washington Emergency Management Division held two virtual discussion-based workshops — one on Critical Transportation (ESF #1) and one on Mass Care Services (ESF #6).

Activity #2: WSDOT Functional Exercise

The Washington State Department of Transportation (WSDOT) held a functional exercise on June 15 – 16. In the event of a CSZ rupture





incident, volunteers will be needed to supplement WSDOT staff in performing post-incident assessment of the critical transportation situation. For this exercise, amateur radio participants traveled to bridges on state and federal highways in their local area, performed Level 1 Post Earthquake Bridge Inspections, and transmitted a Bridge Damage Report Form to WSDOT.

Activities #3 & #4: NTEMC Full-Scale Exercise

The National Tribal Emergency Management Council (NTEMC) held Thunderbird and Whale 2022 (TW22), the first national-level full-scale exercise fully planned and executed by tribal nations, from June 9 through June 19. The exercise covered FEMA Response Phases 2A, 2B, and 2C, and all Community Lifelines were activated. Federal partners included USDOT, USGS, CISA, DOI, BIA, USCG, NOAA, US CBP, FirstNet, and FEMA Regions 8 & 9. State partners included Oregon Health Authority, WA Department of Agriculture, and WA Department of Health. Local and community partners included NGOs, food banks, several airports, and many others.

As this exercise kicked off on June 9, simulated situation reports were collected on HF from amateur radio stations in the affected areas. Ham radio was the backbone of ESF #2 Communications for TW22.

Activity #5: Washington DART/EVAC Functional Exercise

Several Disaster Airlift Response Teams (DARTs) and the Emergency Volunteer Aviation Corp held Thunder Run 2022 on June 18, testing the West Coast General Aviation Response Plan. These groups used general aviation aircraft to fly 17,000 pounds of food from a supply depot at the Walla Walla Regional Airport to two distribution hub airports in the Puget Sound area. In addition, the Aero Club of BC from British Columbia, Canada, flew 30,000 pounds of food into Bellingham International Airport (as the customs/drop-in point), and then assisted other aircraft flying supplies to airfields in the Puget Sound area. Amateur radio support tracked aircraft arrivals, supply manifests, and aircraft departures and passed that information on Winlink.

Activity #6: Oregon DART Functional Exercise

The Oregon DART held Whale Run 2022 on June 18 and 19. General aviation aircraft flew 10,000 pounds of food from a supply depot at the Walla Walla Regional Airport to three distribution hub airports in the Willamette Valley. From there, food supplies were flown to destination airports near tribal populations in Southwest Washington, Oregon, and Northern California. Amateur radio support tracked aircraft arrivals, supply manifests, and aircraft departures and passed that information on Winlink.

SoCal Shifting 2022 Functional Exercise

SoCal Shifting 2022, held the weekend of June 18 – 19, saw more than 100 amateur radio operators practicing their Winlink hybrid email/radio system skills during an earthquake scenario exercise organized by ARES LAX Northeast. Participating groups included LA County DCS, San Diego ARES, San Diego County Sheriff ACS, and Ventura ARES/ACS, as well as the United States Geological Survey and many other groups across the US, thanks to publicity from the EmComm Training Organization (ETO).

The goals of this exercise were to familiarize participants with the battle rhythm of organized earthquake response, encourage operators to share their reports with more than one organization with the intent of working toward a common operating picture, and practice Winlink under blue skies and identify challenges to operator form submissions and net control/traffic station message handling.

Operators sent in excellent reports, with latitudes and longitudes correct and mappable in all but a handful of the 370+ messages received.

Advocacy

ARRL is Amateur Radio's proactive advocate and representative voice in achieving regulatory and legislative success. Through our efforts in Washington and on the international stage,



through the auspices of the International Amateur Radio Union (IARU), ARRL works to ensure that access to the Amateur Radio spectrum remains available and free from interference, as well as from acquisition by commercial interests. ARRL is an active participant working with US government agencies to prepare positions and proposals to the Americas Regional Telecommunications Organization the Inter-American Telecommunication Commission (CITEL) — and at the global level, the International Telecommunication Union (ITU).

WRC-23 Preparations

Immediately following the conclusion of WRC-19, work began to prepare for World Radiocommunication Conference 2023 (WRC-23). Results of the first session of the **Conference Preparatory Meeting for WRC-23** (CPM 23-1) contain the agenda for WRC-23. Several WRC-23 agenda items relate to the Amateur Radio Service or the Amateur Satellite Service. ARRL participates in the relevant ITU-R Working Parties, as well as the regional (CITEL) preparation of proposals that address each item as they may impact Amateur Radio. ARRL works closely with members of the IARU team on all aspects of the WRC-23 agenda items. The decisions of WRC-23 may have a significant impact on Amateur Radio, in terms of additional new allocations being identified for International Mobile Telecommunications (IMT), as well as with guidance administrations possibly opting to protect the radionavigation-satellite service (RNSS). Also, the agenda for the next WRC (WRC-27) may identify areas to be studied, which may impact Amateur Radio in the future.

ITU-R Working Party 5A (WP 5A) is responsible for studies related to the land mobile service (excluding IMT), including wireless access in the fixed service, and is also responsible for studies related to the Amateur and Amateur Satellite Services. WP 5A is considered the "home" for Amateur Radio within the ITU. Working Group 5A-1 is the Amateur and Amateur Satellite Services subgroup, chaired by Dale Hughes, VK1DSH, on the Australian delegation, while ARRL's Jon Siverling, WB3ERA, serves as the alternate chairman. WRC-23 will consider the "mid-bands" for IMT 2020 and beyond under agenda item 1.2: to consider identification of the frequency bands 3300 – 3400 MHz, 3600 – 3800 MHz, 6425 – 7025 MHz, 7025 – 7125 MHz, and 10.0 – 10.5 GHz for IMT, including possible additional allocations to the mobile service on a primary basis.

ARRL is advocating the retention of the amateur secondary allocation of 3300 - 3400 MHz in Regions 2 and 3, as well as opposing the identification of the 10.0 - 10.5 GHz band for IMT.

Two Working Parties (WP 5A and WP 4C) are working on the topic to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service in the band 1240 – 1300 MHz. The Amateur and Amateur Satellite Services have successfully co-existed with all the primary services in the range 1240 – 1300 MHz for many years. ARRL and the US advocate the position that any additional regulatory, operational, or technical measures incorporated into the Radio Regulations are unnecessary.

Specific proposed methods to address each WRC-23 agenda item are contained in the CPM Report, which will be finalized in early 2023. Throughout the preparation process leading up to WRC-23, ARRL actively participates in the FCC's WRC Advisory Committee (WAC).

Protecting Against Future Impacts

ARRL is vigilant on several agenda items that may impact Amateur Radio, such as the item to address the Earth Exploration Satellite Service (Active) spaceborne radar sounders "around" 45 MHz. ARRL worked to protect the adjacent 50 – 54 MHz amateur band. Another area that earned ARRL's attention was the spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems.

"How different amateur radio would be today without its stalwart volume of knowledge we have all come to rely upon through our radio careers."

 ARRL CEO and Secretary David A. Minster, NA2AA, from the 100th edition of *The ARRL Handbook for Radio Amateurs*.



Right: Handbook collector James "Skip" Youngberg, K1NKR, with his 1950 edition.

Throughout 2022, ARRL worked to protect the Amateur Services from any future harmful impact by wireless power transmission, whether for electric vehicles or for charging of portable/mobile devices. This spectrum management work continued in 2022 within the ITU-R Working Party 1A.

Work with CITEL

ARRL participates in regional preparations within the Permanent Consultative Committees of the Inter-American Telecommunication Commission (CITEL). Regional proposals (Inter-American Proposals, or IAPs) for the World Conference from the America's Region are crafted in CITEL's Permanent Consultative Committee II: Radiocommunications.

ITU Election Results

The ITU held the 2022 Plenipotentiary Conference and conducted elections for five management positions. Doreen Bogdan-Martin, KD2JTX, was elected as the new Secretary General of the ITU, effective January 2023. She is a strong supporter of Amateur Radio in the ITU and ARRL.

Membership, Marketing, and Communications

Handbook 100

Dubbed "Handbook 100," the 100th edition of *The ARRL Handbook for Radio Communications* made its debut in October. The book is the culmination of nearly a century of technological progress and achievements by radio amateurs.

The book's significantly revised and expanded content was made possible by many contributing authors and editors, and led by Editor H. Ward Silver, NØAX. A special collector's edition has delighted buyers with a striking black-finish hardbound cover with silver foil embossing, and piano-finish jacket. A special full-color insert includes a retrospective told through previous edition covers and pages, and features an interview with *Handbook* collector James "Skip" Youngberg, K1NKR.





NCJ Turns 50

National Contest Journal – NCJ began its 50th year of publication in 2022. Past NCJ Editor Scott Wright, KØMD, noted, "That's a long time since founding editor Tod Olson, KØTO (SK), launched the magazine on his kitchen table."

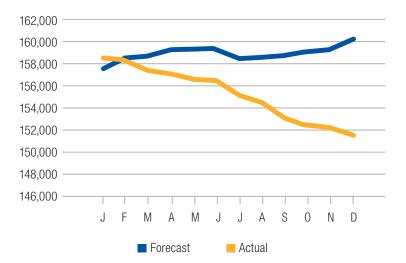
Some years after the first issue appeared in January 1972, ARRL helped to take over its publication, ensuring *NCJ* would continue to serve each new generation of contesters as a forum for contest-specific information, results, and ideas. Since 2020, members have been able to enjoy *NCJ* as part of the suite of four ARRL magazines available as digital editions to all members, including *QST*, *On the Air*, *QEX*, and *NCJ*. A print subscription is also available.

