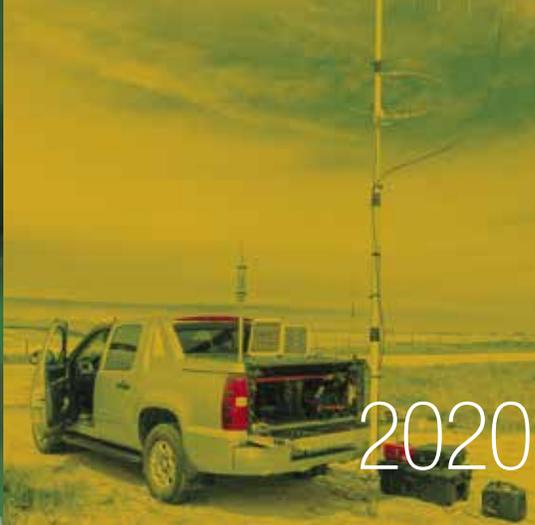
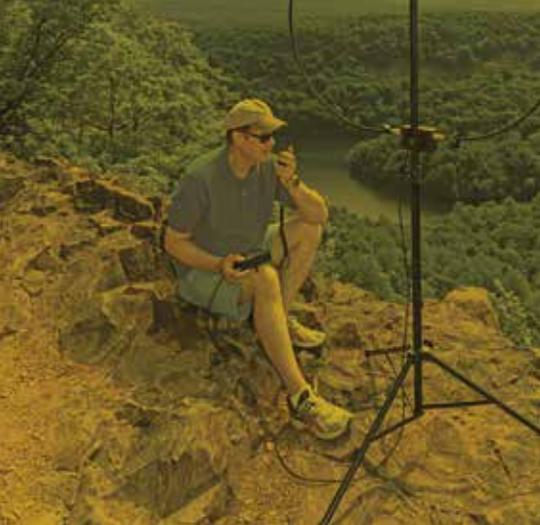




ARRL
The National Association for
Amateur Radio®



2020 Annual Report



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What is Amateur Radio?

Amateur radio, also known as “ham radio,” is a popular service and hobby with more than 770,000 practitioners in the US alone, and 1.95 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.”



The American Radio Relay League (ARRL) is The National Association for Amateur Radio in the US. Today, with over 158,400 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:

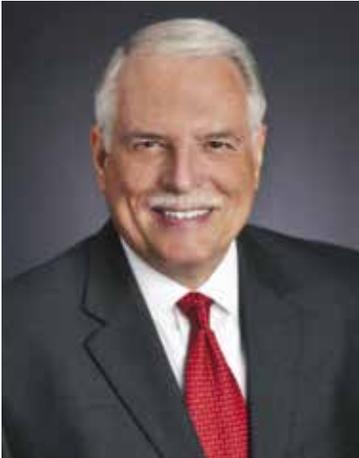
- ♦ Supports the awareness and growth of amateur radio worldwide;
- ♦ Advocates for meaningful access to radio spectrum;
- ♦ Strives for every member to get involved, get active, and get on the air;
- ♦ Encourages radio experimentation and, through its members, advances radio technology and education; 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.

Above: 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.



A Message From the President



2020 was a difficult year all over the world. The coronavirus pandemic changed everything, from the way we socialized, to the way we worked, to the way students learned. Events we look forward to every year were canceled and the future seemed uncertain. Hamfests, club meetings, and other gatherings looked different, as videoconferencing became the new way to conduct business and get together. However, throughout the challenges of 2020, ARRL remained determined to overcome any obstacles in order to continue to serve our members.

Due to the pandemic and state-imposed work restrictions, ARRL Headquarters closed and employees suddenly had to adjust to working remotely. ARRL staff banded together and kept things running for our members. I'm proud of our staff for how quickly they adapted and worked together as a team. They made the shift to working from home as seamless as possible, and they continued to develop new products and services. These new services included things like the ARRL Learning Network webinars, allowing members to expand their radio knowledge from home through video seminars from industry experts, and the At Home virtual events held by the Marketing department, providing ARRL staff with an opportunity to engage with members and give video tours of W1AW through a new online platform. They did a remarkable job!

In the midst of the pandemic, ARRL found itself facing a serious challenge: searching for a new Chief Executive Officer (CEO). Despite the difficulties, the ARRL Board and various Board committees continued operations using the Zoom videoconferencing platform. In fact, the July Board meeting was conducted virtually over Zoom.

After months of the CEO search process, the Board selected David Minster, NA2AA, as the new CEO in a hybrid in-person/videoconferencing Board meeting in August. David subsequently started in September. He has years of software engineering and management experience. He exhibits great enthusiasm and passion for Amateur Radio. David is bringing new ideas and a new culture to the League, and intends to build a collaborative environment with a culture of "yes" for our members. One of his top priorities is establishing goals to bring ARRL into the digital age, as well as engaging current members and enticing new ones through sharing the fun and innovation of Amateur Radio. Under his leadership, ARRL will continue to evolve, grow, and provide excellent service and benefits for our members. You will see greater emphasis on member services, the League's field services organization, and emergency communications.

For the past few years, I've written about how Amateur Radio is changing. I talked about the "new generation ham" and the more traditional "classic" generation ham. I mentioned that we were going through a paradigm shift, that my generation didn't look like the generation entering Amateur Radio today. Times are different. I expressed concern about the future of our hobby, the age demographics, and how we must embrace the changing landscape and accept the ever-changing technologies in our hobby today. Those issues are still there for us to work on, but ARRL is poised to address those issues more aggressively now.

ARRL and Amateur Radio have stood the test of time. Our history includes some serious bumps in the road, but we're still here. In 2020, when the world was forced to change, the League kept going. ARRL membership is steadily increasing, and the number of amateurs licensed is approaching 800,000, which is a positive sign. But with that comes the obligation to work harder than ever to advance the art, science, and enjoyment of Amateur Radio. And that's exactly what we're doing!

73,

Rick Roderick, K5UR
President

Annual Report of the Chief Executive Officer

Welcome to the 2020 ARRL Annual Report. This is my first letter to you reporting on the organization's annual performance as the CEO of ARRL. I would like to thank Barry Shelley, N1VXY, for serving as the interim CEO during the first 9 months of 2020.

I want to start this letter off on a positive note. ARRL is in a very solid position from both a membership and financial perspective. During the fourth quarter of 2020, we began work on a cultural transformation at ARRL Headquarters (HQ). We are rapidly moving towards a culture of "yes" and building strong collaborative skills, both internally and externally. I begin every day arriving at HQ rushing to kick the door down and get the day started on so many fantastic initiatives we are planning and have undertaken. I believe there has never been a better time to be a radio amateur, or a member of the American Radio Relay League.

In review, 2020 was a challenging year for all of us. The impact to many individuals and families was horrible. The loss of work and the loss of life became subjects we saw covered daily in the news. As my wife and I sat in our home in northern New Jersey, locked down while COVID-19 spread through the New York metro area, we took solace in the safety of our home, time we could spend outdoors with each other, and, for me, in amateur radio.

Being radio active became more than a pastime last year — it became a lifeline as clubs set up welfare nets to check in and ensure that everyone was okay. There was a sense of peace that even if we couldn't be together in person, we could still be together on the air, making things a little more normal. This not only happened locally, but globally, as radio amateurs took to the air. And on-the-air events, like 2020 ARRL Field Day, saw more individual participation as members strengthened their personal stations and honed their radio skills. ARRL Affiliated Clubs began using Zoom to conduct their meetings, so they could see friendly faces even in isolation.

After a brief closure in March 2020, ARRL HQ brought roughly half of employees back into the building, adhering to strict state mandates for masking and social distancing, while the other half was equipped to work remotely. We also began to leverage the use of videoconferencing to continue operations in support of our members. In July, we introduced the ARRL Learning Network webinar series as a new membership benefit. This series has also bolstered our library of previously recorded programs, which already featured over 30 recordings available for members.

ARRL Board members continued to conduct regular meetings and recruited for two senior positions, despite having to adapt to new videoconferencing platforms. With regard to the CEO search, these multi-month Zoom interviews culminated with an in-person Board meeting in Denver in July 2020. The obligation of being a member volunteer was never more challenging, but Board members rose to the occasion.

One of the 2020 ARRL initiatives I am happiest about is our new ideation process. Stemming from an authentic interest and need to become more inclusive as a community, especially to newly licensed hams, our members have great ideas about how ARRL could be doing things better. To expand upon that culture of collaboration, we now have a web page (arrl.org/ideas) and email address (ideas@arrl.org) where members can send their thoughts and well-formatted ideas about changes to ARRL programs and services to the management team for consideration. This process has enjoyed early success and we look forward to much greater interaction with members in the future.

We also look forward to the easing of travel and in-person event restrictions during 2021 and are excited to engage with members once again at HQ, W1AW, and a myriad of opportunities across the country!

Very 73,

David A. Minster, NA2AA
Chief Executive Officer



JAN

On the Air magazine launches, helping new and beginner radio amateurs to get active in radio communications.

FEB

The Volunteer Monitor program begins monitoring amateur frequencies, replacing the Official Observer program.

MAR

ARRL Headquarters shuts down due to the COVID-19 pandemic. Staff works remotely.

APR

All four ARRL magazines — *QST*, *On the Air*, *QEX*, and *NCJ* — become available in a digital format for members.

MAY

ARRL at Home virtual expo allows members to shop, donate, renew memberships, and get traditional Hamvention buttons.

JUN

ARRL Field Day, with rules changes for 2020. New 70+ ARRL Life Membership debuts. Launch of *The ARRL Current*.

JUL

ARRL Learning Network, a webinar series to help members get engaged with amateur radio, launches.

AUG

ARRL hires first Director of Emergency Management, Paul Gilbert, KE5ZW.

ARRL attends QSO Today Virtual Ham Expo.

SEP

New ARRL CEO David Minster, NA2AA, (elected in August) joins staff at HQ.

OCT

ARRL Simulated Emergency Test helps operators adapt to pandemic restrictions while practicing emergency response skills.

NOV

End of 2020 Atlantic hurricane season, which involved monitoring of storms and shipments of supplies from ARRL.

DEC

ARRL ends the year with 158,494 members, ahead of its year-end goal.

ARRL

Overcoming Obstacles to Serve Members

The unexpected challenges of 2020 brought the world to a halt. The COVID-19 pandemic altered day-to-day life in a myriad of ways, causing difficulties for everyone. ARRL was not exempt from these difficulties. However, ARRL has existed for over 100 years with one mission: to advance the art, science, and enjoyment of amateur radio. Just as the organization has weathered tough times in the past, ARRL faced the pandemic with that same goal in mind. When the world came to a halt, ARRL kept going, firm in our dedication to promote amateur radio and serve our members.

The ARRL Volunteer Examiner Coordinator (VEC) Program, responsible for the majority of amateur radio license exams administered in the United States, had to rework the fundamental rules of how to hold an exam session. Volunteer Examiners (VEs) all over the country found creative ways to socially distance, conducting exam sessions by spreading out in empty parking lots, or even allowing examinees to take exams from the comfort of their vehicles. In the meantime, the ARRL VEC developed a new virtual exam procedure, allowing exams to be conducted safely during the pandemic. VEs were trained in how to conduct video-supervised exam sessions using new online examination systems, which led to nearly 4,000 license applicants being tested remotely.

ARRL members staying indoors and looking for virtual ways to expand their radio knowledge enjoyed the new ARRL Learning Network, launched in July 2020. The Learning Network offers 30-minute presentations from subject-matter experts and subsequent question-and-answer sessions that give members a chance to engage in online learning and continue to develop their radio skills and knowledge.

The new *On the Air* magazine launched in January 2020, gaining over 18,000 subscribers by the year's end. Aimed at beginners and new radio amateurs, the magazine shares a fresh perspective to help get readers on the air. Additionally, 2020 brought members digital access to all four ARRL magazines — *QST*, *On the Air*, *QEX*, and *NCJ*. This meant members could access any of the content they wanted any time, from their computers, tablets, or smartphones. It also marked the first time that *QEX* and *NCJ* were available in a digital format. To keep members informed of all the new offerings available, ARRL developed *The ARRL Current*, an email update sharing the latest content from our digital publications, social media posts, and more.

Looking for a way to meet and interact with our members, ARRL took part in an At Home virtual expo, as well as the QSO Today Virtual Ham Expo. These expos allowed members to shop, donate, renew memberships, interact with ARRL through video and text, and enjoy online tours of W1AW. Also in 2020, new products were developed and new benefits were offered, including the 70+ Life Membership.

