

American Radio Relay League
Treasurer's Report
Rick Niswander, K7GM
For the quarter ending March 31, 2016

Bonds were the asset class winner in the first quarter of 2016, rising 1.58%, primarily a result of falling interest rates (recall that as rates fall, prices rise). Rates on five year treasuries fell from 1.76% at the beginning of the quarter to 1.21% at the end of March. Rates on corporate bonds or bonds of differing maturities exhibited similar falling interest rate patterns.

The total return on the US stock market increased just shy of 1% in the quarter, but that very modest increase masked a significant drop and recovery in the quarter. In the first half of the quarter, stocks were down with the S&P 500 recording a loss of 10.5% through February 11. From that point, the S&P and other US markets made up that loss plus a little bit. Internationally, stock markets recorded a small loss with the small gains in emerging markets being overcome by small losses in most developed markets.

Net earnings of S&P 500 companies (as reported under Generally Accepted Accounting Principles) fell 12.7% in 2015 according to an analysis by the Wall Street Journal. While much of the drop was driven by the profit collapse in the energy sector, that overall reduction was the worst since 2008. Of concern going forward is that analysts are reducing 2016 earnings estimates at a rate greater than historical averages. In general, analyst earnings estimates are reduced as the year progresses; the first quarter reduction is more than normal. The combination of falling profits and accelerated reductions in forward-looking earnings estimates suggests that stock returns will not be robust in 2016.

Overall, our portfolio gained \$396,174 for the quarter or a 1.82% market increase. The portfolio benchmark (45% US stocks, 5% international stocks, 45% bonds, 5% money market) rose by 1.13%. We beat the benchmark by 0.69% for a few reasons. One is that our stock portfolio has a bit more emphasis on value stocks and that category outperformed in the quarter (value stocks up 3.87% with growth stocks down 1.4%). Another is that we increased our stock exposure during the quarter, adding about \$400K to stocks around mid-February. That increment shared in the end-of-quarter recovery. Finally, our bond exposure is a little higher than the benchmark and, because bonds did a bit better than stocks, our total return got a little boost.

The following chart illustrates the percentage change in various market and portfolio total return indicators for the first quarter of 2016 and calendar 2015.

	Q1 2016	Calendar 2015
Total Return Indices:		
US stock – Russell 3000 (broad market)	0.97%	0.48%
Foreign stock – FTSE All World ex-US	(0.36%)	(4.46%)
Bonds – Barclays US Agg 1-5yr Bond	1.58%	1.07%
Vanguard Money Market	0.01%	0.04%
Portfolio Benchmark (total return)	1.13%	0.48%
Actual Portfolio Return (total return)	1.82%	(0.74%)

ARRL Portfolio Analysis

As noted in Appendix A, the portfolio ended the first quarter of 2016 at \$22,381,974. That is up \$555,117 from year end 2015. In the first quarter, contributions of \$158,943 were added to the portfolio and we earned \$396,174 from interest, dividends, and market returns.

The top of Appendix B provides detail concerning the dispersion of investment portfolio assets across investment classes. The composition of the investment portfolio conforms to the asset allocation policy.

The rest of Appendix B provides detail on the total portfolio return with respect to the portfolio benchmark. The portfolio benchmark is a blend of total return indices in proportions consistent with the asset allocation policy. The benchmark proportions are 45% broad domestic stock, 5% international stock, 45% bonds, and 5% money market.

When comparing benchmark return to actual return, variability from quarter-to-quarter or year-to-year should be expected. Comparisons should be made with caution over three-to-five year time horizon. Further, comparison indexes do not include any transaction/holding costs (trading commissions and annual fees). While our transaction/holding costs are low, they are not zero.

Appendix A

American Radio Relay League
Portfolio Flow

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	Investment Portfolio Market Value
Balance, March 31, 2014	21,573,309
Additions from contributions	500,987
Subtractions	(525,000)
Total Return	667,835
Balance, June 30, 2014	<u>22,217,131</u>
Balance, June 30, 2014	22,217,131
Additions from contributions	336,193
Subtractions	(800,000)
Total Return	(18,775)
Balance, September 30, 2014	<u>21,734,549</u>
Balance, September 30, 2014	21,734,549
Additions from contributions	202,949
Subtractions	(500,000)
Total Return	317,013
Balance, December 31, 2014	<u>21,754,511</u>
Balance, December 31, 2014	21,754,511
Additions from contributions	182,444
Subtractions	(50,000)
Total Return	143,499
Balance, March 31, 2015	<u>22,030,454</u>
Balance, March 31, 2015	22,030,454
Additions from contributions	96,327
Subtractions	0
Total Return	(77,797)
Balance, June 30, 2015	<u>22,048,984</u>
Balance, June 30, 2015	22,048,984
Additions from contributions	300,262
Subtractions	(500,000)
Total Return	(733,318)
Balance, September 30, 2015	<u>21,115,928</u>
Balance, September 30, 2015	21,115,928
Additions from contributions	204,205
Subtractions	0
Total Return	506,724
Balance, December 31, 2015	<u>21,826,857</u>
Balance, December 31, 2015	21,826,857
Additions from contributions	158,943
Subtractions	0
Total Return	396,174
Balance, March 31, 2016	<u>22,381,974</u>