In keeping with its mission, *NCJ* treated readers to an impressive array of content in 2022. Included were news and predictions during the ascent of Solar Cycle 25, profiles of top contesters and their stations, tips for earning a competitive advantage, coverage on gear and station building, and much more.

Member Open House

In October, we welcomed members to ARRL Headquarters for an Open House. The event was organized to help share information about job openings, volunteer opportunities, and recruitment for a new Connecticut Section Manager and positions in the Field Organization.

2022 Membership: Forecast vs. Actual





2022 ARRL National Convention in Orlando

2022 heralded a return to many in-person hamfests and conventions following the previous 2 years of the pandemic. The year started off with the 2022 ARRL National Convention, in conjunction with Orlando HamCation[®]. The convention theme, "reDiscover Radio," highlighted the commitment made by amateurs to developing knowledge and skills in radio technology and radio communication.

ARRL organized four simultaneous all-day Training Tracks for more than 1,000 attendees who kicked off the convention on February 10. The National Convention luncheon included a keynote address from ARRL CEO David Minster, NA2AA, who shared his passion for ham radio and encouraged all attendees to find more ways to get "radio-active."

In addition to many exhibitors, forums, and a huge flea market at HamCation, ARRL hosted a large exhibit area supported by many program representatives and volunteers. The published gate figure for all 3 days was 19,500.

ARRL at 2022 Dayton Hamvention® By all accounts, the 2022 Dayton Hamvention®, which also served as the 70th reunion show, was a great success. Thousands of attendees passed through the gates during its 3-day run, May 20 – 22, in Xenia, Ohio.

ARRL's large exhibit area, ARRL EXPO, included a steady flow of visitors who were treated to more than a dozen booths. Using the theme "Be Radio Active," ARRL also organized many Hamvention forums to encourage attendees to become more active and involved with amateur radio.





Member Rhonda Leonard, KC1KYN (at left), got on the air from W1AW during her visit to ARRL Headquarters for the Open House. Member Tom Gaines, Jr., KB5FHK (center of page), from Fort Walton Beach, Florida, readies his portable satellite station for a demonstration at HamCation. ARRL's big team at Dayton Hamvention (above) included 80+ program representatives and volunteers, including members of the ARRL staff, Board of Directors, and Field Organization.



Above: Just a few of the 2022 Teachers Institute attendees. Below left: The kit that teachers are given to use throughout the week in the Teachers Institute.

Education & Learning Department

Reaching and Teaching More Teachers The Teachers Institute (TI) is integral to ARRL's mission and vision of advancing the art, science, and enjoyment of amateur radio through education. Through funding from the generous support of donors, the TI expanded from three to five in-person sessions in 2022. A total of 51 teachers from 32 states were provided with a week-long professional development program filled with lectures, hands-on activities, and demonstrations that were intended to provide teachers



with tools and strategies to introduce to their students subjects such as basic electronics, radio science, satellite communications, and of course, the joy of amateur radio.

Increased efforts were made in 2022 to reach more potential attendees through exhibiting at educational technology and science conferences throughout the year.

Learning Center Continues to Grow

Launched in the fall of 2021, the ARRL Learning Center continues to serve amateur radio enthusiasts of all levels. In 2022, 32,509 users accessed webinars, podcasts, courses, and books online. Several new courses are under development, as well as a new area for teachers and instructors to access lesson plans and demonstrative videos to share with students. The ARRL Learning Center can be found at learn.arrl.org.

Education and Technology Program Grants

More than \$14,000 was awarded this past year through eight grants, for radio station equipment, related software equipment, and resources for schools across the country. Some of the grants awarded included:

Beaverton School District (Oregon), for foxhunting equipment and an SDR weather station

Bedford-North Lawrence High School (Indiana), for a school HF/VHF/UHF station

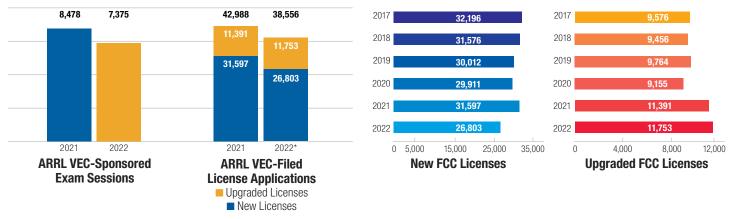
Orangeburg Christian Academy (South Carolina), for high-altitude balloon

equipment

Next Generation of Hams

ARRL is committed to reaching and inspiring the next group of amateur radio enthusiasts — our youth. New flyers and pamphlets were produced to use with outreach at hamfests. Additionally, surveys were conducted to gain further insight into what most interests youth in amateur radio.

The ARRL YouTube channel viewership grew by 20% in 2022, to 4,200 subscribers. YouTube remains the top social media platform among teens today.



*Sessions conducted are lower than 2021 totals because many teams shifted from remote video sessions back to in-person sessions.

ARRL Volunteer Examiner Coordinator (VEC) Program

The ARRL Volunteer Examiner Coordinator (VEC) continues to maintain its position as the largest VEC in the nation, handling 65% of total amateur radio exams administered.



New licenses issued decreased by 15%, with the FCC issuing 26,803 new amateur licenses in 2022, as compared to 2021's total of 31,597. Upgraded license activity increased by 3%, as seen in the 11,753 FCC-issued upgraded licenses in 2022, compared to 11,391 in 2021. For the first time in nearly 15 years, total FCC license activity declined. By the end of 2022, there were 769,536 radio amateurs in the FCC database.

ARRL VEC filed a total of 30,088 license application forms in 2022, compared to 28,411 in 2021. Club license activity increased slightly in 2022, with 1,261 club license applications filed, as compared to 1,222 in 2021. 302 new club license requests were filed this year, an increase from 261 last year.

ARRL served 26,400 exam applicants in 2022, which was down slightly from 2021. Additionally, ARRL conducted 7,375 exam sessions in 2022, a decrease from the 8,478 sessions in 2021. Sessions conducted are lower than 2021 totals because of the shift back to in-person sessions from remote video sessions. ARRL-administered exam elements decreased from 34,941 in 2021 to 32,781 in 2022.

Online Testing

With the shift to the ExamTools online examination system, ARRL VEC staff solicit VEs about going completely digital, and new VE teams are trained in the ExamTools system on a weekly basis. The availability of remote video online sessions makes it easy for candidates to take the exams. In the past 3 years, more than 42,000 applicants have taken online exams.

ARRL had the second largest number of exam applicants served in ExamTools in 2022. Of the total 16,002 exam applicants served in the ExamTools system in 2022, 13,645 were successful and earned a new or upgraded license. The successful ExamTools candidates account for 35% of all FCC licenses issued in 2022.

Despite the decrease in new license activity, 1,604 new VEs joined our program, resulting in a total of 28,421 accredited ARRL VEs. For the first time in the history of our program, a VE has achieved participation in more than 6,000 sessions. Six ARRL VEs reached 1,000 sessions of participation, one reached more than 2,000 sessions, one reached more than 3,000 sessions, and two reached more than 4,000 sessions.

The shift to the ExamTools online examination system has allowed ARRL VEs to better serve our community. Additionally, ARRL VEC's interactive upload page allows VE teams to submit electronic documents quickly, easily, and securely. Uploading this way results in quicker FCC processing and significantly less wait time for a license. What might have taken a few weeks in the past is now taking a few days. Our VEC is averaging 100 to 150 uploaded session files (both in-person and remote video) per week.

New Question Pool

ARRL VEC Manager and National Conference of Volunteer Examiner Coordinators (NCVEC) Vice Chairman Maria Somma, AB1FM, represented our members on the NCVEC Question Pool Committee (QPC), and participated in the review and production of the new Element 3 General-class question pool, which will take effect in July 2023.

New Expertise in the ARRL Lab

2022 brought two new additions to the ARRL Lab staff. Steve Anderson, W1EMI, was hired as Senior RFI Engineer in January, coming to ARRL from his position as an Air Pollution Control Engineer and Supervising Environmental Analyst with the State of Connecticut. A ham for more than 40 years, Steve helps man ARRL's Technical Information Service, works to resolve interference problems at the lowest possible level, and continually expands the Lab's efforts to report on noisy devices.

In June, George Spatta, W1GKS, came on board as Assistant Laboratory Manager and product testing engineer for *QST*'s renowned Product Reviews. George comes to ARRL with extensive experience in component-level electronics testing, troubleshooting, and repair. Prior to his employment with ARRL, George worked as a LabVIEW developer and an electronics technician, and had a 30-year career in the music industry as a recording engineer/producer. When asked about his goals, George said he will "work to bring the ARRL Lab back to...the state of the art in providing technical information to our membership."

The ARRL Clean Signal Initiative

Initially conceived in 2020 as the result of a desire to help solve issues created by overmodulated and distorted signals on the bands, the ARRL Clean Signal Initiative (CSI) was



unanimously approved by the ARRL Board of Directors in January 2022, and the first meeting was held in August.