As always, ARRL provided support to Amateur Radio Emergency Service® (ARES®) members out in the field, sending Ham Aid kits to areas affected by natural disasters, from earthquakes in Puerto Rico to Hurricane Laura tearing its way through Louisiana and Texas. ARRL members were at the ready during 2020's Atlantic hurricane season, which turned out to be the busiest hurricane season on record. At ARRL Headquarters, staff kept ARRL leadership informed, staying in touch by conducting video meetings with Section Managers and Section Emergency Coordinators in areas that could be impacted by storms and hurricanes.

Despite the uncertainty of 2020, ARRL maintained stability. The organization came together to keep serving members without missing a beat. Not only did we keep up the level of service our members have come to expect, we continued to innovate and seek ways to do better, bringing exciting new products and benefits and to ARRL members. Now that 2020 is behind us, we look forward to an exciting future ahead — for ARRL, for our members, and for amateur radio.

The Year in Review

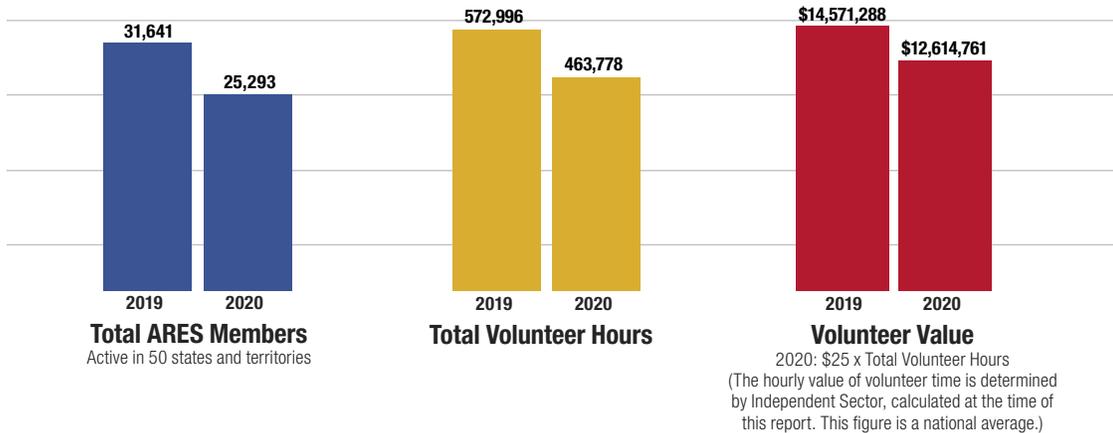


Emergency Management

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®). ARES activity decreased in 2020, as many activities and exercises were canceled or modified due to the pandemic.

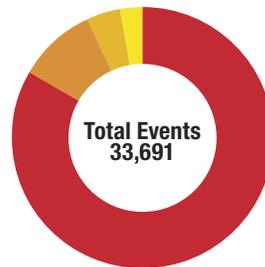
ARES Summary for 2020

Total ARES Membership: 25,293
 Total Sections Reporting: 440
 Total ARES Events: 33,691
 Total Volunteer Hours: 463,778
 Total Volunteer Value Provided: \$12,614,761



2019 ARES Events

- Drills, Training, Test Events
- Public Service Events
- Emergency Operations Events



2020 ARES Events

- Drills, Training, Test Events
- Public Service Events
- SKYWARN Operations
- Emergency Operations Events

Red Cross and ARES Nationwide Drills

The American Red Cross has a longstanding, formal memorandum of understanding and cooperation with ARRL. The strong ties between the Red Cross and amateur radio got a boost in 2020 from two major Red Cross and Amateur Radio Emergency Service (ARES) nationwide drills — one that took place in the spring and the other in the fall.

Spring Messaging Drill

During the May 30 nationwide Red Cross communications exercise, participants engaged from across the country. The drill simulated the types of message traffic typical during a national disaster response, such as a hurricane or wildfire. Among those involved in the drill were members of the ARRL Sacramento Valley and San Joaquin Valley Sections. More than 30 northern California radio amateurs took part, passing 35 voice messages via California Amateur Radio Linking Association (CARLA) repeaters, and 66 digital messages using both HF and VHF gateways to a simulated Red Cross operations center, and receiving 101 messages.

In Puerto Rico, ARRL Puerto Rico Section Manager Oscar Resto, KP4RF, fielded a solar-powered station for HF, VHF, and UHF, as well as a laptop and external monitor. At both locations, participants received advance email messages to be transmitted using *flmsg*, *fldigi*, and Winlink. The Red Cross said it would put some changes into effect immediately as a result of the drill.

Fall Winlink Drill

The fall Red Cross and ARES Winlink messaging drill took place on November 14, and was a demonstration of ARES and other operators' abilities to send digital messages in the official Red Cross message format (ARC-213) to Red Cross Divisional Clearinghouses via Winlink, the hybrid radio and email network. This ability supports radio amateurs, as well as the Red Cross shelter managers they serve, in getting messages to regional and upper ranks of the organization.

Participating operators used a variety of Winlink modes on HF, VHF, UHF, and Telnet to become familiar with Winlink and its associated message templates, including the ARC-213 found in the Winlink subfolder of form templates. The drill provided a minimum of 9 hours for each operator to create and send their single message. The scenario



Amateur radio operators volunteer to practice their emergency response skills by participating in emergency communications exercises and simulated scenarios. Handling communications at public service events, like local marathons or bike races, also provides helpful hands-on experience.

involved major weather events that caused outages and hazardous conditions across the country.

The organizers developed a three-level performance structure for Basic, Intermediate, and Advanced Winlink capability. The Winlink Workshop series training events were held on the popular SEC-ARES Zoom meetings prior to the drill to help operators get up to speed. Winlink training events are expected to continue in the future as interest in the digital message system grows.

Red Cross Divisional Clearinghouse managers reported 1,750 messages sent by 1,550 amateur radio operators in 47 states,

Puerto Rico, Venezuela, and Canada (about double the number of the spring drill). Messages were sent to seven Divisional Clearinghouses — Northeast, Atlantic, Southeast, Southwest, Pacific, Central, and Hawaii — using Winlink tactical call signs. Each operator was asked to send a message with basic information using an ARC-213 message template.



Report to America

Amateur Radio Preparation for Hurricane Laura

Hurricane Laura, a Category 4 hurricane, was one of the strongest hurricanes on record to make landfall in the US. As the first major hurricane of the 2020 Atlantic hurricane season, it began as a tropical storm in the Lesser Antilles and Puerto Rico. It later traveled to the island nations of Haiti and the Dominican Republic, killing 35 people in its path. The National Hurricane Center (NHC) predicted “unsurvivable storm surge” in the vicinity of 20 feet or greater, driving Gulf waters inland into waterways and lowlands.

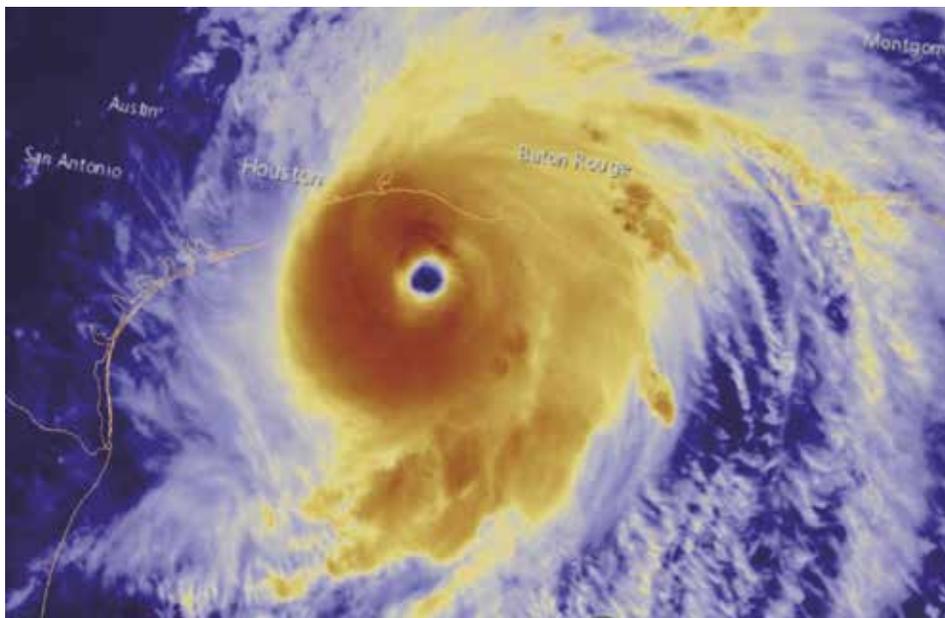
Once it reached the US, it hit southwestern Louisiana and southeastern Texas. More than a half-million people in Louisiana and Texas were ordered to evacuate ahead of the storm, which was set to strike around the border between the two states. During this hurricane, amateur radio operators were available for emergency communications, as well as reporting data from the affected areas.

The NHC’s amateur radio station, WX4NHC, was on the air for Hurricane Laura for over 29 hours from August 26 to August 27 and received about 70 reports. WX4NHC was active on several radio nets and modes, including the Hurricane Watch Net (HWN), Voice over Internet Protocol (VoIP) Hurricane Net, Winlink, and online report forms.

In addition to the work done by the NHC, the HWN had net control stations on the air for more than 30 hours on 20 and 40 meters, relaying surface reports from stations in affected areas. The VoIP Hurricane Net was active for 20 hours supporting WX4NHC, as well as stations in affected areas.

The VoIP Hurricane Net’s network had direct connection to many other digital modes through an advanced VoIP-linked system, which was tested for the first time during the net’s activation for Hurricane Laura. Through that system, EchoLink, Internet Radio Linking Project (IRLP), AllStarLink, Digital Mobile Radio (DMR), Project 25 (P25), Yaesu’s System Fusion, and Digital Smart Technologies for Amateur Radio (D-STAR) were connected directly into the system.

When Hurricane Laura was a tropical storm, the NHC was consulted daily, and ARRL Headquarters was mobilized to prepare



for impact on Texas and Louisiana. The Headquarters Emergency Response Team (HQERT) was activated and its members provided daily updates on the storm’s progress. While the precise area of landfall was still uncertain, ARRL Headquarters was ready.

Emails were sent to all the Gulf Coast Sections, including South and North Texas; Louisiana; Alabama; Mississippi, and North, West Central, and South Florida, asking to include the ARRL Emergency Management Assistant Manager Ken Bailey, K1FUG, on messages with requests for assistance, and to send situation reports where amateur radio was being utilized in activations and operations. HQERT also held Zoom meetings with Section Managers and Section Emergency Coordinators in areas that could be impacted by the storm.

On August 21, W1AW was placed on alert and Station Manager Joe Carcia, NJ1Q, was on standby throughout the weekend in case W1AW was needed to relay any emergency



Top: NOAA and NESDIS satellite imagery.

Above from left to right: National Hurricane Center Director Ken Graham, WX4KEG; John McHugh, K4AG, and Julio Ripoll, WD4R.



or priority traffic. The HQERT was also placed on alert, and communications maintained between team members.

In 2018 and 2019, Ham Aid emergency communications kits from ARRL Headquarters were pre-positioned in Louisiana and other states along the Gulf Coast in preparation for emergency weather events and could have been redeployed in the region to meet emergent needs.

The FCC granted an ARRL request for a 30-day waiver to facilitate relief communications in the wake of Hurricane Laura. The waiver temporarily permitted amateur data transmissions at a higher symbol rate than currently permitted under the FCC's rules. ARRL pointed out in its request that Amateur Radio Emergency Service (ARES) members would be working with federal, state, and local emergency management officials to assist with disaster relief and may have needed to use radio modems capable of both PACTOR 3 and PACTOR 4 emissions. The higher data rates PACTOR 4 offers are critical to sending hurricane relief communications, including lists of needed and distributed supplies.

"ARRL stands ready to assist the area potentially impacted by Hurricane Laura to conduct disaster relief communications," the FCC said. "We conclude that granting the requested waiver is in the public interest. Hurricane Laura has the potential to cause massive destruction [to] states along the Gulf of Mexico, and communications services will likely be disrupted."

When Hurricane Laura reached west Louisiana and east Texas on late August 26 and early August 27 as a Category 4 hurricane, it left devastation in its wake before losing strength and being downgraded to a tropical storm later that day. Once Hurricane Laura weakened and storm-related traffic decreased, amateur radio operations in Texas, Louisiana, and W1AW returned to standby on the afternoon of Thursday, August 27.