Two-Year Summary

Beginning Balance, March 31, 2014	21,573,309
Cumulative Additions from contributions	1,982,310
Cumulative Subtractions	(2,375,000)
Cumulative Market Returns	1,201,355
Ending Balance, March 31, 2016	<u>22,381,974</u>

Appendix B

**American Radio Relay League
Portfolio Composition as of March 31, 2016**

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	Fair Value	Percentage	Amortized Cost
Investment Portfolio			
Stock (of which \$1,072,283 is international)	10,380,310	46.4%	7,923,212
Bond	11,283,059	50.4%	11,199,600
Cash	718,605	3.2%	718,605
Total Investment Portfolio	<u>22,381,974</u>	<u>100.0%</u>	<u>19,841,417</u>

**American Radio Relay League
Portfolio Return and Total Return Metrics**

	2016 1st Quarter	Calendar Year 2015	Calendar Year 2014	Calendar Year 2013	Calendar Year 2012
Applicable Total Return Indices					
US Stock - Russell 3000 TR	0.97%	0.48%	12.56%	33.55%	16.42%
Foreign Stock - FTSE AW Ex US TR	-0.36%	-4.46%	-3.04%	15.63%	17.80%
Bonds - Barclays US Agg 1-5Yr TR	1.58%	1.07%	1.69%	0.25%	2.21%
VG Prime Money Market	0.01%	0.04%	0.04%	0.04%	0.04%
Benchmark Blended Total Return (45% us, 5% intl, 45% bonds, 5% mmmkt)	1.13%	0.48%	6.26%	15.99%	9.28%
Benchmark Bended Total Return (above)	1.13%	0.48%	6.26%	15.99%	9.28%
Actual Total Return	1.82%	-0.74%	5.77%	14.66%	11.04%
In Percent	396,174	(160,892)	1,220,626	2,654,016	1,769,299
In Dollars (from page 1)					

Notes:

Returns for greater than one quarter will be different than the sum of the quarterly returns because of compounding

The Russell 3000 Index is a measure of the total US stock market.

The FTSE index measures the World (AW) stock market, minus the US market

The Barclays index measures the aggregate US bond market for maturities of 1-5 years (the type of bonds in which we invest)

The Vanguard Prime Money Market is a proxy for the overall US money market

The Benchmark Blended Total Return is calculated from the above indexes in the proportions noted. It represents the expected return on the portfolio.

The Actual Total Return is calculated based on the dollar amount of Total Return relative to the original principal amount for the period calculated.

If there are significant increases or decreases to the investment portfolio in the period, the calculated Actual Total Return is adjusted accordingly.

IT Project Status — May 2016

Report to the Administration & Finance Committee of the ARRL Board of Directors

As of the end of the first quarter of 2016, the status of the IT projects identified in the ARRL 2016-2017 Plan are summarized in Table 1 (below).

During the first quarter of 2016, web applications software development efforts were directed towards projects identified in the ARRL 2016 Plan as being of high priority, specifically:

1. *Logbook of the World support for the National Parks on the Air Event*

Supported test and release of award certificate ordering and fulfillment.

Coded, tested and deployed enhancements to support NPotA event

2. *AIS Membership & Subscriptions Module*

Continued conceptual design and requirements collection from stakeholders.

3. *Field Service Reporting*

In test with Filed Organization

4. *Education project*

Completed coding commenced testing with customer.

5. VEC

Emergency repair to Siebel (MS SQL Server) database tables.

In the infrastructure (hardware) area, the following project continued during the 1st quarter:

1. Deployment of perimeter network for externally visible servers (“DMZ”) resumed after hiatus for the holiday shopping season. Plan has one remaining work session to be completed.

Table 1 — IT Project Status (May 2016)
Table 1a — Web Application Software Development Projects (May 2016)

Priority	Project	Phase	Status	
			Complete	ETC — Effort (person-months)
High (2015)	National Parks on the Air Operating Event	Complete	100%	N/A
High (2013)	AIS Affiliated Club Module	Complete	100%	N/A
High (2014)	AIS Advertising Module	Complete	100%	N/A
High (2016)	AIS Membership/Subscription/Development Module	Inception	5%	9
High (2016)	AIS Membership — Web membership application/renewal	Inception	5%	3
High (2016)	AIS Membership — Automatic renewal of membership	Inception	5%	3
High (2016)	AIS Membership — Account management	Elaboration	15%	13
High (2016)	AIS Education Module	Construction	80%	1
High (2016)	Field Organization Reporting	Construction	70%	1
High (2016)	Replacement for DXCC (“ATS”) system	Construction	35%	10
High (2015)	Web service subscription interface for Digital QEX	Inception	0%	2
High (2016)	Web service for VEC portal	Inception	0%	2
Medium (2014)	Upgrade ARRL web site software components	Elaboration	10%	3
Medium (2016)	Improve tools for ARRL electronic newsletters	Inception	0%	2
Medium (2014)	Authentication web service for exam generation	Inception	0%	2
Medium (2016)	“Contest 2020” Phase 2	Inception	10%	2
Medium (2016)	“Contest 2020” Phase 1	Transition	60%	2
Total Effort				45
Available Effort				10 (19)
Commitments				450% (240%)

Table 1 — IT Project Status (May 2016) – cont.