The CSI is envisioned as an extension of ARRL, which has traditionally established performance expectations within the Amateur Radio Service and hobby, and has educated amateurs on how to meet them. ARRL has also historically worked with equipment manufacturers to correct shortcomings in design and performance that are revealed in the ARRL Laboratory's tests of the equipment. The CSI will undertake similar activities, with the 5-year goals being:

- Repurposing the ARRL Lab's existing Test Review Team into the Technical Standards Committee, which will include Lab staff and outside consultants who will maintain and represent CSI materials and programs.
- Working with major amateur radio transceiver manufacturers to create performance benchmark standards on a per-parameter basis.
- Agreement on test procedures and the publication of results with major transceiver manufacturers, and the addition of transmitter tests and results to QST Product Review.
- The creation of an equipment certification program.
- Exploring the feasibility and desirability of working with the IARU to develop standards internationally.
- The creation of a program for assessing signal purity, with rationale stated in terms of on-air effects, while also assessing the feasibility and desirability of an organized monitoring function.
- The development of educational materials that instruct amateurs on how to meet primary technical and operational expectations by using their radio controls effectively.
- Reporting to the ARRL Board of Directors twice a year to outline on-air results, standards and educational deliverables, and resource needs.

The ARRL Laboratory has a significant role in the CSI, with Lab staff serving on the Clean Signal Initiative Committee, establishing a Test Review Team made up of volunteers who will advise on methodologies, procedures, and developments that necessitate changes in ARRL's testing and reporting, and generating educational information about how to achieve maximum equipment performance with clean signals, and more.

For more information on the development, purpose, and current status of the CSI, see "The ARRL Clean Signal Initiative" in the June 2023 issue of *QST*.

New Director of Information Technology Joins ARRL

In August, Steve Berry, N1EZ, of Bedford, New Hampshire, stepped into the new position of ARRL Director of Information Technology.

In this role, Berry is responsible for the overall strategic and operational IT functions, including continuous evaluation and execution of processes, systems, applications, and infrastructure. He also manages a team of professional IT contributors who help to fulfill a variety of technology services for ARRL, including corporate databases and systems, websites and web services, server support, and coordinating outside suppliers of technology services and contracted resources.

"I'm excited to lead our digital transformation at ARRL. We've made significant progress toward our goal of an integrated data platform," Berry shared. "By making our information systems more accessible, integrated, and secure, we are steadily



moving toward better supporting our volunteers, offering additional services to our members, and developing new and exciting applications in support of amateur radio."

A ham for 45 years, Berry began his 35-year IT career in software development. While working for AT&T Bell Labs (now known as Nokia Bell Labs) as a network consultant, he built his first consulting firm, which focused on Unix networking and electronic publishing. In 1995, Berry founded Strafford Technology, which offered business intelligence consulting services and delivered Enterprise Performance Management solutions to Fortune 500 organizations based on Oracle/Hyperion technology.

"I feel truly honored to give back to ARRL and the hobby," he said. "Both have done so much for me, especially with the many friends I have made over the years and the ham mentors who gave me a start in my career."

From the Foundation President

It is my honor to serve as President of the ARRL Foundation, and as we finish another successful year, we look back on so many years of scholarships benefiting students and advancing the future of amateur radio. In 2023, we will celebrate the 50th anniversary of the ARRL Foundation. With that in mind, let me take you back to 1973 and the archives from *QST*:

From time to time, ARRL has been the recipient of substantial contributions from individual amateurs — to further the work of the League. The ARRL Board of Directors, after exploring over a period of several years, has decided to set up a separate entity specifically to solicit, receive, and disburse such gifts. By unanimous vote, it directed the formation of an ARRL Foundation. There are many areas in which the Foundation could usefully provide funds for expanded or new activities, including scholarships. However, the ARRL Board expressed the strong view that the number one objective at the start should be amateur space communications.

At the first Foundation Board meeting, Director Harry Williams, W1MBK, and Chairman of the Board of the Hartford Insurance Group, stated, "Amateur radio offers the young people of our country and the world, especially through our communications satellite program, a unique opportunity for direct, personal involvement in today's world."

Now, approaching our 50th anniversary, nothing could be more true.

In these past 5 decades of service, the ARRL Foundation has awarded countless scholarships to hopeful young radio amateurs, has supported space programs from OSCAR to ARISS, and continues modestly providing financial resources through its grant program.

The recent support the Foundation has received from Amateur Radio Digital Communications (ARDC) has been transformational. We have been able to dramatically increase the funding of scholarships through their generosity, and are working through a program of Club Grants where more than \$500,000 was distributed to clubs looking to take on new projects or sustain their organizations — and to share their learning with others.

Both ARRL ("The League") and the ARRL Foundation ("The Foundation") continue to work closely "holding hands" for the betterment of amateur radio. The Foundation carefully manages a portfolio of endowments where donors have provided specific goals for their gifts, and that portfolio is invested and managed in a way that it can continue to support those goals for many years to come.

David Norris, K5UZ

President, ARRL Foundation *Director, Delta Division, ARRL*

Development

Development at ARRL is focused on cultivating the philanthropic support for our mission. Organized efforts supporting various funds and projects, with a primary focus on the Diamond Club and the General Fund, support the organization through deficit spending challenges. For the ARRL Foundation, the focus remains squarely on the extensive scholarship program that we operate, the continuing relationship with ARDC, and finding places where the Foundation may play a role in supporting ARRL initiatives, like the new Convention Grant program to help division conventions remain vital through any financial challenges they may be encountering. What is the future of the Foundation? Tomorrow's Foundation may evolve into playing a significant role in the funding of ARRL as new revenue strategies evolve for keeping ARRL strong through the decades to come.

Fundraising in 2022 ended with strong results. There were 5,510 unique donors who contributed nearly \$2 million of support to ARRL.



2022 Fundraising Results

•	
Education & Technology	\$455,710
Diamond Club	\$417,993
Unrestricted Donations	\$415,476
Spectrum Defense	\$251,919
Other Endowments	\$180,001
General Endowment	\$178,314
Other Funds	\$21,461

Giving Tuesday

Results from the 2022 Giving Tuesday campaign exceeded all previous years, with total contributions of \$46,600 from 265 individual donors.

Legacy Circle

ARRL Legacy Circle recognizes those who have included ARRL in their estate plans. In 2022, ARRL received five estate bequests, ranging from \$1,000 to \$300,000.

Diamond Club

Diamond Club is an important way for members and donors to provide critical resources of unrestricted revenue to support ARRL in areas of greatest need. Life Members of ARRL can support Diamond Club beginning at \$50, and all annual members can join Diamond Club at the Basic level of \$95, an increase from \$85 in the previous year. Contributions exceeded the budget target by \$28,000 in 2022.



ARDC

ARRL and the ARRL Foundation are thankful for the strategic relationship with, and continuing support from, Amateur Radio Digital Communications (ARDC), a private foundation. Beginning in 2019, ARDC shifted its focus to the establishment of a grant program and restructuring from a nonprofit organization to a private foundation. Its vision is a world where communication technology is available through open-source hardware and software, and where anyone has the ability to innovate upon it.

ARDC's roots in amateur radio and the technology of internet communication create an excellent partnership in the support of our shared mission to advance the awareness and growth of amateur radio worldwide. Through this partnership, and grant support from ARDC, the ARRL Foundation Club Grant Program kicked off in 2022 with \$500,000 of support for transformational impact. ARRL and ARDC both know that clubs are important for the future and advancement of amateur radio. Local clubs have historically played a significant role in recruiting, licensing, and training new radio amateurs. They are the community setting for radio amateurs to continue their education and training.

ARRL and the ARRL Foundation look forward to the continued partnership and the shared strategic vision with ARDC, and for all the great things we will accomplish together.

Annual Donor Reception

The 20th Annual ARRL Donor Recognition Reception was held on May 19, 2022, at The Schuster Center Wintergarden in Dayton, Ohio. More than 160 ARRL donors and their guests were in attendance. The event preceded Dayton Hamvention[®], held May 20 – 22.



ARRL donors listen to remarks by ARRL President Rick Roderick, K5UR, at the 20th Annual Donor Reception.



Maxim Society Donors in attendance gather for the annual group photo. At the 2022 event, 64 new Maxim Society members were recognized, bringing the total to 333 Maxim Society donors.

ARRL Board of Directors January 2022



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ARRL gratefully acknowledges the following individuals, clubs, and organizations for their generous support in 2022 with donations of \$1,000 or more. Donors listed below contributed to the ARRL Diamond Club, the Second Century Campaign, the Spectrum Defense Fund, the Education & Technology Fund, the W1AW Endowment, the Ham Aid Fund, and the Legislative Issues Advocacy Fund.

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† = Silent Key

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Financial Summary

In 2022, ARRL saw a combination of events that resulted in an overall decrease in the organization's net assets of \$6.4 million. With significant realized gains in the investment portfolio, ARRL had a \$2.1 million gain from operations with both total revenues and expenses increasing in comparison to the prior year. Turbulent market conditions during the year resulted in an unrealized loss of \$8.7 million in the investment portfolio at the year end, resulting in a decrease of net assets.

ARRL ended 2022 with 151,840 members. In comparison to last year, dues revenue remained flat at \$6.7 million and continued to be the largest revenue source for the organization at 40% of the total operational revenue for the year.

ARRL publications and product sales fell to \$3.09 million, a decrease of 13% compared to the prior year. These results were not surprising based on the combination of high sales during the pandemic years, inflation, and the typical trend of lower sales prior to a major *Handbook* revision.

The decline in the number of businesses in the amateur radio industry has had an impact on the revenue generated from advertising. In 2022, the total advertising across ARRL platforms dropped by 2% to \$1.56 million. The decrease in revenue is indicative of a larger trend of businesses contracting within the industry and other advertisers reducing their advertising footprint.