Oscar Resto, KP4RF, who was Puerto Rico Section Manager at the time, installs an antenna at one of the Red Cross sites following the January 2020 earthquakes.

Puerto Rico Earthquake Relief from American Red Cross and ARES

A 6.4-magnitude earthquake struck the southwestern part of Puerto Rico on January 7, 2020, following a 5.8-magnitude quake that struck one day earlier. Aftershocks followed in the wake of these seismic events. The Puerto Rico Electric Power Authority (PREPA) reported widespread power outages after generating plants automatically activated protective shutdown systems following the earthquake. But considerable generating capacity was lost due to earth-

quake damage, and it took some time to bring replacement units back online.

The worst-impacted cities were Guayanilla, Peñuelas, Yauco, and Guánica. Engineers determined that 80% of the houses in the earthquake's impact zone were uninhabitable, which left many residents sleeping outdoors.

The American Red Cross, which has a memorandum of understanding with Puerto Rico ARES, requested assistance to identify undeclared refugee camps and to report on closed or damaged roadways and bridges. ARES volunteers operated from the Red Cross distribution center in Yauco. About



two dozen volunteers made themselves available in the Mayagüez area, where the Red Cross later relocated disaster relief efforts.

ARES District 5 Emergency Coordinator Herb Perez, WP4ZZ, said, “One of our members, Jared Martinez, KP4LCO, was able to search near his hometown of Lajas and was able to locate more than 10 unidentified campsites around the area.” Such reports enabled the Red Cross to provide necessary assistance to those left homeless as a result of the earthquakes. Puerto Rico Section Manager Oscar Resto, KP4RF, said the ARES volunteers “did a marvelous job” that earned praise from Red Cross officials.

Volunteers were able to collect food from a church-run food pantry in Sabana Grande for isolated communities in the mountain region. They also reached out to affected communities asking for tents, diapers, medicine, and other necessities. Local members of the General Mobile Radio Service (GMRS) and citizens band (CB) radio communities also pitched in.

The ARES team in Yauco handled health and welfare traffic from the earthquake zone. VHF and UHF repeaters with emergency power carried reports of power and water outages, the continuing aftershocks, and other information on an informal basis. Bottled water and canned food were in high demand and the Puerto Rico Emergency Management Agency (PREMA) Emergency Operations Center (EOC) was activated.

ARRL shipped six VHF/UHF base/repeater antennas and six 50-foot rolls of LMR-400 coax through the Ham Aid program. Several HF radios and 15 VHF/UHF transceivers left over from the Hurricane Maria emergency response had been safely stowed for use in case of another major disaster.

Resto described the situation as “scary, with houses, schools, and roads collapsing.” At least one death resulted from the earthquake. The disaster was a setback for the US territory as it continued its long recovery from severe hurricane damage in 2017.

Amateur Radio Response to Iowa Derecho

A derecho hit South Dakota, Nebraska, Iowa, Wisconsin, Illinois, Indiana, Michigan, and Ohio on August 10, 2020. A derecho is a straight-line windstorm that is associated with a fast-moving group of severe thunderstorms (known as a mesoscale convective system). Derechos can cause hurricane-force winds, tornadoes, heavy rains, and flash floods. The storm had a duration of 45 minutes, with sustained wind speeds of up to 140 MPH.

Winds of more than 70 MPH hit Chicago, and more than 300,000 lost power. Iowa was the hardest-hit state, with some 10 million acres of corn and soybean crops wiped out. Residents had little or no warning before the so-called “land hurricane” struck.

FEMA declared Linn County, Iowa, including the city of Cedar Rapids, a major disaster. Linn County amateur radio operators were a vital source of community safety information. The derecho caused the loss of landline and cell phone service, internet, local TV and radio, and National Weather Service (NWS) information. After the storm, most of the local public safety and amateur radio repeaters remained accessible on emergency backup power. Local hams conducted a net for 6 days, providing assistance with health and welfare checks and sharing information about gas, food, generators, and disaster-related safety issues.

Iowa Section Manager Lelia Garner, WAØUIG, reported that Cedar Rapids began the long-term recovery process after 2 weeks of heavy lifting to repair, replace, and restore power and communications services. Recovery from the derecho included addressing widespread damage to the amateur radio communications infrastructure that proved essential to life and safety in this disaster.



Damage caused by Hurricane Zeta in New Orleans, Louisiana. [WDSU News photo]

The Busiest Hurricane Season on Record

According to the National Oceanic and Atmospheric Association (NOAA), the 2020 Atlantic hurricane season surpassed 2005 as the busiest on record. The 2020 hurricane season produced 30 named storms, of which 13 became hurricanes. Radio amateurs were at the ready each time, prepared for activation.

In early October, the Hurricane Watch Net (HWN), WX4NHC at the National Hurricane Center (NHC), the Salvation Army’s SATERN, and the Louisiana ARES HF Net (with support from the ARRL Delta Division and the Arkansas Section) activated for Hurricane Delta. The hurricane followed a similar track to Hurricane Laura, advancing on the Gulf Coasts of Texas, Louisiana, Mississippi, and Alabama.

WX4NHC Coordinator Julio Ripoll, WD4R, said, “NHC appreciates all the surface reports from the affected area during hurricanes as they fill in gaps of not just weather data, but also give a real-time, first-person perspective of what is actually happening on the ground.”



A few weeks later, the HWN activated for 9 hours in response to Hurricane Zeta, for which Ham Aid kits were pre-positioned in Louisiana. ARES teams in Louisiana went on standby status on October 27, ready to activate at the request of local emergency management officials or served agencies.

“To say this 2020 hurricane season has been a busy one is an understatement!” Hurricane HWN Manager Bobby Graves, KB5HAV, said at the time.

At the end of hurricane season, in November, Hurricane Eta caused heavy damage to parts of Central America before being downgraded to a tropical storm off the west coast of Florida, causing heavy rains and sustained winds of 70 MPH.

The Hillsborough County ARES/RACES group in the ARRL West Central Florida (WCF) Section was asked to staff five shelters. Section Manager Darrell Davis, KT4WX, disseminated WCF Section Special Bulletins to keep ARRL members and the amateur community informed.

Mississippi ARES Tornado Response

ARES volunteers in DeSoto County, Mississippi, devoted a January 2020 weekend to assisting local emergency managers in responding to tornado damage in the region. DeSoto County Emergency Coordinator (EC) Ricky Chambers, KF5WVJ; Assistant EC Gene Adams, KF5KVL; Tate County EC Brad Kerley, KG5TTU, and Andy Luscomb, AG5FG, reported at 3 AM on January 11 to the DeSoto County Emergency Operations Center (EOC) to open a SKYWARN weather watch. After a tornado warning was issued for DeSoto County, Chambers activated an emergency net on a local repeater. When the repeater went down, the net switched to simplex and later moved to another operational repeater.

Initial reports of downed trees blocking roadways and an eyewitness report of a possible tornado southwest of Hernando came in just after 5 AM. The ARES team at the EOC took damage reports, answered the phone, and monitored and took calls from public safety dispatchers. When the deputy EMA director requested traffic control in Lewisburg, three of the ARES volunteers



accompanied EMA Director Chris Olson to Lewisburg. The ham radio volunteers also handled welfare checks.

A dozen ARES/RACES and EMA reservists returned the next day to conduct door-to-door damage assessment. For the next 10 days, the DeSoto County volunteers assisted in handling telephone traffic in the EOC, freeing up first responders to do their primary jobs.

“I attribute our effective response to the training we have conducted on a monthly basis,” Chambers said, noting that training included recommended ARRL courses. “We were able to see how the Incident Command System (ICS) worked on a firsthand basis as the incident unfolded, based on the ICS training courses we have taken. My group went from 0 to 110 MPH in seconds, never missing a beat [and] everyone performed on a professional level.”

Taking part in simulated emergency scenarios allows volunteer amateur radio operators to prepare for handling communications during real disasters.

Volunteer Monitor
Program Administrator
Riley Hollingsworth,
K4ZDH.

Regulatory

Volunteer Monitoring Program



In March 2019, ARRL and the FCC signed a Memorandum of Understanding (MOU) to establish a new and enhanced Volunteer Monitor (VM) program to replace the

Official Observer program. VM Program Administrator Riley Hollingsworth, K4ZDH, said, "The program was developed with the intent to re-energize enforcement efforts in the Amateur Radio Service. It was proposed by the FCC as a result of the closure of several field offices and a reduction in field staff."

ARRL Regulatory Information Manager Dan Henderson, N1ND, added, "It is about assessing the general state of compliance to the FCC rules and promoting cooperation among the amateur community."

Under the new program, cases of flagrant violations are referred to the FCC Enforcement Bureau by ARRL in accordance with FCC guidelines. The FCC then gives enforcement priority to cases developed by the VM program without the delay of ARRL having to refer cases through the FCC online complaint process.

The program was launched in January 2020, and monitoring of amateur frequencies began in February 2020. Approximately 190 VMs were selected for the program. Hollingsworth reported that during 2020, VMs recorded 21,714 hours of monitoring the HF frequencies and 22,037 hours monitoring VHF and other frequencies. These many hours of hard work resulted in reports to the FCC, which resulted in warnings for operators who committed violations, as well as recognition for good operators. In fact, good operator notices made up 27% of actions taken by VMs. Turnover in the VM program was less than 1.2%.

Hollingsworth explained that most complaints were resolved through incident reports leading to contact, formally or informally, of the subject operator by the VM Program Administrator. Two cases were referred to the VM program by the FCC, and the VM program referred two cases to the FCC.

In one case, an applicant for renewal withdrew his application after being notified by the FCC that it was reviewing his qualifications due



to evidence submitted by the VM program regarding his conduct on 75 meters. The subject is no longer an amateur radio licensee.

Over the course of 2020, Henderson and Hollingsworth held several training webinars for the VMs. Henderson and Hollingsworth also created a training manual, which outlined "the basic principles and parameters of the new program," Henderson explained, adding that there was careful emphasis on the FCC Enforcement Bureau's needs. He also recognized the contribution of John Loughmiller, KB9AT, who spent hundreds of hours writing and developing the VM administration tools in the *Microsoft Access* database management system.

In the coming year, Hollingsworth's goal is to tackle the next phase of the program, which includes developing better data-reporting tools for VMs to submit their reports.

Advocacy

ARRL is amateur radio's proactive advocate and representative voice in achieving regulatory and legislative success in Washington and on the international stage through the auspices of the International Amateur Radio Union (IARU). ARRL works with US government agencies to prepare proposals to the Americas Regional Telecommunications Organization, the Inter-American Telecommunication Commission (CITEL), and, at the global level, the International Telecommunication Union (ITU).

The ITU's World Radiocommunication Conference 2019 (WRC-19) yielded several big wins for amateur radio, including additional allocations and continued defense of amateur bands. Following the conclusion of WRC-19, preparations for World Radiocommunication Conference 2023 (WRC-23) began.

Preparing for WRC-23



During the ITU's First Conference Preparatory Meeting for 2023 (CPM 23-1), WRC-23 agenda items were assigned to specific ITU Working Parties within the Radiocommunication Study

Groups. Throughout 2020, ARRL continued to work closely with members of the IARU team on all aspects of the WRC-23 agenda items that related to amateur radio and participated in the relevant ITU-R Working Parties, as well as the regional CITEL preparation of proposals.

ITU-R Working Party 5A (WP5A) is responsible for studies related to amateur radio and the land mobile service, excluding International Mobile Telecommunications (IMT) and including wireless access in the fixed service. WP5A Subgroup Working Group 5A-1 is chaired by Dale Hughes, VK1DSH, on the Australian delegation, with alternate Chairman Jon Siverling, WB3ERA, from ARRL. WP5A-1 deals with studies for WRC-23 and revisions to Recommendation ITU-R M.1732 on the *Characteristics of systems operating in*

The lobby of the QSO Today Virtual Ham Expo.



the Amateur and Amateur Satellite Services for use in sharing studies.

For example, WRC-23 will consider the mid-bands for IMT and 5G, including possible additional allocations to the mobile service on a primary basis. ARRL advocates 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. ARRL is also working on a “review of the Amateur Service and the Amateur Satellite Service allocations in the frequency band 1240 – 1300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band.” ARRL advocates the position that any additional regulatory, operational, or technical measures incorporated into the Radio Regulations are unnecessary.

ARRL also remains vigilant on addressing the Earth Exploration Satellite Service (Active) spaceborne radar sounders “around” 45 MHz. ARRL seeks to protect the adjacent 50 – 54 MHz band. An agenda item to consider the spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems is set for WRC-23.

Protecting Against Future Impacts

Throughout 2020, ARRL worked to protect the Amateur Radio Services from any future harmful impact by wireless power transmission (WPT). The ARRL Lab was a key participant working on the revision of an ITU report on the *Assessment of impact of wireless transmission for electric vehicle charging on radiocommunication services*. ARRL prevented an amateur band from inclusion in *Frequency bands for the use of non-beam WPT for mobile and portable devices*.

Work with CITELE Proposals

ARRL participated in all regional preparations within the Permanent Consultative Committees of CITELE. Most proposals for the World Conference from the Americas Region are crafted in CITELE’s Permanent Consultative Committee II: Radiocommunications. Jon Siverling, WB3ERA, chairs the Rapporteurship on disaster prevention, response and mitigation, ICT and climate change, environ-

mental protection, and circular economy in CITELE’s Permanent Consultative Committee I: Telecommunications/Information and Communication Technologies. This Rapporteurship conducted work on the Amateur Radio Winlink Project for the use of ICTs in emergency and disaster situations in the Americas Region.

ITU Elections

The ITU will hold the 2022 Plenipotentiary Conference and conduct elections for five management positions. The US government has announced that the US will nominate the current Director of the Development Bureau (BDT), Doreen Bogdan-Martin, KD2JTX, as a candidate to be the next Secretary-General of the ITU. Bogdan-Martin is a strong supporter of amateur radio, and ARRL actively supports her campaign.

Membership, Marketing, and Communications

The challenges of 2020 allowed for new ways of working, communicating, and connecting with our members and each other.

Magazine Success

The year began with a successful launch of *On the Air* magazine. By the end of the year, the magazine had 18,025 subscribers, far surpassing the goal of 10,000. In February, Orlando HamCation (our only in-person event of the year) allowed us to share and receive feedback on the new publication while meeting our members.

Like many organizations across the country, ARRL staff began working remotely in March, utilizing Zoom for meetings and finding new ways to stay connected to our members. *The ARRL Current*, a revised version of the previous digital *QST* notification email, was one of these new initiatives. This monthly email provides reminders of ARRL communications and programs, such as podcasts, social media posts, promotions,

and announcements of new member benefits like the Learning Network webinars and the availability of digital formats of all four magazines — *QST*, *On the Air*, *QEX*, and *NCJ*.

Virtual Events

As spring and summer hamfests and events were canceled, we looked for opportunities to connect with our members in person. With the cancellation of the Dayton Hamvention®, the Membership and Marketing team worked with others from ARRL Headquarters to host an At Home virtual expo. The event offered opportunities for members to shop, donate, renew their membership, and collect the traditional Hamvention button. Due to the positive response to this event, At Home events will continue in 2021.

In late summer, the Membership team participated in the QSO Today Virtual Ham Expo, which gave us the opportunity to text and video chat with our members, and for members to interact with each other. The event also included a W1AW Zoom tour, as well as presentations from well-known experts and personalities throughout the ham radio community. The event developed into a lasting partnership.

New Membership Program

In the summer, we launched the new Life 70+ Membership program and 50 new Life Members were signed up in its inaugural year. This membership is available to members who have turned 70 and have a combined 25 years of paid annual ARRL membership. Life 70+ Members receive all the benefits of an annual membership, as well as a Life Member pin and a window decal. Additionally, they have the option to purchase an exclusive Life Member plaque.

Making Room for New Products

With help from the Controller’s office, Marketing undertook a thorough review and assessment of the ARRL product mix. Many outdated and under-performing titles and products were put on clearance throughout

ARRL's newest magazine, *On the Air*, launched in January 2020 and has been a hit with the new and beginner-level hams it was meant to reach.



the summer, allowing the warehouse to reorganize and make room for new products and titles. This initial effort has evolved into the cross-departmental Assortment Planning Committee, which meets monthly to assess new and proposed publications and fill the gaps in our offerings.

New Initiatives

Toward the end of the year, we gained inspiration and motivation from David Minster, NA2AA, ARRL's new CEO. As a result, many new marketing initiatives were developed, ranging from new products for Field Day and Solar Cycle 25, to a marketing strategy for what was to be our most successful holiday sales season.

Throughout 2020, core members of our team have been dedicated to working on the new Personify AMS project, which will serve as the foundation for membership transactions and support other technology to come. We began using the Informz marketing automation platform in the fourth quarter of the year. This tool manages marketing campaigns and reporting faster and easier. The platform will eventually be fully integrated with Personify, allowing us to create more customized and dynamic emails for our members.

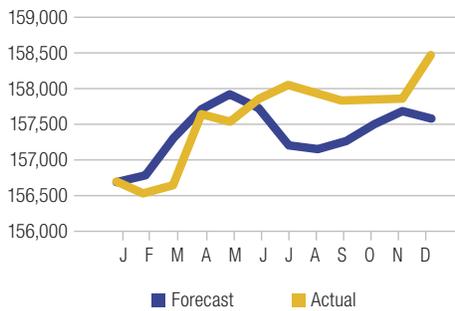
Despite the challenges of 2020, our team's commitment to ensure an amazing membership experience helped us bridge the physical distance of the past year.

Membership

December 2020 ended with 158,494 members — 915 members ahead of year-end goal. This represents a 1.11% increase in membership from 2019. An increase of 0.53% was forecast.

The overall retention rate for 2020 was 83.1%. The industry average for associations with individual memberships (not trade associations) is 78%, according to the 2020 Membership Marketing Benchmarking Report prepared annually by Marketing General Incorporated.

2020 Membership: Forecast vs. Actual



New Publication Offerings for Members

On the Air Launch

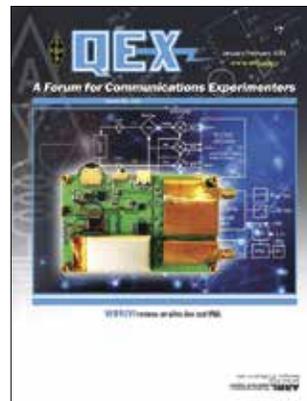
The January 2020 launch of *On the Air* was the culmination of two and a half years of work to bring our members ARRL's first new magazine in several decades. The goal of *On the Air* was to be a vital resource in helping new and beginner radio amateurs get active and involved in radio communications. "Too many new licensees never take the next step," said *QST* and *On the Air* Editorial Director Becky Schoenfeld, W1BXY, adding that ARRL was excited to introduce "a new amateur radio magazine for this audience, aimed at getting them active, getting them involved, and getting them on the air."

The audience was just as excited about the launch. "Anticipation was high," Schoenfeld said. "The ham community couldn't wait to get their hands on it — especially the newer hams who'd been asking ARRL for some kind of mentoring or education."

On the Air was an instant hit, offering advice and insights on topics from a variety of amateur radio interests and activities: radio technology, operating, equipment, project building, and emergency communication. Schoenfeld said, "The premiere issue, January/February 2020, was met with almost universal enthusiasm, and every month the readership grew."



2020 marked the first time QEX and NCJ were available digitally. A new monthly email from the Marketing department, The ARRL Current, keeps members informed on what they'll find in ARRL's magazines and other media offerings.



The ARRL Learning Network launched in July 2020 to help radio amateurs expand their knowledge and get involved on the air.

Members have been raving about the quality of the content in *On the Air*, sending emails saying that this is exactly what they needed as beginner hams. The publication is even receiving letters from experienced hams, thanking ARRL for providing much-needed refreshment on basic topics.

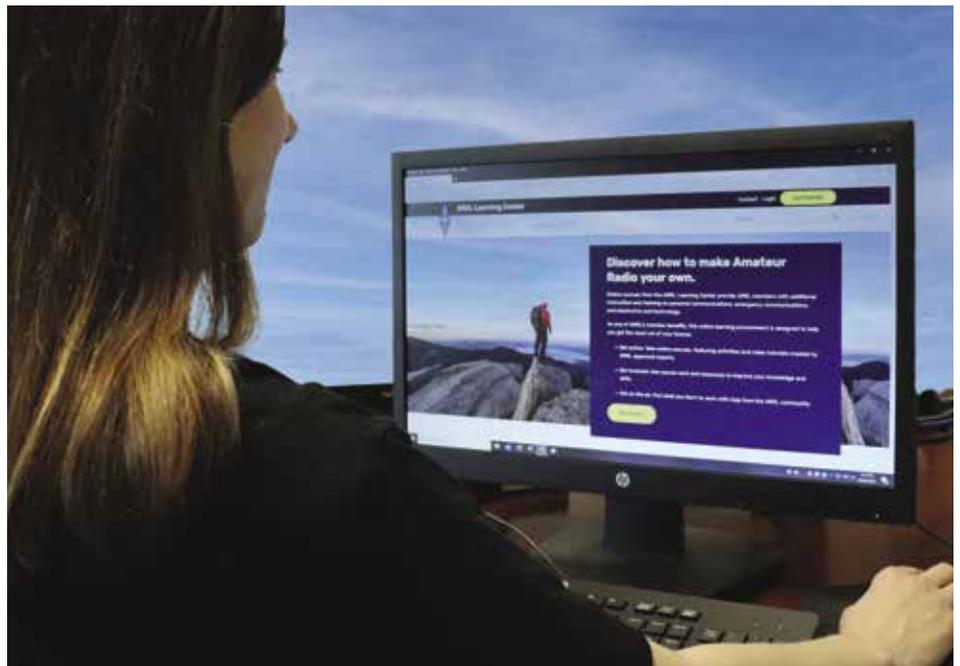
ARRL members were given the choice to receive the monthly print edition of *QST* or the bimonthly print edition of *On the Air*. As of December 31, 2020, a total of 18,025 current members had selected *On the Air* as their choice of print magazine, with 43% of subscribers being Technician-class licensees and 33% General-class licensees.

Along with the launch of the magazine, ARRL released companion material in the form of an *On the Air* podcast, which takes a deeper dive into select features and projects, and the *On the Air* blog, which features additional curated stories. Through *On the Air* magazine and its suite of companion benefits, ARRL continues to help our members make the most of their amateur radio licenses.

New Digital Offerings

Beginning in April 2020, all ARRL members, including international members, were given digital access to all four ARRL magazines. For the first time, the bimonthly editions of *QEX: The Forum for Communications Experimenters* and *National Contest Journal (NCJ)* joined *QST* and *On the Air* magazines on a digital platform.

With the push toward digital content, ARRL was able to offer all members specialized content and a high-quality reading experience. *QEX* includes articles, columns, and other features ranging from construction projects to more advanced technical information in radio theory and practice. *NCJ*, published since 1973, targets radio amateurs active in radiosport. *NCJ* includes scores, technical articles, contributions from top contesters, and advice for beginners and seasoned radiosport enthusiasts alike. Both *NCJ* and *QEX* have always had a dedicated readership, and Schoenfeld said, "Subscribers had been asking about digital access for a while, and they're definitely enjoying it now that it's available."



Offering this suite of digital magazines was an opportunity to give members more of what they wanted, while adding value to ARRL membership. With access to ARRL's digital magazine editions, subscribers were given the capability to view replicas of the printed editions with added functionality, allowing users to fully search issues, enlarge pages, share articles, and more. All four magazines are easily accessed through any web browser from members-only links. The free ARRL Magazines app, available for iOS and Android, also supports downloading complete issues onto your mobile device or tablet for offline reading.

Additionally, the Membership, Marketing, and Communications Department developed *The ARRL Current*, which launched in June 2020. The *Current* is distributed via email and provides a helpful guide to ARRL's digital publications, and even includes some exclusive content that was put together just for *Current* readers. With online access to *QST*, *On the Air*, *QEX*, and *NCJ*, members not only have exclusive access to four magazines, each with their own unique content, but they can also elect to receive this monthly overview of new ARRL publications and member benefits.

Lifelong Learning

ARRL Learning Network Launch

In 2020, ARRL's educational programs were able to grow, as the concept of learning at any time from any place took on new meaning.

In July, ARRL launched the Learning Network, a webinar series to help introduce members

to the variety of activities and opportunities enjoyed by radio amateurs. Like hamfest forums and radio club presentations, the webinars are intended to help participants get more active, involved, and engaged in amateur radio, focusing on three main categories of interest:

- Radio electronics and technology
- Personal communications and operating
- Emergency communications and public service

Each presentation is approximately 30 minutes long, making them easy to fit into a lunch break or enjoy as a short evening activity. A 15-minute question-and-answer period follows each presentation.