The impacts of the investment markets on ARRL's financial position in 2022 were significant. Interest, dividends, and realized gains contributed \$3.6 million to ARRL revenues for the year, a 141% increase from the previous year. Of this total, approximately, \$2.3 million came from the sale of portfolio assets in preparation for the move to an external investment manager. The realized gain reflects the years of growth in the markets prior to the market adjustments taking place in 2022. Leveraging investment growth is an increasingly important revenue stream in covering operation expenses on a regular basis.

Revenue from license examination activities contributed \$302,000 in revenue to the organization, 18% lower than in 2021. The new FCC licensing fee that went into effect in April 2022 resulted in overall licensing to decline by 10% as compared to 2021. Program and service fees contributed \$592,000 in revenue during 2022, up 10% from the prior year driven by the return of DXpeditions and Solar Cycle 25 increasing on-air activity. Dedicated members continued to be vital to the ongoing success of the organization through their thoughtful contributions — both with and without donor restrictions. In 2022 their generosity totaled almost \$2.1 million. Of this, \$600,000 came from bequests — another testament of the immense generosity and commitment of ARRL's members.

Expenses in 2022 rose by \$1.1 million or 8% higher than the prior year, a result of the full return of travel and events. Total expenditures across the organization stood at \$15.72 million, up from \$14.57 million in 2021.

At the end of 2022, the organization's total assets stood at \$38.5 million, down from \$43.7 million at the end of 2021. Included in the assets were cash and investments totaling approximately \$34.3 million at year end compared to \$39.7 at the end of 2021. The investment portfolio supports the various unrestricted and restricted funds in addition to the long-term liability represented by the Life Member program. Net assets decreased to \$23.2 as of December 31, 2022, from \$29.6 million a year earlier. This decrease was driven by the impact of the investment markets on the value of ARRL's investment portfolio. The investment portfolio is invested with a long-term strategy designed to ride the highs and lows of the market. As the market improves, so will the investment portfolio.

The unusual event of the \$2.3 million realized gains from the investment portfolio provided a significant one-time increase to operational revenue in 2022 that has otherwise remained relatively flat for several years. The pandemic provided ARRL with unique Federal COVID funding, as well as 2 years of lower spending due to reduced or no travel and events. This allowed ARRL to delay the need to increase revenue without sacrificing its operations.

In 2022, normalized expense levels returned, along with all the impacts of inflation. While ARRL has remained committed to responsibly tight spending policies, the organization is now at a crossroads. In order to avoid the elimination of services or benefits ARRL offers, revenue streams must be increased to cover ever increasing costs. Fortunately, ARRL has the financial foundation to incur operational losses in the short term. However, it is only through a careful and deliberate approach that ARRL will be able to ensure that its legacy of service and dedication will continue in the future. Appropriate adjustments must be made to the business model to ensure the future success of ARRL.



Independent Auditor's Report

To the Board of Directors The American Radio Relay League, Incorporated

Opinion

We have audited the financial statements of The American Radio Relay League, Incorporated, which comprise the statements of financial position as of December 31, 2022 and 2021, and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of The American Radio Relay League, Incorporated as of December 31, 2022 and 2021 and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of The American Radio Relay League, Incorporated and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about The American Radio Relay League, Incorporated's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of The American Radio Relay League, Incorporated's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about The American Radio Relay League, Incorporated's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audits.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The schedules of restricted funds for time and purpose summary are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

CohnReynickZIP

Hartford, Connecticut May 15, 2023

Statements of Financial Position December 31, 2022 and 2021

<u>Assets</u>

	 2022	 2021
Current assets		
Cash Accounts receivable, net of allowance for doubtful	\$ 1,357,885	\$ 1,992,047
accounts of \$58,570 and \$57,424 for 2022 and 2021	354,276	244,252
Inventories, net	562,760	402,390
Contributions receivable, current	164,713	143,713
Other receivables	383,688	413,620
Prepaid expenses and other current assets	 406,340	 420,292
Total current assets	 3,229,662	 3,616,314
Other assets Investments Long-term contributions receivable, net of discount and	32,899,592	37,684,306
allowance of \$172,579 and \$139,719 for 2022 and 2021	197,421	281,281
Land, building and equipment, net	2,032,729	2,164,761
Operating lease right of use assets	 184,483	
Total other assets	 35,314,225	 40,130,348
Total assets	\$ 38,543,887	\$ 43,746,662

Statements of Financial Position December 31, 2022 and 2021

Liabilities and Net Assets

	2022	2021
Current liabilities Accounts payable Accrued liabilities Deferred revenue	\$ 360,553 740,148 53,653	\$ 402,058 655,270 85,337
Subtotal operational current liabilities Deferred life membership dues, current Deferred term membership dues, current Current maturities of operating lease liabilities	1,154,354 626,706 3,264,258 53,241	1,142,665 620,392 3,480,603
Total current liabilities	5,098,559	5,243,660
Long-term liabilities Deferred life membership dues, less current portion Deferred term membership dues, less current portion Operating lease liabilities, less current maturities	9,045,406 1,088,045 131,242	7,918,034 982,905 -
Total long-term liabilities	10,264,693	8,900,939
Total liabilities	15,363,252	14,144,599
Commitments		
Net assets Without donor restrictions Undesignated Board designated	1,963,126 13,463,478	6,021,275 14,307,138
Total without donor restrictions With donor restrictions	15,426,604 7,754,031	20,328,413 9,273,650
Total net assets	23,180,635	29,602,063
Total liabilities and net assets	\$ 38,543,887	\$ 43,746,662

Statement of Activities Year Ended December 31, 2022

	ithout donor	Vith donor estrictions	 Total
Revenues and contributions Membership dues Net publication sales Advertising Investment income Examination fees and other Program and service fees Contributions and support Net assets released	\$ 6,749,957 3,086,574 1,588,981 2,723,124 301,998 591,531 971,311	\$ - - 908,314 - - 894,091	\$ 6,749,957 3,086,574 1,588,981 3,631,438 301,998 591,531 1,865,402
from restrictions	1,197,877	(1,197,877)	 -
	 17,211,353	 604,528	 17,815,881
Expenditures Programs and services Publications Administration Fundraising	 8,653,583 3,224,279 3,388,914 451,006 15,717,782	 - - - -	 8,653,583 3,224,279 3,388,914 451,006 15,717,782
Increase in net assets before other income (expense)	 1,493,571	 604,528	 2,098,099
Other income (expense) Bequests, Board designated functioning as an endowment Second Century Campaign endowment contributions Unrealized loss on investments	 199,314 - (6,594,694)	 - (20,815) (2,103,332)	199,314 (20,815) (8,698,026)
	(6,395,380)	 (2,124,147)	 (8,519,527)
Change in net assets	(4,901,809)	(1,519,619)	(6,421,428)
Net assets, beginning	 20,328,413	 9,273,650	 29,602,063
Net assets, end	\$ 15,426,604	\$ 7,754,031	\$ 23,180,635

See Notes to Financial Statements.

Statement of Activities Year Ended December 31, 2021

	Without donor restrictions	With donor restrictions	Total
Revenues and contributions Membership dues Net publication sales Advertising Investment income Examination fees and other Program and service fees Contributions and support Net assets released from restrictions	\$ 6,724,700 3,529,659 1,617,421 1,112,595 368,057 541,502 801,818 617,482	\$ - - - - - - - - - - - - - - - - - - -	\$ 6,724,700 3,529,659 1,617,421 1,510,423 368,057 541,502 1,258,645
Expenditures Programs and services Publications Administration Fundraising	15,313,234 7,826,116 3,339,390 2,939,780 465,963	<u>237,173</u> - - - -	15,550,407 7,826,116 3,339,390 2,939,780 465,963
Increase in net assets before other income	14,571,249 741,985	237,173	<u>14,571,249</u> <u>979,158</u>
Other income Bequests, Board designated functioning as an endowment Second Century Campaign endowment contributions Unrealized gain on investments Contributions - PPP loan forgiveness	399,951 - 814,947 1,048,864	- 20,807 227,264 -	399,951 20,807 1,042,211 1,048,864
Contributions - Employee retention tax credit	330,000		330,000
	2,593,762	248,071	2,841,833
Change in net assets Net assets, beginning	3,335,747 16,992,666	485,244 8,788,406	3,820,991 25,781,072
Net assets, end	\$ 20,328,413	\$ 9,273,650	\$ 29,602,063

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

Statement of Functional Expenses Year Ended December 31, 2022 (with Comparative totals for 2021)

		Program	₽	Publications	Adi	Administrative	Fu	Fundraising		2022		2021
Salaries, compensation and benefits	θ	4,013,993	θ	1,293,122	θ	1,652,600	φ	256,038	θ	7,215,753	θ	7,234,306
Publication costs		1,021,848		946,407		134		5,163		1,973,552		1,865,288
Shipping and forwarding costs		946,841		509,120						1,455,961		1,470,208
Communication and postage		366,051		107,171		37,765		42,314		553,301		527,040
Other		105,648		2,679		412,333		77,218		597,878		551,522
Occupancy costs		212,202		88,041		275,711		7,851		583,805		576,428
Office supplies and expenditures		444,516		59,914		24,883		31,385		560,698		365,992
Legal and professional fees		554,249		94,938		264,714		8,091		921,992		907,922
Governance		114,978				401,744				516,722		276,887
Travel		394,135		4,572		22,809		4,220		425,736		37,655
Depreciation		177,527		38,169		124,338		7,169		347,203		249,396
Rentals and equipment maintenance		301,595		80,146		171,883		11,557		565,181		508,605
Total	φ	8,653,583	φ	3,224,279	φ	3,388,914	φ	451,006	φ	15,717,782	φ	\$ 14,571,249