By the end of 2020, a total of 16 webinars were created through the Learning Network, attended live by nearly 3,000 participants, with nearly 6,000 views of the post-session recordings.



ARRISS Goes Virtual

Through the Amateur Radio on the International Space Station (ARRISS) program, students, educators, and their communities learn about space, technology, and amateur radio. School contacts with the International Space Station (ISS) help promote science, technology, engineering, and mathematics (STEM) activities through the use of amateur radio.

ARRISS found a way to continue its mission in 2020, even as many schools closed their buildings and moved to remote learning.

The Amateur Radio on the International Space Station (ARISS) program gives students the unique opportunity to learn about radio communications by talking to astronauts on the International Space Station.



ARISS developed an alternative contact method — the Multipoint Telebridge Contact via Amateur Radio — in which an ARISS telebridge radio ground station connects to the amateur radio station located on the ISS, with each student and teacher remotely linked to the telebridge station. This allowed each student to ask the astronaut on the ISS questions without having to be in their school building. This method involved assistance from local amateur radio club members, who mentored students outdoors or virtually.

Other schools utilized a hybrid method, following local health guidelines for the number of students participating in person while connecting with the rest of the student population virtually from their classrooms or remotely. These ARISS contacts generated positive stories highlighting amateur radio in the media, as well as sharing radio knowledge with the next generation.

There also appeared to be an increase in the number of school radio clubs being launched, who held online meetings. 2020 saw an increase in the number of ARISS educators who reported youth expressing interest in studying for their amateur radio license.

In September, astronaut Chris Cassidy, KF5KDR, set up the new ARISS radio system, which was launched in March 2020 with a higher power level. Many amateur radio operators at home enjoyed new ARISS cross-band repeater contacts and downloading slow scan TV (SSTV) images transmitted from the new radio configuration setup, along with making ARISS packet contacts.

ETP Grants Share Amateur Radio with Students

ARRL's Education & Technology Program (ETP) offers grants to help schools pay for radio station equipment and related software and resources for classrooms all over

the US. The Northwest Christian School in Phoenix, Arizona, utilized their 2020 grant to share the fun of amateur radio with students and to make license exams more accessible for all. As they said in a letter to ARRL:

Thank you again for continuing to invest in Northwest Christian Amateur Radio Club.

The past year has been an interesting one for sure. We kicked off our club in January of 2020 with 14 students, in which one of them already had their license. By March, our school was completely online and our meetings were canceled for the school year. Since August, we have started up again and have eight students participating... Since our school has reopened, we continue to partner with our local club, Thunderbird Amateur Radio Club (TBARC), to host monthly free VE testing. Since October, we have offered over 90 tests to community members, both youth and adult alike. TBARC used to use a hospital conference room for testing, and since the COVID-19 pandemic we have offered our facilities free of charge to the club and testers. We are one of the few sites still open for testing in our area and we have people drive from surrounding towns (upwards of 2 hours) to test and receive their license.

Thank you again for all that you do to encourage the next generation to imagine, learn, and apply knowledge in the field of amateur radio.

Brett Irwin, W7OKS
Northwest Christian
Amateur Radio Club

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 68% of total amateur radio exams administered.

In the first half of 2020, FCC-issued new ham licenses were down by 16%, and upgraded licenses were down by 34%, as compared to 2019 totals. This was due to the COVID-19 pandemic and the limited number of in-person sessions. After a push was made toward online services and remote video online exams, the Amateur Radio Service experienced a bump in third- and fourth-quarter activity levels.

By the end of 2020, there were 771,688 radio amateurs in the FCC database (see the graphs). The gap between 2019 levels had closed considerably, with only a 2% decrease from 2019. New licenses were in line with previous years, with the FCC issuing 29,911 new amateur licenses in 2020, as compared to 2019's total of 30,012.

Upgraded license activity improved as well, as seen in the 9,155 FCC-issued upgraded licenses in 2020, down only 6% from 2019. ARRL VEC filed a total of 26,712 license application forms in 2020, compared to 29,427 in 2019. Club license activity dropped slightly in 2020, with 1,568 club license applications filed, as compared to 1,756 in 2019.

Switch to Online Testing

ARRL served 28,490 exam applicants in 2020, which was down from 2019, but 7,180 exam sessions were conducted by ARRL in 2020. This outpaced the 6,757 exam sessions conducted in 2019.



2020 led to the implementation of socially distanced exam sessions, as well as online virtual exams.

The VEC switched to an online test session model in 2020 in order to keep exams running safely during the pandemic. Hundreds of Volunteer Examiners (VEs) were trained to conduct video-supervised online exam sessions using the ExamTools online examination system. By the end of the year, ARRL VE teams had remotely tested nearly 4,000 applicants. There is one candidate per session in an online test session, and teams conduct multiple sessions per day. Because of this, video session numbers were high in 2020.

The shift to the ExamTools online examinations system has allowed ARRL VEs to better serve our members. The program works for online or printed examinations to manage, conduct, and grade a test session. The comprehensive program utilizes *GradeCam* to automatically grade exams in seconds using the camera on a phone or computer, which eliminates the need to manually score the tests. Additionally, ARRL VEC's interactive upload page allows our VEs to submit electronic documents quickly and easily. Uploading this way results in quicker FCC

processing and 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) per week.

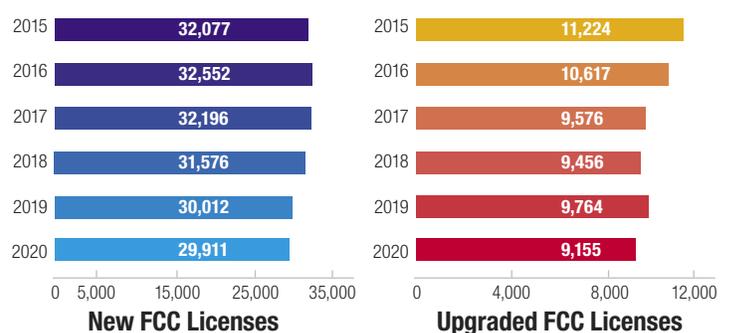
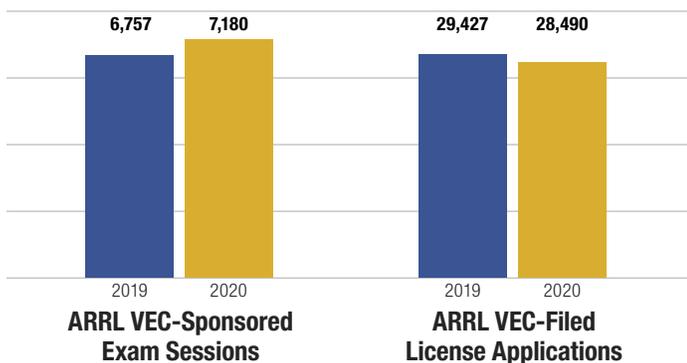
ARRL-administered exam elements decreased from 43,589 in 2019 to 34,941 in 2020, due to limitations in the time limits for the online video test sessions. At in-person sessions, examinees are encouraged to try the next level exam, but an online setup does not allow for candidates to sit for a higher-level exam without preparation or prior notification to the team. However, despite the reduced in-person licensing activity, 1,616 new VEs joined our program, resulting in a total of 28,146 accredited ARRL VEs.

For the first time in the history of our program, a VE reached the impressive milestone of 2,000 sessions of participation. VE Gary Pike, KA4KBX, of Roanoke, Alabama, is one of eight ARRL VEs to have participated in over 1,000 sessions, and the first to participate in 2,000 sessions.

New Question Pools

In August 2020, ARRL VEC Manager and National Conference of Volunteer Examiner Coordinators (NCVEC) Vice Chairman Maria Somma, AB1FM, was elected by NCVEC delegates to the NCVEC Question Pool Committee (QPC), so she could represent our members by participating in the review of the new Element 2 Technician-class question pool, which will take effect in July 2022.

In November 2020, standardized Spanish-language question pools were created and published in ExamTools, making Spanish-language exams accessible to candidates outside Puerto Rico.





Eight New Scholarships Founded in 2020

In 2020, the ARRL Foundation established eight new scholarships, which will each be awarded annually beginning in 2021, except where noted.

The Chick Allen, NW3Y, Scholarship is open to licensed amateur radio operators who are graduating high school seniors, undergraduate students, or US military veterans pursuing a degree in electronics, electrical engineering, aerospace engineering, computer science, or a similar scientific field at an accredited college, university, or trade school that has established programs in the stated field of study. Preference for the \$3,000 annual award will be given to applicants residing within 250 miles of Seaford, Delaware.

The Amateur Radio Digital Communications (ARDC) Scholarships are available to applicants holding a valid amateur radio operating license for at least 1 year prior to the date of submission of application. US licensure, US residence, and US citizenship are not requirements. Applicant must show proof of amateur radio activity during the previous year. Examples of this proof include, but are not limited to, membership in a local or regional radio club, participation in amateur radio emergency activities, teaching amateur radio classes, on-the-air activities, and participation in college radio clubs. Multiple scholarships will be awarded, ranging in amounts from \$5,000 to \$25,000.

The Rev. Paul E. Bittner, WØAIH, Memorial Scholarship is open to US citizens and amateur radio licensees pursuing an Associate's or higher degree in the fields of science, technology, engineering, or mathematics at an accredited institution of higher education. Preference for the \$1,000 annual award will be given to applicants residing in the ARRL Central Division (Illinois, Indiana, and Wisconsin). If no qualified applicant is found, applicants who reside in any ARRL Division will be accepted.

The Frankford Radio Club Scholarship is open to applicants holding a valid FCC-issued amateur radio license and attending an accredited college, university, or trade school, and are pursuing a degree in electronics, electrical engineering, computer science, or a related field. Preference will be given to applicants residing within 175 miles of Alburtis, Pennsylvania. The first annual scholarship of \$1,500 was awarded in 2020.

The Gulf Coast Amateur Radio Club Scholarship provides funding for the educational expenses of a young amateur radio operator holding a Technician-class or higher amateur radio license. The applicant's field of study must be related to science, technology, or mathematics. Preference will be given to residents of Pasco County, Florida. If no qualified applicant is identified, then residents of the West Central Florida Section counties will be accepted. The first annual scholarship of \$2,000 will be awarded in 2022.

The Fritz Nitsch, W4NTO, Memorial Scholarship is intended to help support the educational expenses of an amateur radio operator who has been licensed for at least 1 year prior to applying for the scholarship and holding a General-class or higher license at the time of application. Preference will be given to applicants from South Carolina pursuing studies in engineering or other 4-year technical degrees. If no qualified applicant is identified, preference will be given to an applicant from the Roanoke Division. The scholarship award will be \$5,000 annually.

The Pikes Peak Radio Amateur Association (PPRAA) Memorial Scholarship is open to applicants pursuing studies in engineering, physical science, or mathematics. Preference for the \$1,000 annual award will be given to applicants residing in Colorado and attending any accredited 4-year college or university, or applicants attending any accredited 4-year college or university within the State of Colorado.



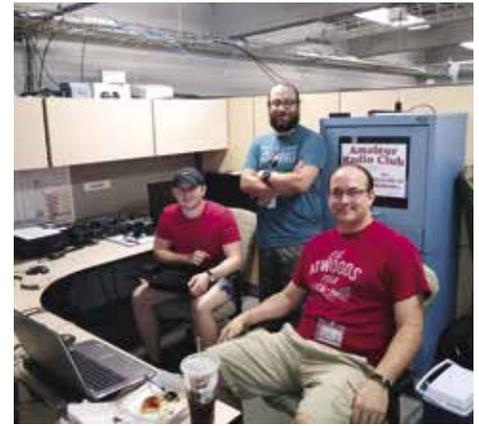
Scholarships from the ARRL Foundation help support students learning about science, technology, engineering, and math (STEM) subjects.

The Potomac Valley Radio Club (PVRC) Scholarship provides financial assistance for the educational expenses of a licensed radio amateur pursuing full-time studies at an accredited undergraduate degree-granting institution. Preference will be given to applicants who are residents of, or attending a post-secondary institution located in, the District of Columbia or any of the states comprising the main territory of the PVRC, including Pennsylvania, Maryland, Delaware, West Virginia, Virginia, and North Carolina. The award will be \$1,500 annually.

Grants Awarded in 2020

American Legion Post 10 Albany, located in Albany, Oregon, received a \$1,200 grant from the ARRL Foundation to start a new radio club in the American Legion in Post 10. Classes will be held to help veterans get their amateur radio license or upgrade their license.

The Carver Elementary School Amateur Radio Club (AAØOF), in Colorado Springs, Colorado, has partnered with the Village Seven Amateur Radio Club (V7ARC) to provide an after-school club enrichment opportunity for fourth- and fifth-grade students. The club received an \$1,800 grant to purchase teaching materials for soldering, constructing antennas, and building simple electronic kits.



ARRL Foundation grants allow amateur radio clubs to buy equipment and instructional materials so they can share the hobby.

Goreville Amateur Radio Club, located in Goreville, Illinois, received a \$2,500 grant to start Amateur Radio Studio, N9GHS, at Goreville High School. Equipment will be purchased by the club to introduce students to ham radio and to help them get licensed.

Iroquois County Youth Center, in Watseka, Illinois, has partnered with Iroquois County Amateur Radio Club, AD9L, to start a radio club at the Youth Center. The \$2,500 grant will be used to purchase equipment, soldering stations, and books. They will install radios in the building to allow the club to teach youth about amateur radio, electronic circuitry, and theory, and to help individuals earn their licenses.

Open Research Institute of Berkeley, California, received a \$3,000 grant for Phase 1 of their P4XT project. P4XT is an open-source project with hardware, firmware, software, and documentation components used to create an amateur radio communication system using digital multiplexed transponders (DMTs). Phase 1 of the project will produce a few articles of DMT hardware that will initially demonstrate a DVB-S2 downlink from the open-source P4XDMT codebase.

The University of Alabama Huntsville Center for Cybersecurity Research and Education received a \$510 grant for their Integrating Amateur Radio Devices into Industrial System Cybersecurity project. The goal of the project is to work with university students to get them licensed in ham radio and then integrate amateur radio communication protocols into extant models, which are used for cybersecurity testing for industrial control systems.

Jacob M. Nagel, ADØJA, Wins 2020 Hiram Percy Maxim Award



The ARRL Board conferred the 2020 ARRL Hiram Percy Maxim Award on Jacob M. Nagel, ADØJA, of Wright City, Missouri. Licensed since 2012, the Board cited Nagel for exemplifying the spirit of amateur radio by learning new technologies, providing community service, and helping with emergency communication. ARRL's top youth honor, the Hiram Percy Maxim Memorial Award is given annually to a radio amateur and ARRL member under the age of 21. The award consists of a \$1,500 stipend and an engraved plaque.

The Board cited Nagel's involvement in providing technical assistance to the Okaw Valley Amateur Radio Club and the Egyptian Radio Club of Illinois for the installation and upgrading of their club repeaters;

advising the Germantown, Illinois, Fire Department on upgrading its communication systems; speaking at the 2016 Dayton Hamvention® Youth Forum; sharing his expertise in online forums, and participating in projects that integrate his amateur radio knowledge with other technical ventures in electronics.

Left: The ARRL Board conferred the 2020 ARRL Hiram Percy Maxim Award on Jacob M. Nagel, ADØJA, of Wright City, Missouri.



Legacy Circle Members

The ARRL Legacy Circle recognizes individuals who have provided for ARRL in their wills or other estate plans. Gifts received in this capacity — unless otherwise designated — provide unrestricted revenue to be used wherever resources are most needed, either through the ARRL Endowment or to assist in offsetting operational costs.

John Abbruscato, W5JON and
Cathy Abbruscato, W5HAM

Rev. Dr. Alicia, KG6LJ, and
Dave, K6XG, Abell

Robert Ahmann, W7SC

Alan Applegate, KØBG

Donald J. Backys, K9UQN

Bob Barden, MDØCCE

Robert C. Beach, W8LCZ

Michael E. Beck, W7EDO

Mark Beckwith, N5OT, and
Kathryn Stewart

Bob Beebe, GU4YOX/KX6N

Steven Bense, W9SRB

Rev. Paul Bittner, WØAIH†

Jim Boockholdt, N4AL

Alvin C. Borne, W6IVO

S. Clint Bradford, K6LCS

J. Bruce Burnette, K5PX

George Byrkit, K9TRV, and
Mary Byrkit

Kenneth R. Cary, K9UCX

Joseph G. Chaet, W1RGH† and
Carla M. Chaet, N7OPU†

Roberta Chamalian, WB1ADL, and
Peter Chamalian, W1RM

J. Craig Clark, Jr, K1QX

Jose R. Cruz, KA2KCR

John G. DePrimo, K1JD

Richard Dievendorf, K6KR

In Memory of
Jake McClain Driver, KC5WXA

G. Kip Edwards, W6SZN

Dennis G. Eksten, W9SS

Ronald D. Erickson, KØIC

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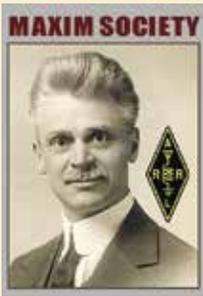
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11 Anonymous Donors

† = Silent Key

ARRL Board of Directors January 2020



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Financial Summary

As for most organizations, 2020 proved to be a unique year of mixed financial results due to the COVID-19 pandemic, although in the end, ARRL's overall results remained solid from a financial perspective. Total revenues and expenses were both slightly up in comparison to the prior year. Continued support in the form of voluntary contributions, coupled with increases in the value of ARRL's investment portfolio and strong publication and product sales, resulted in an overall increase in the organization's assets for the year. ARRL produced a \$1 million gain from operations, experienced growth in the investment portfolio, and was the beneficiary of significant support through bequests resulting in an overall net asset gain of \$2.26 million.

ARRL membership at the end of 2020 increased to 158,494 members, compared to 156,755 members at the end of 2019, a growth of 1.1%. Continued growth in the membership is key to the organization's success. Dues revenue remains the largest revenue source for the organization, at \$6.77 million for the year.

While Amazon shifted to only essential products for several months, and most other amateur radio retailers reduced operations during the height of the pandemic, the membership and public turned to ARRL to purchase ARRL publications and products directly. Combined with people looking for ways to pass the time, publications and product sales increased to \$3.87 million in 2020, an increase of 15% in comparison to the prior year.

Advertising sales was one revenue source that quickly saw a decrease due to the pandemic. With many businesses closed or working at reduced capacity, the desire to advertise in 2020 quickly faded. Sales of advertising across the various ARRL platforms were \$1.60 million in 2020, a 10% decrease from 2019.

The investment markets proved to have a significant positive impact on our financial position in 2020 despite the volatility during the year. Interest, dividends, and realized gains contributed \$1.21 million to ARRL revenues in 2020, up by 5% from the previous year.

While revenues from license examination activities contributed \$331,000 in revenue to the organization, it was 20% lower than in 2019 due to in-person gathering restrictions during most of the year. Those same restrictions provided the opportunity for more operating activity, and ARRL's programs and services revenue increased to \$532,000, a growth of 8% over 2019.

The continued generous support from our members through voluntary contributions, both with and without donor restrictions, totaled \$2.53 million in 2020, with almost \$890,000 coming from bequests.

Total expenses increased less than 2% in 2020, in comparison to the prior year. Total expenditures across the organization stood at \$14.95 million, up from \$14.66 million in 2019. Like revenues, expenses varied from 2019, with higher cost of goods and shipping expenses related to the higher publications and product sales, and lower expenses related to activities such as travel and temporarily suspended mailings.

Total assets for the organization stood at \$40.3 million at the end of 2020, up from \$36.6 million at the end of 2019. Of these totals, cash and investments totaled approximately \$36.7 million at year end, compared to \$33.1 million at the end of 2019. The investment portfolio supports the various funds with and without donor restrictions, in addition to the long-term liability represented by the Life Member program. Net assets increased to \$25.8 million on December 31, 2020, from \$23.5 million a year earlier.

ARRL weathered 2020 better than many organizations, with continued service to the members and without the need to shut down operations or implement staff furloughs and layoffs. ARRL continues to have a strong financial foundation and remains in good financial condition. There are sufficient reserves to support existing programs and maintain a solid infrastructure going forward. The challenge continues to be finding the best ways to add membership value to grow the organization. Continued membership growth is key to ensure the future success of ARRL.

Independent Auditor's Report

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

We have audited the accompanying financial statements of The American Radio Relay League, Incorporated, which comprise the statements of financial position as of December 31, 2020 and 2019, and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The American Radio Relay League, Incorporated as of December 31, 2020 and 2019, 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.

Report on Supplementary Information

Our audits were conducted for the purpose of forming an opinion of 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 audits 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.



Hartford, Connecticut
May 13, 2021

The American Radio Relay League, Incorporated

Statements of Financial Position
December 31, 2020 and 2019

	<u>Assets</u>	
	<u>2020</u>	<u>2019</u>
Current assets		
Cash	\$ 1,479,130	\$ 1,340,096
Accounts receivable, net of allowance for doubtful accounts of \$60,148 and \$28,620 for 2020 and 2019	304,105	311,832
Inventories, net	418,725	629,252
Contributions receivable, current	158,688	83,713
Other receivables	96,816	130,201
Prepaid expenses and other current assets	429,765	363,982
Total current assets	<u>2,887,229</u>	<u>2,859,076</u>
Other assets		
Investments	35,217,139	31,726,591
Long-term contributions receivable, net of discount and allowance of \$189,321 and \$193,999 for 2020 and 2019	294,179	354,001
Land, building and equipment, net	1,868,990	1,644,055
Total other assets	<u>37,380,308</u>	<u>33,724,647</u>
Total assets	<u>\$ 40,267,537</u>	<u>\$ 36,583,723</u>

The American Radio Relay League, Incorporated

**Statements of Financial Position
December 31, 2020 and 2019**

Liabilities and Net Assets

	2020	2019
Current liabilities		
Accounts payable	\$ 362,727	\$ 387,924
Accrued liabilities	594,846	542,174
Deferred revenue	123,035	129,825
Refundable advance - PPP Loan	1,055,789	-
Subtotal operational current liabilities	2,136,397	1,059,923
Deferred life membership dues, current	507,665	512,869
Deferred term membership dues, current	3,259,577	3,183,896
Total current liabilities	5,903,639	4,756,688
Long-term liabilities		
Deferred life membership dues, less current portion	7,604,858	7,370,735
Deferred term membership dues, less current portion	977,968	932,395
Total long-term liabilities	8,582,826	8,303,130
Total liabilities	14,486,465	13,059,818
Commitments		
Net assets		
Without donor restrictions		
Undesignated	4,605,957	4,839,077
Board designated	12,386,709	10,382,995
Total without donor restrictions	16,992,666	15,222,072
With donor restrictions	8,788,406	8,301,833
Total net assets	25,781,072	23,523,905
Total liabilities and net assets	\$ 40,267,537	\$ 36,583,723

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

**Statement of Activities
Year Ended December 31, 2020**

	Without donor restrictions	With donor restrictions	Total
Revenues and contributions			
Membership dues	\$ 6,773,387	\$ -	\$ 6,773,387
Net publication sales	3,870,443	-	3,870,443
Advertising	1,601,483	-	1,601,483
Investment income	867,695	343,972	1,211,667
Examination fees and other	331,084	-	331,084
Program and service fees	531,551	-	531,551
Contributions and support	745,938	895,547	1,641,485
Net assets released from restrictions	954,998	(954,998)	-
	<u>15,676,579</u>	<u>284,521</u>	<u>15,961,100</u>
Expenditures			
Programs and services	8,143,370	-	8,143,370
Publications	3,250,446	-	3,250,446
Administration	3,173,593	-	3,173,593
Fundraising	384,379	-	384,379
	<u>14,951,788</u>	<u>-</u>	<u>14,951,788</u>
 Increase in net assets before other income (expense)	 <u>724,791</u>	 <u>284,521</u>	 <u>1,009,312</u>
Other income (expense)			
Bequests, Board designated functioning as an endowment	888,459	-	888,459
Second Century Campaign endowment contributions	-	38,950	38,950
Unrealized gain on investments	566,904	163,102	730,006
Loss on disposal of software costs	(409,560)	-	(409,560)
	<u>1,045,803</u>	<u>202,052</u>	<u>1,247,855</u>
 Change in net assets	 1,770,594	 486,573	 2,257,167
 Net assets, beginning	 <u>15,222,072</u>	 <u>8,301,833</u>	 <u>23,523,905</u>
 Net assets, end	 <u>\$ 16,992,666</u>	 <u>\$ 8,788,406</u>	 <u>\$ 25,781,072</u>