The American Radio Relay League, Incorporated

Statement of Functional Expenses Year Ended December 31, 2021

		Program	Ъ	Publications	Adr	Administrative	ЪЦ	Fundraising		2021
Salaries, compensation and benefits	θ	4,034,011	θ	1,331,692	ω	1,593,296	ω	275,307	θ	7,234,306
Publication costs		910,070		952,626		274		2,318		1,865,288
Shipping and forwarding costs		888,423		581,785		·		·		1,470,208
Communication and postage		353,797		100,884		34,619		37,740		527,040
Other		128,927		893		366,791		54,911		551,522
Occupancy costs		203,247		85,261		279,949		7,971		576,428
Office supplies and expenditures		260,168		44,469		27,781		33,574		365,992
Legal and professional fees		549,613		123,748		203,519		31,042		907,922
Governance		80,562		·		196,325		·		276,887
Travel		31,698		957		4,730		270		37,655
Depreciation		124,421		27,693		90,894		6,388		249,396
Rentals and equipment maintenance		261,179		89,382		141,602		16,442		508,605
Total	ω	7,826,116	မ	3,339,390	မ	2,939,780	မ	465,963	ω	14,571,249

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

Statements of Cash Flows Years Ended December 31, 2022 and 2021

		2022		2021
Cash flows from operating activities				
Change in net assets	\$	(6,421,428)	\$	3,820,991
Adjustments to reconcile change in net assets to net	Ŧ	(0, 121, 120)	Ŧ	0,020,000
cash provided by (used in) operating activities				
Receipts to establish or increase perpetual endowment funds		(96,141)		(36,622)
Depreciation		347,203		249,396
Amortization of operating lease asset		52,519		-
(Gain) loss on sale of equipment		-		3,896
Discount and allowance for accounts receivable		10,334		11,420
Discount and allowance for contributions receivable		32,860		(49,602)
Change in inventory reserve		1,129		22,056
PPP loan forgiveness		-		(1,048,864)
Unrealized gain on investments		8,698,026		(1,042,211)
Realized (gain) loss on investments allocated				
to general and perpetual funds		(2,300,561)		(724,233)
Changes in operating assets and liabilities				
Accounts receivable		(120,358)		48,433
Inventories		(161,499)		(5,721)
Contributions receivable		30,000		77,475
Other receivables		29,932		(316,804)
Prepaid expenses and other current assets		13,952		9,473
Accounts payable and accrued liabilities		43,373		92,830
Deferred revenue		(31,684)		(37,698)
Operating lease liability		(52,519)		-
Deferred life membership dues, net of allocated		(106 290)		01 620
realized gain		(106,389) (111,205)		81,638 263,463
Deferred term membership dues		(111,203)		203,403
Net cash provided by (used in) operating activities		(142,456)		1,419,316
Cash flows from investing activities				
Purchase of equipment		(215,171)		(549,063)
Sales of investments		4,293,397		13,904,219
Purchases of investments		(4,666,073)		(14,298,177)
Net cash used in investing activities		(587,847)		(943,021)
Cash flows from financing activities				
Receipts to establish or increase perpetual endowment funds		96,141		36,622
Net increase (decrease) in cash		(634,162)		512,917
Cash, beginning		1,992,047		1,479,130
Cash, end	\$	1,357,885	\$	1,992,047
Cash naid for amounts included in lease lightlitics				
Cash paid for amounts included in lease liabilities	\$	55,432	\$	_
Operating	φ	55,452	φ	
Supplemental disclosure of noncash investing and financing activities				
Right of use assets recognized	\$	237,002	\$	-
5 5	Ţ	/	r	

See Notes to Financial Statements.

Notes to Financial Statements December 31, 2022 and 2021

Note 1 - Organization and summary of significant accounting policies

Nature of activities

The American Radio Relay League, Incorporated (the "League") is a not-for-profit organization formed to promote interest in amateur radio communication, experimentation and the advancement of radio art, further the public welfare and foster education in the field of electronic communication. The League also publishes documents, books, magazines and pamphlets necessary or incidental to its purpose. The League's operations are primarily supported by membership dues, publication sales, advertising and contributions. The League's members are primarily located throughout the United States.

New accounting pronouncements

The League adopted Accounting Standards Update 2016-02 (as amended), Leases ("Topic 842") on January 1, 2022. Topic 842 requires lessees to recognize a right-of-use asset and a corresponding lease liability for virtually all leases. The League elected and applied the following transition practical expedients when initially adopting Topic 842:

- To apply the provisions of Topic 842 at the adoption date, instead of applying them to the earliest comparative period presented in the financial statements.
- The package of practical expedients permitting the League to not reassess (i) the lease classification of existing leases; (ii) whether existing and expired contracts are or contain leases; and (iii) initial direct costs for existing leases.
- To apply the practical expedient to use a risk-free discount rate for all leases.

The League made the following adjustments as of the adoption date in connection with transitioning to Topic 842:

	Janu	As of ary 1, 2022
Operating use lease right of use assets	\$	237,002
Operating lease liabilities		237,002

The adoption of Topic 842 did not have a material impact on the League's change in net assets for the year ended December 31, 2022.

The League presents its right of use assets and lease liabilities for operating leases separately on its statement of financial position. See Note 7 regarding the League's rights of use assets for operating leases and lease liabilities.

Basis of presentation

The accompanying financial statements of the League have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of

Notes to Financial Statements December 31, 2022 and 2021

America ("GAAP"). The League reports information regarding its financial position and activities according to the following net asset categories:

Net assets without donor restrictions

Net assets without donor restrictions represent available resources other than donor-restricted contributions. Included in net assets without donor restrictions are funds that may be earmarked for specific purposes.

Net assets with donor restrictions

Net assets subject to donor- (or certain grantor-) imposed restrictions are temporary in nature, such as those that will be met by the passage of time or other events specified by the donor. Other donor-imposed restrictions are perpetual in nature, where the donor stipulates that resources be maintained in perpetuity.

Cash and cash equivalents

Cash and cash equivalents include all cash balances and highly liquid short-term instruments with an original maturity of three months or less when acquired. Temporary cash and cash equivalent balances associated with investment accounts are included with investments in these financial statements. There were no cash equivalents as of December 31, 2022 and 2021 included in operating cash.

Allowance for doubtful accounts

Trade accounts receivable is stated at the amount management expects to collect from outstanding balances. The League performs on-going credit evaluations of its customers' financial condition and grants credit based on each customer's ability to pay. The League evaluates the need for an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends and other information.

Contributions receivable

Contributions receivable are recorded at their net realizable value, which approximates fair value. Receivables that are expected to be collected in future years are discounted to their present values.

Inventories

Inventories consist of publications, software, membership supplies and other miscellaneous items. Inventories are stated at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method. Inventories are reflected net of reserves for slow moving inventory of \$89,853 and \$88,724 as of December 31, 2022 and 2021, respectively.

Investments

The League reports investments at fair value (see Note 5) and reflects any gain or loss in the statements of activities. Investment income and gains and losses are considered to be without donor restriction unless restricted by donor stipulation or by operation of law.

Land, building and equipment

The League capitalizes expenditures for building and equipment with a useful life of greater than one year and a cost of \$1,000 or more. Purchased land, building and equipment are carried at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful life of the asset. Estimated lives for financial reporting purposes are as follows:

	Estimated useful
Asset	lives
Building	40 years
Furnishings, equipment and building	3 - 15 years
Computer software	3 - 5 years

Expenditures for repairs and maintenance are charged to expense as incurred. For assets sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in change in net assets for the period.

The League reviews its long-lived assets for impairment using an undiscounted cash flow method whenever events or circumstances indicate the carrying value of an asset may not be recoverable. There were no impairment losses related to long-lived assets as of December 31, 2022 and 2021.

Endowment and spending policy

The League adheres to investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Endowment assets include those assets of donor-restricted funds that the League must hold in perpetuity as well as board-designated funds. Under this policy, as approved by the Board of Directors, the endowment assets are invested in accordance with sound investment practices that emphasize long-term investment fundamentals. It is recognized that short-term market fluctuations may cause variations in account performance and investment balances.

To satisfy its long-term rate of return objectives, the League relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The League targets a diversified asset allocation to achieve its long-term return objectives within prudent risk constraints.

The League appropriates funds for distribution based on an annual review of investment results and available net assets. The League's objective is to maintain the purchasing power of the endowment assets held in perpetuity or for a specified term as well as to provide additional real growth through new gifts and investment return.

Revenue recognition

Revenue is recognized when control of the promised goods or services is transferred to the League's customers (participants and members), in an amount that reflects the consideration expected to be entitled in exchange for those goods or services.

<u>Membership dues</u> - Revenue from term membership dues is recognized to the extent of acquisition costs when memberships are received. The remaining portion is recognized as revenue on the straight-line basis ratably over the applicable membership period.

The by-laws of the League provide for a life membership dues rate that equals 25 times the term membership annual dues rate. Life member dues are deferred upon receipt. Investment earnings on allocated life member investments are deferred. Revenue is recognized at an amount representative of the estimated cost to the League for providing services to the life members.

<u>Publication sales</u> - Revenue from publication sales is recognized when the earnings process is complete and the risks and rewards of ownership have transferred to the customer, which is generally considered to have occurred upon shipment of the publication.

<u>Advertising</u> - Advertising revenue is recorded during the period in which the advertisements are published.

<u>Contributions and bequests</u> - Transactions where the resource provider often receive value indirectly by providing a societal benefit, although the societal benefit is not considered to be of commensurate value, are deemed to be contributions. Contributions are classified as either conditional or unconditional. A conditional contribution is a transaction where the League has to overcome a barrier or hurdle to be entitled to the resource and the resource provider is released from the obligation to fund or has the right of return of any advanced funding if the League fails to overcome the barrier. The League recognizes the contribution revenue upon overcoming the barrier or hurdle. Any funding received prior to overcoming the barrier is recognized as refundable advance. Unconditional contributions are recognized as revenue and receivable when the commitment to contribute is received.

Conditional and unconditional contributions are recorded as either with donor restriction or without donor restriction. Contributions are recognized as contributions with donor restrictions if they are received with donor stipulations that limit the use of the donated asset. Contributions received with no donor stipulations are recorded as contributions without donor restrictions. When a donor restriction expires, that is, when a stipulated time restriction ends or purpose restriction is accomplished, net assets with donor restrictions are reclassified as net assets without donor restrictions and are reported in the statements of activities and changes in net assets as net assets released from restriction. Donor-restricted contributions whose restrictions expire during the same fiscal year are recognized as contribution without donor restrictions.

Income taxes

The League is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. However, the League is subject to federal and state income tax as a result of unrelated business income arising from net advertising income. There are no unrelated business income tax liabilities for the years ended December 31, 2022 and 2021.

The League's federal information returns prior to calendar year 2019 are closed and management continually evaluates expiring statutes of limitations, audits, proposed settlements, changes in tax law and new authoritative rulings. The League recognizes interest and penalties associated with uncertain tax positions as part of the income tax provision and includes accrued interest and penalties with the related tax liability in the statements of financial position. Management has analyzed the tax positions taken by the League and has concluded that, as of December 31, 2022, there are no uncertain tax positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements.

Functional expenses

The financial statements report certain categories of expenses that are attributed to more than one program or supporting function. Therefore, expenses require allocation on a reasonable basis that is consistently applied. The expenses that are allocated include occupancy, which is allocated on a square footage basis, as well as salaries and wages, benefits, payroll taxes, professional services, office expenses, information technology, interest, insurance, and other, which are allocated on the basis of estimates of time, effort, and utilization.

Use of estimates

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Subsequent events

The League has evaluated events and transactions for potential recognition or disclosure through May 15, 2023, which is the date the financial statements were available to be issued.

Note 2 - Liquidity

The League regularly monitors liquidity required to meet its annual operating needs and other contractual commitments while also striving to maximize the return on investment of its funds not required for annual operations. As of December 31, 2022 and 2021, the League has the following financial assets available to meet annual operating needs for the subsequent calendar year:

	2022		 2021
Cash Accounts receivable Investments available for operations Other receivable	\$	1,357,885 354,276 1,694,652 383,688	\$ 1,992,047 244,252 1,717,385 413,620
Total	\$	3,790,501	\$ 4,367,304

These financial assets are not subject to any donor or contractual restrictions.

The League supports its general operations primarily with membership dues, advertising, publications and program fees, as well as contributions without donor restrictions and donor restricted funds whose time or purpose restriction has been met. In addition, the Board may appropriate a portion of the earnings as needed from the League's donor-restricted endowment as described in Note 10.

The League's Investment Policy Statement requires the investment portfolio to maintain liquid instruments within its portfolio to ensure assets are available to meet general expenditures, liabilities and other obligations as they come due. The League's management may withdraw from the investments available for operations up to 3% in 2022 and 2021, of the average of the prior two fiscal year end market values of the regular portfolio. In addition, management may draw from the portfolio the annual cost of the life member annual dues amount for each life member. The estimate of these two amounts is approximately \$1.7 million as of December 31, 2022 and 2021. Amounts withdrawn in excess of that amount require approval by the League's administration and finance committee. The League's administration and finance committee reviews investment performance and considers near-term liquidity needs on a quarterly basis.

The Board may also appropriate amounts currently reported as board designated to be available as needed. The Board designates bequests without donor restriction over \$50,000 to the board-designated endowment.

Note 3 - Contributions receivable

Unconditional contributions receivable to be collected as of December 31, 2022 and 2021, are expected to be realized in the following periods:

	 2022	 2021
In one year or less In one to five years In more than five years	\$ 164,713 130,000 240,000	\$ 143,713 151,000 270,000
Total contributions receivable	534,713	564,713
Less allowance for uncollectible contributions receivable Less discount	 (40,237) (132,342)	 (47,222) (92,497)
Total	\$ 362,134	\$ 424,994

Amounts are shown in the statements of financial position as of December 31 as follows:

	 2022	 2021
Current Long-term	\$ 164,713 197,421	\$ 143,713 281,281
Total	\$ 362,134	\$ 424,994

Contributions receivable expected to be received in more than one year have been discounted using a discount rate of 3.25% at December 31, 2022 and 2021.

Note 4 - Investments

Investments are carried at their aggregate fair value. The following summarizes the relationship between the cost and fair values as presented in the financial statements as of December 31, 2022 and 2021:

	 20	22		 20	21	
	 Fair value		Cost	 Fair value		Cost
Cash and cash equivalents Equities and mutual funds Fixed maturities	\$ 389,785 32,505,922 3,885	\$	389,785 33,371,841 <u>3,881</u>	\$ 1,076,182 26,843,994 9,764,130	\$	1,076,182 19,309,576 9,466,090
Total	\$ 32,899,592	\$	33,765,507	\$ 37,684,306	\$	29,851,848

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2022 and 2021

The League allocates its investments into categories related to life memberships, regular operations, donor restricted and endowment funds. The following summarizes the fair value of investments by category as of December 31, 2022 and 2021:

	2022		2021	
Life membership Regular operations Donor restricted for time and purpose	\$	9,672,112 2,009,970 2,774,580	\$	8,538,426 5,565,092 4,432,385
Functioning as an endowment Donor restricted in perpetuity		13,463,478 4,979,452		14,307,138 4,841,265
Total	\$	32,899,592	\$	37,684,306

The following summarizes changes in relationships between cost and fair values of investments:

	2022	2021
Unrealized appreciation, beginning Fair value Cost	\$ 37,684,306 29,851,848	\$ 35,217,139 28,426,892
Net gain	7,832,458	6,790,247
Unrealized appreciation, end Fair value Cost	32,899,592 33,765,507	37,684,306 29,851,848
Net gain (loss)	(865,915)	7,832,458
Net unrealized gain (loss) for the year	<u>\$ (8,698,373)</u>	\$ 1,042,211

Investment income is summarized as follows for the years ended December 31, 2022 and 2021:

	2022		2021	
Interest and dividend income Net realized gain on investments	\$	808,730 4,128,630	\$	755,213 1,373,558
Gross investment income Less		4,937,360		2,128,771
Net investment income allocated to deferred life liability		(1,305,921)		(618,348)
Total investment income	\$	3,631,439	\$	1,510,423

Note 5 - Fair value measurements

The League values its financial assets and liabilities based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In order to increase consistency and comparability in fair value measurements, a fair value hierarchy that prioritizes observable and unobservable inputs is used to measure fair value into three broad levels, which are described below:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.
- Level 2: Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in inactive markets or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated with observable market data by correlation or other means. If an asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.
- Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

In determining fair value, the League utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible as well as considers counterparty credit risk in its assessment of fair value.

Financial assets carried at fair value at December 31, 2022 and 2021, are classified in the tables below in one of the three categories described above:

	2022				
	Level 1	Level 2	Level 3	Total	
Money market fund	\$ 389,786	\$-	\$-	\$ 389,786	
Mutual funds					
Large blend fund	6,327,077	-	-	6,327,077	
Large growth fund	488,104	-	-	488,104	
Foreign large growth fund	4,658,786	-	-	4,658,786	
Intermediate core plus bond	4,423,481	-	-	4,423,481	
Intermediate core bond	1,939,913	-	-	1,939,913	
Multisector bond	1,131,340	-	-	1,131,340	
Foreign large value	1,839,519	-	-	1,839,519	
Small value	1,902,846			1,902,846	
Total mutual funds	22,711,066			22,711,066	
Exchange traded funds					
Large blend fund	1,075,011	-	-	1,075,011	
Foreign large blend fund	39,384	-	-	39,384	
Large value	1,486,378	-	-	1,486,378	
Technology	518,168	-	-	518,168	
Large growth	865,365	-	-	865,365	
Short government	1,341,172	-	-	1,341,172	
Long government	2,271,902	-	-	2,271,902	
Ultrashort bond	2,164,820			2,164,820	
Total exchange traded funds	9,762,200			9,762,200	
Stocks					
Domestic large cap	32,655			32,655	
Total stocks	32,655			32,655	
Fixed maturities					
Domestic corporate bonds		3,885		3,885	
Total fixed maturities		3,885		3,885	
Total assets at fair value	\$ 32,895,707	\$ 3,885	\$-	\$ 32,899,592	

	Level 1	Level 2	021 Level 3	Total	
Money market fund	\$ 1,076,182	\$-	\$-	\$ 1,076,182	
Mutual funds					
Large blend fund	17,645	-	-	17,645	
Large growth fund	562,431	-	-	562,431	
World large stock fund	284,593	-	-	284,593	
Foreign large growth fund	212,997		-	212,997	
Total mutual funds	1,077,666			1,077,666	
Exchange traded funds					
Small blend	1,751,117	-	-	1,751,117	
Mid cap blend	109,860	-	-	109,860	
Large blend	15,636,698	-	-	15,636,698	
Inflation-protected bond	377,340	-	-	377,340	
Foreign large blend	831,228	-	-	831,228	
Equity energy	116,415	-	-	116,415	
Commodities precious metals	209,426	-	-	209,426	
Consumer defense	67,590	-	-	67,590	
Health	372,988	-	-	372,988	
Utilities	357,900	-	-	357,900	
Technology	290,854	-	-	290,854	
Immediate-term bonds	108,309	-	-	108,309	
Diversified emerging markets	121,260	-	-	121,260	
Foreign large value	247,076	-	-	247,076	
Large growth	1,184,008	-	-	1,184,008	
Consumer cyclical	10,568			10,568	
Total exchange traded funds	21,792,637		<u> </u>	21,792,637	
Stocks					
Domestic large cap	3,973,691			3,973,691	
Fixed meturities					
Fixed maturities Domestic corporate bonds		9,451,644		9,451,644	
	-		-		
International developed bonds		312,486		312,486	
Total fixed maturities		9,764,130		9,764,130	
Total assets at fair value	\$ 27,920,176	\$ 9,764,130	<u>\$</u> -	\$ 37,684,306	

Level 1 stocks, mutual funds, exchange traded funds, and money market funds are valued at the daily closing price as reported by the fund. Mutual funds held are open-ended funds that are registered with the Securities and Exchange Commission and are valued at the daily closing price as reported by the fund. These funds are required to publish their daily net asset value and to transact at that price. These financial assets held by the League are deemed to be actively traded.