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

**Statement of Activities
Year Ended December 31, 2019**

	Without donor restrictions	With donor restrictions	Total
Revenues and contributions			
Membership dues	\$ 6,769,243	\$ -	\$ 6,769,243
Net publication sales	3,375,378	-	3,375,378
Advertising	1,773,198	-	1,773,198
Investment income	807,070	342,815	1,149,885
Examination fees and other	413,468	-	413,468
Program and service fees	492,267	-	492,267
Contributions and support	775,476	508,684	1,284,160
Net assets released from restrictions	706,760	(706,760)	-
	15,112,860	144,739	15,257,599
Expenditures			
Programs and services	8,109,743	-	8,109,743
Publications	3,020,478	-	3,020,478
Administration	3,083,966	-	3,083,966
Fundraising	447,709	-	447,709
	14,661,896	-	14,661,896
Increase in net assets before other income	450,964	144,739	595,703
Other income			
Bequests, Board designated functioning as an endowment	387,127	-	387,127
Second Century Campaign endowment contributions	-	31,691	31,691
Uncollectible pledge	-	-	-
Redesignations	-	-	-
Unrealized gain on investments	2,135,708	598,900	2,734,608
	2,522,835	630,591	3,153,426
Change in net assets	2,973,799	775,330	3,749,129
Net assets, beginning	12,248,273	7,526,503	19,774,776
Net assets, end	\$ 15,222,072	\$ 8,301,833	\$ 23,523,905

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

Statement of Functional Expenses
 Year Ended December 31, 2020
 (with Comparative totals for 2019)

	Program	Publications	Administrative	Fundraising	2020	2019
Salaries, compensation and benefits	\$ 4,269,374	\$ 1,292,430	\$ 1,848,383	\$ 272,112	\$ 7,682,299	\$ 7,336,941
Publication costs	911,587	993,239	149	3,736	1,908,711	1,834,917
Shipping and forwarding costs	808,996	607,882	-	-	1,416,878	1,282,777
Communication and postage	322,671	105,216	38,626	31,735	498,248	605,349
Other	427,913	1,268	372,103	23,925	825,209	470,957
Occupancy costs	194,664	79,945	265,814	7,570	547,993	564,309
Office supplies and expenditures	208,868	30,311	27,043	20,363	286,585	463,524
Legal and professional fees	531,489	47,543	202,082	5,011	786,125	568,751
Governance	62,914	-	181,537	-	244,451	522,316
Travel	50,444	5,634	6,720	1,580	64,378	393,529
Depreciation	127,078	23,727	84,031	5,369	240,205	244,204
Rentals and equipment maintenance	227,372	63,251	147,105	12,978	450,706	374,322
Total	\$ 8,143,370	\$ 3,250,446	\$ 3,173,593	\$ 384,379	\$ 14,951,788	\$ 14,661,896

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

Statement of Functional Expenses
Year Ended December 31, 2019

	Program	Publications	Administrative	Fundraising	2019
Salaries, compensation and benefits	\$ 4,313,809	\$ 1,174,137	\$ 1,598,402	\$ 250,596	\$ 7,336,944
Publication costs	917,329	911,950	420	5,216	1,834,915
Shipping and forwarding costs	797,081	485,696	-	-	1,282,777
Communication and postage	371,385	143,285	39,996	50,679	605,345
Other	107,474	1,661	311,447	50,876	471,458
Occupancy costs	199,077	83,251	274,173	7,807	564,308
Office supplies and expenditures	289,264	77,984	37,631	58,637	463,516
Legal and professional fees	377,169	14,715	175,314	1,554	568,752
Governance	119,418	-	402,900	-	522,318
Travel	288,719	55,847	42,934	6,031	393,531
Depreciation	133,979	23,587	81,313	5,325	244,204
Rentals and equipment maintenance	195,039	48,365	119,436	10,988	373,828
Total	\$ 8,109,743	\$ 3,020,478	\$ 3,083,966	\$ 447,709	\$ 14,661,896

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

**Statements of Cash Flows
Years Ended December 31, 2020 and 2019**

	2020	2019
Cash flows from operating activities		
Change in net assets	\$ 2,257,167	\$ 3,749,129
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Receipts to establish or increase permanent endowment	(104,198)	(117,087)
Depreciation	240,205	244,204
(Gain) loss on sale of equipment	411,431	(1,395)
Uncollectible contributions receivable	-	-
Discount and allowance for accounts receivable	42,216	4,894
Discount and allowance for contributions receivable	(4,678)	(39,971)
Change in inventory reserve	(30,563)	15,394
Unrealized gain on investments	(730,006)	(2,734,608)
Realized gain on investments allocated to general and permanent funds	(545,376)	(757,879)
Changes in operating assets and liabilities		
Accounts receivable	(34,489)	(98,593)
Inventories	241,090	(147,426)
Contributions receivable	(10,475)	55,550
Other receivables	33,385	(52,913)
Prepaid expenses and other current assets	(65,783)	(64,952)
Accounts payable and accrued liabilities	27,475	2,145
Deferred revenue	(6,790)	106,865
Refundable advance	1,055,789	-
Deferred life membership dues, net of allocated realized gain	28,027	408,988
Deferred term membership dues	121,254	26,262
	<u>2,925,681</u>	<u>598,607</u>
Net cash provided by operating activities		
Cash flows from investing activities		
Purchase of equipment	(876,571)	(303,371)
Proceeds from sale of equipment	-	1,395
Sales of investments	8,896,831	6,904,870
Purchases of investments	(10,911,105)	(7,639,153)
	<u>(2,890,845)</u>	<u>(1,036,259)</u>
Net cash used in investing activities		
Cash flows from financing activities		
Receipts to establish or increase permanent endowment	104,198	117,087
	<u>139,034</u>	<u>(320,565)</u>
Net increase (decrease) in cash		
Cash, beginning	1,340,096	1,660,661
Cash, end	<u>\$ 1,479,130</u>	<u>\$ 1,340,096</u>

See Notes to Financial Statements.

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2020 and 2019

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.

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 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, 2020 and 2019 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 \$66,668 and \$97,231 as of December 31, 2020 and 2019, respectively.

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2020 and 2019

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 unrestricted 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:

Asset	Estimated useful lives
Building	40 years
Furnishings, equipment and building improvements	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, 2020 and 2019.

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.

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Membership dues - 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.

Publication sales - 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.

Advertising - Advertising revenue is recorded during the period in which the advertisements are published.

Contributions and bequests - 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, 2020 and 2019.

The League's federal information returns prior to calendar year 2017 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. The League has no unrecognized tax positions at December 31, 2020 and 2019.

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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 accounting principles generally accepted in the United States of America 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 13, 2021, 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, 2020 and 2019, the League has the following financial assets available to meet annual operating needs for the subsequent calendar year:

	2020	2019
Cash	\$ 1,479,130	\$ 1,340,096
Accounts receivable	304,105	311,832
Investments available for operations	1,004,000	1,186,000
Other receivable	96,816	130,201
Total	<u>\$ 2,884,051</u>	<u>\$ 2,968,129</u>

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% and 4% in 2020 and 2019, respectively, 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 \$1.0 million and \$1.2 million as of December 31, 2020 and 2019, respectively. Amounts withdrawn in excess of that amount require approval by the

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Notes to Financial Statements December 31, 2020 and 2019

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 unrestricted bequests over \$50,000 to the board-designated endowment.

Note 3 - Contributions receivable

Unconditional contributions receivable to be collected as of December 31, 2020 and 2019, are expected to be realized in the following periods:

	<u>2020</u>	<u>2019</u>
In one year or less	\$ 158,688	\$ 83,713
In one to five years	183,500	248,000
In more than five years	<u>300,000</u>	<u>300,000</u>
Total contributions receivable	642,188	631,713
Less allowance for uncollectible contributions receivable	(50,318)	(48,635)
Less discount	<u>(139,003)</u>	<u>(145,364)</u>
Total	<u>\$ 452,867</u>	<u>\$ 437,714</u>

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

	<u>2020</u>	<u>2019</u>
Current	\$ 158,688	\$ 83,713
Long-term	<u>294,179</u>	<u>354,001</u>
Total	<u>\$ 452,867</u>	<u>\$ 437,714</u>

Contributions receivable expected to be received in more than one year have been discounted using a discount rate of 3.25% and 4.75% at December 31, 2020 and 2019, respectively.

The American Radio Relay League, Incorporated

**Notes to Financial Statements
December 31, 2020 and 2019**

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, 2020 and 2019:

	2020		2019	
	Fair value	Cost	Fair value	Cost
Cash and cash equivalents	\$ 2,223,033	\$ 2,223,033	\$ 541,533	\$ 541,533
Equities and mutual funds	20,104,978	14,020,106	18,173,317	12,423,045
Fixed maturities	12,889,128	12,183,753	13,011,741	12,701,772
Total	\$ 35,217,139	\$ 28,426,892	\$ 31,726,591	\$ 25,666,350

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, 2020 and 2019:

	2020	2019
Life membership	\$ 8,112,523	\$ 7,883,604
Regular operations	5,929,501	5,158,159
Donor restricted for time and purpose	3,983,763	3,601,392
Functioning as an endowment	12,386,709	10,382,995
Donor restricted in perpetuity	4,804,643	4,700,441
Total	\$ 35,217,139	\$ 31,726,591

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

	2020	2019
Unrealized appreciation, beginning		
Fair value	\$ 31,726,591	\$ 27,617,702
Cost	25,666,350	24,292,069
Net gain	6,060,241	3,325,633
Unrealized appreciation, end		
Fair value	35,217,139	31,726,591
Cost	28,426,892	25,666,350
Net gain	6,790,247	6,060,241
Net unrealized gain for the year	\$ 730,006	\$ 2,734,608

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Investment income is summarized as follows for the years ended December 31, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
Interest and dividend income	\$ 668,120	\$ 750,973
Net realized gain on investments	<u>1,088,829</u>	<u>936,455</u>
Gross investment income	1,756,949	1,687,428
Less		
Net investment income allocated to deferred life liability	<u>(545,282)</u>	<u>(537,543)</u>
Total investment income	<u>\$ 1,211,667</u>	<u>\$ 1,149,885</u>

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.

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Notes to Financial Statements December 31, 2020 and 2019

Financial assets carried at fair value at December 31, 2020 and 2019, are classified in the tables below in one of the three categories described above:

	2020			Total
	Level 1	Level 2	Level 3	
Money market fund	\$ 2,223,033	\$ -	\$ -	\$ 2,223,033
Mutual funds				
Mid-cap growth fund	110,265	-	-	110,265
Large blend fund	13,714	-	-	13,714
Large growth fund	772,320	-	-	772,320
World large stock fund	250,477	-	-	250,477
Foreign large growth fund	207,887	-	-	207,887
Total mutual funds	1,354,663	-	-	1,354,663
Exchange traded funds				
Small blend	-	-	-	-
Mid cap blend	95,620	-	-	95,620
Large blend	4,141,489	-	-	4,141,489
Short term bond	1,906,140	-	-	1,906,140
Inflation-protected bond	279,360	-	-	279,360
Foreign large blend	670,594	-	-	670,594
Equity energy	77,790	-	-	77,790
Commodities precious metals	267,631	-	-	267,631
Equity precious metals	108,060	-	-	108,060
Consumer defense	173,920	-	-	173,920
Health	373,818	-	-	373,818
Preferred stock	238,330	-	-	238,330
Utilities	250,800	-	-	250,800
Technology	232,136	-	-	232,136
Immediate-term bonds	519,960	-	-	519,960
Long-term bond	49,338	-	-	49,338
Diversified emerging markets	51,670	-	-	51,670
Option writing	98,460	-	-	98,460
Foreign large value	87,840	-	-	87,840
Large growth	1,965,636	-	-	1,965,636
Consumer cyclical	110,072	-	-	110,072
Total exchange traded funds	11,698,664	-	-	11,698,664
Stocks				
Domestic large cap	6,961,111	-	-	6,961,111
International developed	90,540	-	-	90,540
Total stocks	7,051,651	-	-	7,051,651
Fixed maturities				
Domestic corporate bonds	-	12,159,614	-	12,159,614
U.S. Treasury Bills	-	201,626	-	201,626
International developed bonds	-	527,888	-	527,888
Total fixed maturities	-	12,889,128	-	12,889,128
Total assets at fair value	\$ 22,328,011	\$ 12,889,128	\$ -	\$ 35,217,139

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	2019			Total
	Level 1	Level 2	Level 3	
Money market fund	\$ 541,533	\$ -	\$ -	\$ 541,533
Mutual funds				
Short-term bond fund	265,374	-	-	265,374
Medium value fund	69,650	-	-	69,650
Large blend fund	419,772	-	-	419,772
Large growth fund	389,803	-	-	389,803
World large stock fund	179,158	-	-	179,158
Foreign large growth fund	166,614	-	-	166,614
Total mutual funds	1,490,371	-	-	1,490,371
Exchange traded funds				
Small blend	165,640	-	-	165,640
Mid cap blend	241,318	-	-	241,318
Large blend	6,472,123	-	-	6,472,123
Short-term bond	1,484,183	-	-	1,484,183
Inflation-protected bond	198,205	-	-	198,205
Foreign large blend	697,061	-	-	697,061
Equity energy	122,235	-	-	122,235
Commodities precious metals	194,123	-	-	194,123
Equity precious metals	58,560	-	-	58,560
Consumer defense	161,200	-	-	161,200
Europe stock	58,600	-	-	58,600
Health	230,088	-	-	230,088
Large value	345,182	-	-	345,182
Preferred stock	290,545	-	-	290,545
Industrials	317,930	-	-	317,930
Utilities	258,480	-	-	258,480
Technology	101,620	-	-	101,620
Financial	70,860	-	-	70,860
Total exchange traded funds	11,467,953	-	-	11,467,953
Stocks				
Domestic large cap	5,129,238	-	-	5,129,238
International developed	85,755	-	-	85,755
Total stocks	5,214,993	-	-	5,214,993
Certificates of deposit	100,013	-	-	100,013
Fixed maturities				
Domestic corporate bonds	-	12,095,026	-	12,095,026
U.S. Treasury Bills	-	201,446	-	201,446
International developed bonds	-	615,256	-	615,256
Total fixed maturities	-	12,911,728	-	12,911,728
Total assets at fair value	\$ 18,814,863	\$ 12,911,728	\$ -	\$ 31,726,591

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Notes to Financial Statements December 31, 2020 and 2019

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. Certificates of deposit are valued at cash values based on the instrument issued plus interest accrued.