The fair value of fixed maturities (Level 2), which consists principally of corporate and international bonds, is estimated using market price quotations (where observable), recently executed transactions or bond spreads of the issuer. If the spread data does not reference the issuer, then data that references a comparable issuer is used. When observable price quotations are not available, fair value is determined based on cash flow models with yield curves or bond spreads.

The preceding is a description of the valuation methodologies used for assets at fair value. There have been no changes in the methodology used at December 31, 2022 and 2021.

The League's policy is to recognize transfers in and transfers out of levels at the actual date of the event or change in circumstances that caused the transfer. There were no transfers in or out of the respective levels during the years ended December 31, 2022 and 2021.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the League believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Note 6 - Land, building and equipment

Land, building and equipment, and related accumulated depreciation are comprised of the following at December 31, 2022 and 2021:

	2022	2021
Land and building Furnishings, equipment and building improvements Computer software	\$ 1,094,693 4,880,610 3,172,756	\$ 1,094,693 4,785,245 2,421,017
Less accumulated depreciation	9,148,059 (7,115,330)	8,300,955 (6,804,423)
Construction in progress	2,032,729	1,496,532 668,229
Total	\$ 2,032,729	\$ 2,164,761

Note 7 - Leases

The League leases warehouse space and office equipment. All contracts that implicitly or explicitly involve property, plant and equipment are evaluated to determine whether they are or contain a lease.

At lease commencement, the League recognizes a lease liability, which is measured at the present value of future lease payments, and a corresponding right-of-use asset equal to the lease liability, adjusted for prepaid lease costs, initial direct costs and lease incentives. The League has elected and applies the practical expedient available to lessees to combine non-lease components with their related lease components and account for them as a single combined lease component for all its leases. The League remeasures lease liabilities and related right-of-use assets whenever there is a change to the lease term and/or there is a change in the amount of future lease payments, but only when such modification does not qualify to be accounted for as a separate contract.

The League determines an appropriate discount rate to apply when determining the present value of the remaining lease payments for purposes of measuring or remeasuring lease liabilities. As the rate implicit in the lease is generally not readily determinable, the League uses a risk-free rate as the discount rate at either lease commencement or when a lease liability is remeasured.

For accounting purposes, the League's leases commence on the earlier of (i) the date upon which the League obtains control of the underlying asset and (ii) the contractual effective date of a lease. Lease commencement for most of the League's leases coincides with the contractual effective date. The League's leases generally have minimum base terms with renewal options or fixed terms with early termination options. Such renewal and early termination options are exercisable at the option of the League and, when exercised, usually provide for rental payments during the extension period at then current market rates or at pre-determined rental amounts. Unless the League determines that it is reasonably certain that the term of a lease will be extended, such as through the exercise of a renewal option or non-exercise of an early termination option, the term of a lease begins at lease commencement and spans for the duration of the minimum non-cancellable contractual term. When the exercise of a renewal option or non-exercise of an early termination option is reasonably certain, the lease term is measured as ending at the end of the renewal period or on the date an early termination may be exercised.

Leases involving real estate

The lease of the League's warehouse has a lease term of five years has been incorporated into our measurement of the related right of use assets and operating lease liabilities. Although most of our real estate leases include one or more options to renew that can extend the contractual terms from 5 to 10 years, those renewal options are exercisable solely at the League's discretion and have been excluded from lease term measurements. Rental payments on these leases are fixed payments.

Leases involving equipment

Equipment operating leases have lease terms that range from 36 to 63 months and do not have renewal options. Rental payments on these leases are fixed payments.

The components of all operating lease rental costs for the year ended December 31, 2022 was \$55,432. The rental costs for the year ended December 31, 2021 was \$157,089.

Weighted average remaining lease term and weighted average discount rate for the League's leases as of December 31, 2022:

Operating	Operatir	g
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Weighted average remaining lease term	3.86 years
Weighted average discount rate	1.37%

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2022 and 2021

Annual maturity analysis of the Company's lease liabilities as of December 31, 2022 are as follows:

Year Ending December 31,	
2023 2024	\$ 55,432 55,083
2025 2026	 54,734 23,696
Total future payments	188,945
Less: imputed interest	 (4,462)
Total obligation	\$ 184,483

Note 8 - 403(b) plan

The League has The ARRL, Inc. 403(b) Pension Plan. Employees are eligible to participate in the plan immediately upon employment. After an employee has worked for six months, the League provides a contribution of 2% of the employee's compensation and will match any elective contributions made by the employee up to the employee's contribution of 4% of their compensation. The match was one dollar for every dollar contributed by the employee in 2022 and 2021. Total employer contributions were \$262,955 and \$259,100 in 2022 and 2021, respectively.

Note 9 - Board-designated net assets

The League's Board of Directors' intent is to treat bequests without donor restrictions over a specific amount as funds functioning as an endowment. Since the beginning of 2004, the League has received bequests in the amount of \$8,167,989. As of December 31, 2022 and 2021, the balance of the bequests, inclusive of investment income and unrealized gains and losses, was \$13,463,479 and \$14,307,138, respectively.

Note 10 - Net assets with donor restrictions

Net assets with donor restrictions as of December 31, 2022 and 2021, were available for the following purposes:

	2022	2021
Funds restricted for time or purpose Exceptional merit Other specific purposes Education and research	\$ 1,153,766 743,885 876,929	\$ 1,574,263 2,167,408 690,714
Total funds restricted for time or purpose	2,774,580	4,432,385
Funds restricted in perpetuity Second Century fund W1AW fund DX Log Archive fund Youth and Education fund Colvin fund Dave Bell, W6AQ fund Snyder Collegiate fund	3,167,344 730,325 229,390 313,189 154,340 134,864 250,000	3,208,853 721,629 229,390 292,189 154,340 134,864 100,000
Total funds restricted in perpetuity	4,979,452	4,841,265
Total donor restricted net assets	\$ 7,754,032	\$ 9,273,650

In 1993, the League became entitled, as beneficiary, to proceeds from a life insurance policy on one of its members, the Colvin fund. This endowment specifies that the principal is to be maintained in a fund and invested for the purpose of producing future income. The income from this endowment will be expended to reward deserving radio amateurs.

In 2002, an endowment fund was established for W1AW maintenance and upkeep.

In 2011, the League started the Second Century Campaign. The principal funds are to be maintained and invested for the purpose of producing future income. The income from the endowment will support creating a path to passionate involvement in amateur radio by new generations, and will thereby provide opportunities for educational enrichments, community service and personal achievement.

In 2012, the League became entitled to a bequest for the Youth and Education fund. This endowment specifies that the principal is to be maintained in a fund and invested for the purpose of producing future income. The income from this endowment will be used to support education and technology initiatives.

In 2014, the League received a donation to establish the DX Log Archive fund. This endowment specifies that the principal is to be maintained in a fund and invested for the purpose of producing future income. The income will fund the creation and management of the DX Log Archive Program for paper DX logs for rare and significant DX petitions.

In 2015, the League became entitled to a bequest to establish the Dave Bell, W6AQ fund. This fund specifies that the principal is to be maintained in a fund and invested for the purpose of producing future income. The income from this endowment will be used for the League's programs and operations in the best interests of the Amateur Radio Service as determined by the League.

In 2017, the League received a donation to establish the W1YSM Snyder Family Collegiate Amateur Radio Endowment fund. This endowment specifies that the principal is to be maintained in a fund and invested for the purpose of producing future income. The income from this endowment will be used to support the League's Collegiate Amateur Radio Initiative activities.

Note 11 - Endowment

The League's endowment includes both donor-restricted endowment funds and funds designated by the Board of Directors to function as endowments. The donor-restricted funds include the corpus restricted in perpetuity and the net appreciation of the fund. Funds designated by the Board of Directors as restricted to purpose or time are also included in the Organization's endowment and are reported as net assets without donor restrictions. The Board of Directors has interpreted the Connecticut Uniform Prudent Management of Institutional Funds Act ("CTUPMIFA") as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, the League retains in perpetuity (a) the original value of the initial and subsequent gift amounts (including contributions receivable net of discount and allowance for doubtful accounts donated to the Endowment and (b) any accumulations to the endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added. Donor-restricted amounts not retained in perpetuity are subject to appropriation for expenditure by use in a manner consistent with the standard of prudence prescribed by CTUPMIFA.