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, 2020 and 2019.

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, 2020 and 2019.

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, 2020 and 2019:

	2020	2019
Land and building	\$ 1,094,693	\$ 1,094,693
Furnishings, equipment and building improvements	4,696,846	4,403,270
Computer software	2,073,306	2,073,306
	7,864,845	7,571,269
Less accumulated depreciation	<u>(6,750,842)</u>	<u>(6,511,312)</u>
	1,114,003	1,059,957
Construction in progress	<u>754,987</u>	<u>584,098</u>
Total	<u>\$ 1,868,990</u>	<u>\$ 1,644,055</u>

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Note 7 - 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 2020 and 2019. Total employer contributions were \$298,941 and \$286,496 in 2020 and 2019, respectively.

Note 8 - 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 \$7,568,724. As of December 31, 2020 and 2019, the balance of the bequests, inclusive of investment income and unrealized gains and losses, was \$12,386,709 and \$10,382,995, respectively.

Note 9 - Net assets with donor restrictions

Net assets with donor restrictions as of December 31, 2020 and 2019, were available for the following purposes:

	2020	2019
Funds restricted for time or purpose		
Exceptional merit	\$ 1,498,058	\$ 1,475,619
Other specific purposes	1,895,252	1,640,172
Education and research	590,453	485,601
Total funds restricted for time or purpose	3,983,763	3,601,392
Funds restricted in perpetuity		
Second Century fund	3,209,892	3,163,260
W1AW fund	703,968	661,398
DX Log Archive fund	229,390	229,390
Youth and Education fund	272,189	257,189
Colvin fund	154,340	154,340
Dave Bell, W6AQ fund	134,864	134,864
Snyder Collegiate fund	100,000	100,000
Total funds restricted in perpetuity	4,804,643	4,700,441
Total donor restricted net assets	\$ 8,788,406	\$ 8,301,833

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.

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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 DXpeditions.

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 10 - 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 permanently restricted corpus 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.

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Changes in endowment net assets for the year ended December 31, 2020, are as follows:

	Without donor restrictions	With donor restrictions	Total
Endowment net assets, January 1, 2020	\$ 10,382,995	\$ 5,685,796	\$ 16,068,791
Investment income, net	848,711	272,473	1,121,184
Net unrealized gain	266,544	125,221	391,765
Contributions	888,459	104,402	992,861
Amounts appropriated for expenditure	-	(220,979)	(220,979)
Endowment net assets, December 31, 2020	<u>\$ 12,386,709</u>	<u>\$ 5,981,196</u>	<u>\$ 18,367,905</u>

Endowment net asset composition by type of fund as of December 31, 2020, is as follows:

	Without donor restrictions	With donor restrictions	Total
Donor-restricted endowment funds	\$ -	\$ 5,981,196	\$ 5,981,196
Board-designated endowment funds	12,386,709	-	12,386,709
Total funds	<u>\$ 12,386,709</u>	<u>\$ 5,981,196</u>	<u>\$ 18,367,905</u>

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Changes in endowment net assets for the year ended December 31, 2019, are as follows:

	Without donor restrictions	With donor restrictions	Total
Endowment net assets, January 1, 2019	\$ 8,665,279	\$ 5,093,084	\$ 13,758,363
Investment income, net	417,341	261,521	678,862
Net unrealized gain	913,248	457,202	1,370,450
Contributions	387,127	117,087	504,214
Amounts appropriated for expenditure	-	(243,098)	(243,098)
Endowment net assets, December 31, 2019	<u>\$ 10,382,995</u>	<u>\$ 5,685,796</u>	<u>\$ 16,068,791</u>

Endowment net asset composition by type of fund as of December 31, 2019, is as follows:

	Without donor restrictions	With donor restrictions	Total
Donor-restricted endowment funds	\$ -	\$ 5,685,796	\$ 5,685,796
Board-designated endowment funds	<u>10,382,995</u>	<u>-</u>	<u>10,382,995</u>
Total funds	<u>\$ 10,382,995</u>	<u>\$ 5,685,796</u>	<u>\$ 16,068,791</u>

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. There were no deficiencies of this nature reported in net assets as of December 31, 2020 and 2019.

Note 11 - Lease obligations

The League leases warehouse space and office equipment under operating leases with monthly payments ranging from \$77 to \$4,265, which expire at various times through June 2021. Total operating lease expense was \$150,940 and \$130,489 for the years ended December 31, 2020 and 2019, respectively.

The future minimum lease payments due under noncancelable operating leases as of December 31, 2020 are \$24,203 for 2021.

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Notes to Financial Statements December 31, 2020 and 2019

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, 2020, the Company had approximately \$1,276,000 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, 2020 and 2019.

Note 14 - Refundable advance - 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 loan is uncollateralized and is fully guaranteed by the Federal government. The League is eligible for loan forgiveness of up to 100% of the loan, upon meeting certain requirements. The League has initially recorded the loan as a refundable advance and will record the forgiveness in accordance with guidance for conditional contributions when there is no longer a measurable performance or other barrier and a right to return of the PPP loan or when such conditions are explicitly waived. The League has also recorded \$6,925 in accrued interest related to this advance, and this amount is included in the refundable advance balance on the accompanying statement of financial position. Proceeds from the loan are eligible for forgiveness if the League maintains employment levels during its eight-week covered period and uses the funds for certain payroll, rent, and utility expenses. No contribution revenue has been recorded for the year ended December 31, 2020. The League will be required to repay any remaining balance, plus interest accrued at 1% per annum in monthly payments through the maturity date.

The American Radio Relay League, Incorporated

Notes to Financial Statements December 31, 2020 and 2019

Note 15 - Contingency

The COVID-19 pandemic, whose effects first became known in January 2020, is having a broad and negative impact on commerce and financial markets around the world. The United States and global markets experienced significant declines in value resulting from uncertainty caused by the pandemic. The League is closely monitoring its investment portfolio and its liquidity and is actively working to minimize the impact of these declines. The extent of the impact of COVID-19 on the League's operational and financial performance will depend on certain developments, including the duration and spread of the outbreak and its impacts on the League's customers, employees, and vendors, all of which at present, cannot be determined. Accordingly, the extent to which COVID-19 may impact the League's future financial position and changes in net assets and cash flows is uncertain and the accompanying consolidated financial statements include no adjustments relating to the effects of this pandemic.

The American Radio Relay League, Incorporated
Supplementary Information
Restricted Funds for Time and Purpose Summary
Year Ended December 31, 2020

Fund name	Balance January 1, 2020	Redesignations	Contributions	Investment income, net	Unrealized gain	Released from restriction	Balance December 31, 2020
H.P. Maxim Award	\$ 44,636	-	-	\$ 1,109	-	-	\$ 45,745
Exceptional Merit	1,475,619	-	-	24,558	37,881	(40,000)	1,498,058
Legal Research and Resource	218,387	-	26,404	-	-	(1,002)	243,789
Ham Aid Fund	117,509	-	36,687	-	-	(1,002)	153,194
Defense of Frequencies	-	-	321,048	28,129	-	(349,177)	-
Lab Fund	30,212	-	4,868	-	-	-	35,080
Education and Technology	448,265	1,650	380,516	17,701	-	(301,612)	546,520
Steven Rich Fund	10,000	-	-	-	-	-	10,000
Direction Finding	1,334	-	-	-	-	-	1,334
Fred Fish Awards Fund	723	-	1,945	-	-	(961)	1,707
Legislative Issues Advocacy Fund	61,650	-	4,238	-	-	-	65,888
Preservation of Artifacts	204,287	-	1,608	-	-	-	205,895
Awards LoTW Fund	-	-	40,266	-	-	(40,266)	-
Colvin Fund earnings	60,273	2,597	-	10,472	4,812	-	78,154.00
W1AW Fund earnings	233,354	8,268	200	45,393	20,790	(23,919)	284,086
Youth and Education Fund earnings	37,336	-	-	-	6,598	-	43,934
Second Century Campaign earnings	546,351	-	-	185,112	80,540	(185,109)	626,894
CCF Earnings - DX Log Archive	74,813	-	-	15,564	6,674	(2,800)	94,251
Dave Bell - W6AQ Fund earnings	17,937	-	-	9,150	3,255	(9,150)	21,192
Snyder Collegiate Amateur Radio earnings	18,706	-	-	6,784	2,552	-	28,042
Total restricted funds for time and purpose	\$ 3,601,392	\$ 12,515	\$ 817,780	\$ 343,972	\$ 163,102	\$ (954,998)	\$ 3,983,763

See Independent Auditor's Report.

The American Radio Relay League, Incorporated
Restricted Funds for Time and Purpose Summary
Year Ended December 31, 2019

Fund name	Balance January 1, 2019	Contributions	Investment income, net	Unrealized gain	Released from restriction	Balance December 31, 2019
H.P. Maxim Award	\$ 43,361	-	1,275	-	-	\$ 44,636
Exceptional Merit	1,344,515	-	29,403	141,701	(40,000)	1,475,619
Legal Research and Resource	204,738	13,829	-	-	(180)	218,387
Ham Aid Fund	113,696	3,813	-	-	-	117,509
Defense of Frequencies	-	245,143	27,158	-	(272,301)	-
Lab Fund	21,023	9,189	-	-	-	30,212
Education and Technology	422,794	142,725	16,660	-	(133,914)	448,265
Steven Rich Fund	10,000	-	-	-	-	10,000
Direction Finding	1,334	-	-	-	-	1,334
Fred Fish Awards Fund	1,320	-	-	-	(597)	723
Legislative Issues Advocacy Fund	70,036	4,753	-	-	(13,139)	61,650
Preservation of Artifacts	200,597	3,836	-	-	(146)	204,287
Colvin Fund earnings	35,713	-	10,493	17,067	(3,000)	60,273
W1AW Fund earnings	163,752	-	43,507	74,266	(48,171)	233,354
Youth and Education Fund earnings	13,722	-	-	23,614	-	37,336
Second Century Campaign earnings	247,607	-	182,759	298,744	(182,759)	546,351
CCF Earnings - DX Log Archive	36,602	-	15,594	22,617	-	74,813
Dave Bell , W6AQ Fund earnings	5,711	-	9,168	12,226	(9,168)	17,937
Snyder Collegiate Amateur Radio earnings	6,628	-	6,798	8,665	(3,385)	18,706
Total restricted funds for time and purpose	\$ 2,943,149	\$ 423,288	\$ 342,815	\$ 598,900	\$ (706,760)	\$ 3,601,392

See Independent Auditor's Report.

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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 Regulations



ARRL The National Association for
Amateur Radio®

225 Main Street, Newington, CT 06111-1400

860-594-0200 Phone

860-594-0259 Fax

www.arrl.org

hq@arrl.org