In accordance with CTUPMIFA, the League considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds: (1) the duration and preservation of the various funds, (2) the purposes of the League and donor-restricted endowment funds, (3) general economic conditions, (4) the possible effect of inflation and deflation, (5) the expected total return from income and the appreciation of investments, (6) other resources of the League and (7) the League's investment policies.

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2022 and 2021

Changes in endowment net assets for the year ended December 31, 2022, are as follows:

	Without donor restrictions			With donor estrictions	Total		
Endowment net assets, January 1, 2022	\$	14,307,138	\$	6,257,344	\$	20,564,482	
Investment income, net		2,642,557		724,949		3,367,506	
Net unrealized loss		(3,685,531)		(1,697,800)		(5,383,331)	
Contributions		199,314		201,046		400,360	
Amounts appropriated for expenditure				(544,901)		(544,901)	
Endowment net assets, December 31, 2022	\$	13,463,478	\$	4,940,638	\$	18,404,116	

Endowment net asset composition by type of fund as of December 31, 2022, is as follows:

	ithout donor	-	Vith donor estrictions	 Total
Donor-restricted endowment funds	\$ -	\$	4,940,638	\$ 4,940,638
Board-designated endowment funds	 13,463,478		-	 13,463,478
Total funds	\$ 13,463,478	\$	4,940,638	\$ 18,404,116

Changes in endowment net assets for the year ended December 31, 2021, are as follows:

	Without donor restrictions		Vith donor estrictions	Total
Endowment net assets, January 1, 2021	\$	12,386,709	\$ 5,981,196	\$ 18,367,905
Investment income, net		1,088,053	306,092	1,394,145
Net unrealized gain		432,425	174,968	607,393
Contributions		399,951	36,623	436,574
Amounts appropriated for expenditure			 (241,535)	 (241,535)
Endowment net assets, December 31, 2021	\$	14,307,138	\$ 6,257,344	\$ 20,564,482

Endowment net asset composition by type of fund as of December 31, 2021, is as follows:

	 ithout donor	-	Vith donor estrictions	 Total
Donor-restricted endowment funds	\$ -	\$	6,257,344	\$ 6,257,344
Board-designated endowment funds	 14,307,138			 14,307,138
Total funds	\$ 14,307,138	\$	6,257,344	\$ 20,564,482

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor requires the League to retain as a fund of perpetual duration. The League may spend from underwater endowments. If the endowment agreement specifically prohibits distributions for any reason, including underwater situations, the endowment agreement shall prevail and the distributions will be eliminated or reduced in accordance with donor intent.

Due to a decline in investment earnings, the fair values of some of the endowments dropped below their historic gift value. The aggregate underwater funds as of December 31, 2022 and 2021 are as follows:

	Number of funds underwater	F	⁻ air Value	C	Driginal gift	-	Amount of deficiencies			
2022 2021	4 N/A	\$	3,502,501 N/A	\$	3,869,782 N/A	\$	(367,280) N/A			

Note 12 - Concentrations

Credit risk

Financial instruments, which potentially subject the League to concentrations of credit risk, consist primarily of cash, pledges and trade receivables. The League maintains its cash with high-credit quality financial institutions. At times, such amounts may exceed the federally insured limit. At December 31, 2022, the League had approximately \$939,000 in excess of federally insured limits.

The League believes that the concentration of credit risk in its trade receivables is substantially mitigated by the League's credit evaluation process, relatively short collection terms and the financial stability of the larger customers comprising the League's credit base. The League does not generally require collateral from customers. Contributions receivable are comprised primarily of commitments from individuals who are members of the League. The League evaluates the need for an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends and other information.

Market risk

The League invests in various debt and equity securities. These investment securities are exposed to interest rate, market, credit and other risks depending on the nature of the specific investment. Accordingly, it is at least reasonably possible that these factors will result in changes in the value of the League's investments which could materially affect amounts reported in the financial statements.

Note 13 - Related party transactions

The League has some common directors with The ARRL Foundation, Inc. The League performs administrative services for The ARRL Foundation, Inc. and was reimbursed for these services in the amount of \$15,000 for the years ended December 31, 2022 and 2021.

Note 14 - PPP loan

The League was granted a \$1,048,864 loan under the Paycheck Protection Program ("PPP") administered by a Small Business Administration ("SBA") approved partner. The League initially recorded the loan as a refundable advance in accordance with guidance for conditional contributions; that is, until the measurable performance or other barrier and right of return of the PPP loan no longer existed, the amount would be considered a liability to the League. The League has met the conditions related to the contribution at December 31, 2021 and therefore the full amount of the loan is included as other income on the statement of activities. There is a six year period during which the SBA can renew the League's forgiveness application.

Note 15 - Employee Retention Tax Credit

The League was granted a \$330,000 Employee Retention Tax Credit. The League initially recorded the amount in accordance with guidance for conditional contributions; that is, until the measurable performance or other barrier and right of return of the Employee Retention Tax Credit no longer existed, the balance would not be considered revenue to the League. The League has met the conditions related to the contribution at December 31, 2021 and therefore the full amount of the tax credit is included as other income on the statement of activities.

Supplementary Information

The American Radio Relay League, Incorporated Restricted Funds for Time and Purpose Summary Year Ended December 31, 2022

Fund name	Balance January 1, 2022 Contributions		ntributions	Investment income, net			Unrealized loss	 eleased from restriction	Balance December 31, 2022		
H.P. Maxim Award	\$	45,353	\$	-	\$	1,143	\$	-	\$ -	\$	46,496
Exceptional Merit		1,574,263		-		25,035		(405,532)	(40,000)		1,153,766
Legal Research and Resource		268,274		5,028		-		-	-		273,302
Ham Aid Fund		156,567		1,663		-		-	(8,218)		150,012
Defense of Frequencies		-		257,919		103,332		-	(361,251)		-
Lab Fund		45,973		1,760		-		-	-		47,733
Education and Technology		637,165		455,710		53,855		-	(226,753)		919,977
Steven Rich Fund		10,000		-		-		-	-		10,000
Direction Finding		1,334		820		-		-	-		2,154
Fred Fish Awards Fund		1,722		3,415		-		-	(4,769)		368
Legislative Issues Advocacy Fund		67,249		1,230		-		-	(10,096)		58,383
Preservation of Artifacts		208,410		5,830		-		-	(174)		214,066
Awards LoTW Fund		-		1,715		-		-	(1,715)		-
Colvin Fund earnings		96,690		-		26,227		(65,712)	-		57,205
W1AW Fund earnings		346,549		-		122,862		(282,355)	(39,533)		147,523
Youth and Education Fund earnings		53,549		-		-		(96,595)	-		(43,046)
Second Century Campaign earnings		737,524		-		476,092		(1,043,920)	(476,092)		(306,396)
CCF Earnings - DX Log Archive		116,837		-		38,981		(90,743)	(4,200)		60,875
Dave Bell, W6AQ Fund earnings		25,662		-		22,918		(42,266)	(22,918)		(16,604)
Snyder Collegiate Amateur Radio earnings		39,264		-		37,869		(76,209)	 (2,158)		(1,234)
Total restricted funds for time and purpose	\$	4,432,385	\$	735,090	\$	908,314	\$	(2,103,332)	\$ (1,197,877)	\$	2,774,580

The American Radio Relay League, Incorporated Restricted Funds for Time and Purpose Summary Year Ended December 31, 2021

Fund name	Balance January 1, 2021				Investment itions income, net			Unrealized gain		Released from restriction		Balance cember 31, 2021
H.P. Maxim Award	\$	45,745	\$	-	\$	1,108	\$	-	\$	(1,500)	\$	45,353
Exceptional Merit		1,498,058		-		23,907		52,298		-		1,574,263
Legal Research and Resource		243,789		24,485		-		-		-		268,274
Ham Aid Fund		153,194		3,373		-		-		-		156,567
Defense of Frequencies		-		255,798		45,614		-		(301,412)		-
Lab Fund		35,080		10,893		-		-		-		45,973
Education and Technology		546,520		134,731		21,108		-		(65,194)		637,165
Steven Rich Fund		10,000		-		-		-		-		10,000
Direction Finding		1,334		-		-		-		-		1,334
Fred Fish Awards Fund		1,707		3,745		-		-		(3,730)		1,722
Legislative Issues Advocacy Fund		65,888		3,080		-		-		(1,719)		67,249
Preservation of Artifacts		205,895		2,515		-		-		-		208,410
Awards LoTW Fund		-		2,392		-		-		(2,392)		-
Colvin Fund earnings		78,154		-		11,540		6,996		-		96,690
W1AW Fund earnings		284,086		-		53,104		29,876		(20,517)		346,549
Youth and Education Fund earnings		43,934		-		-		9,615		-		53,549
Second Century Campaign earnings		626,894		-		206,734		110,630		(206,734)		737,524
CCF Earnings - DX Log Archive		94,251		-		17,152		9,634		(4,200)		116,837
Dave Bell, W6AQ Fund earnings		21,192		-		10,084		4,470		(10,084)		25,662
Snyder Collegiate Amateur Radio earnings		28,042		-		7,477		3,745				39,264
Total restricted funds for time and purpose	\$	3,983,763	\$	441,012	\$	397,828	\$	227,264	\$	(617,482)	\$	4,432,385

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Basis and Purpose of the Amateur Service

- a. Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- b. Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- c. Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- d. Expansion of the existing reservoir within the amateur radio service of trained operators, technicians and electronics experts.
- e. Continuation and extension of the amateur's unique ability to enhance international goodwill.

Title 47, Code of Federal Regulation





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