Table 1b — LoTW Software Development Projects (May 2016)

Priority	Project	Phase	Status	
			Complete	ETC — Effort (person-months)
High (2016)	Place ads on LoTW pages	Complete	100%	N/A
High (2016)	Add new awards (award sponsor API)	Transition	95%	0.1
High (2016)	Improvements to user interface (Logbook web site redesign)	Inception	0%	12
High (2015)	Update administration and awards management screens	Inception	0%	6
Medium (2014)	Code maintenance and upgrade SAP database classes	Transition	99%	0.10
Medium (2014)	Instrument, monitor and tune database performance	Construction	50%	1
Medium (2014)	Establish a Logbook of the World co-location site.	Transition	90%	0.50
Medium (2014)	Add ARRL 5-Band award (WAS)	Complete	100%	0
Medium (2014)	Add ARRL 5-Band awards (DXCC)	Construction	50%	0.50
Total Effort				20.6
Available Effort				21
Commitments				100%

Table 1 — IT Project Status (May 2016) – cont.

Table 1c — Infrastructure Projects (May 2016)

Priority	Project	Phase	Status	
			Complete	ETC — Effort (person-months)
High (2015)	Upgrade MS Great Plains to latest	Complete	100%	N/A
High (2015)	Install boundary firewall	Complete	100%	N/A
High (2015)	Install perimeter firewall	Construction	90%	0.1
High (2015)	Upgrade McAfee anti-virus/anti-malware protection suite	Complete	100%	N/A
High (2015)	Deploy McAfee Complete Endpoint Protection module	Complete	100%	N/A
High (2015)	Deploy McAfee Web Security module	Complete	100%	N/A
High (2015)	Security / vulnerability assessment by external consultant	Complete	100%	N/A
High	Implement migration plans for Windows Server 2003 servers	Complete	100%	N/A
Medium	Configure & deploy Network Monitoring Center	Complete	100%	N/A
Medium (2015)	Deploy McAfee Host Intrusion Prevention s/w	Complete	100%	N/A
Medium (2015)	Deploy security policy changes to HQ servers	Complete	100%	N/A
Medium (2016)	Deploy security policy changes to HQ desktop users	Transition	90%	0.25
Low (2014)	Upgrade HW desktop systems to MS Office 2013 / Office 365	Complete	100%	N/A
Total Effort				.35
Available Effort				18
Commitments				1%

ADOPTION OF A WEB PENETRATION POLICY FOR MEMBERS

OLD BUSINESS: Item 8 of January 14, 2016 minutes

BACKGROUND: Immediate past A&F Committee member Dr. Jim Boehner, N2ZZ, Roanoke Division Director, raised the issue about ARRL adopting an "Opt-Out" rather than "Opt-In" policy for members registered through ARRL's website. Issue is being pursued by current A&F member Bill Morine, N2COP, Roanoke Division Vice Director. This issue was prompted as an agenda item because Directors, Vice Directors and Section Managers noticed at hamfests and club meetings a large number of members were unaware of Division and Section emails, and that they had to elect for an "Opt-In" selection to receive field communications. This item originally was designed to see if ARRL wished to adopt a blanket wide "Opt-Opt" policy to reach the maximum number of members by email. Subsequent research has modified the objective to address instead development of member web penetration policy.

REVIEW: Statistics contained in the accompanying spreadsheet show that 86.5% of ARRL members have created a website member profile. ARRL had an exclusive "Opt-In" policy until 2010, meaning members had to elect voluntarily to subscribe to various ARRL email messages. Following the conversion in 2010 to a new website, members who set up a website profile after that date were placed in "Opt-Out" status, meaning they were enrolled automatically in ARRL emails and could elect to exclude themselves from ARRL email subscriptions. However, ARRL members who had completed a member profile on the website prior to the 2010 website conversion have retained "Opt-In" status. With the blend of the pre-2010 Opt-In policy and the post 2010 Opt-Out policy, the range of penetration of ARRL emails varies from a high of 83% for digital QST to a low of 1.6% for minutes of board meetings. 65% of members with active ARRL web accounts receive Division and Section field emails.

DISCUSSION: League representatives in the field at the Division and Section levels find it counterproductive in not being able to reach members with issues which impact them on a regional and local basis. Simultaneously, HQ staff are sensitive to those members who wish not to receive emails without permission.

PROPOSAL: Development of a cohesive policy(ies) which addresses how ARRL wishes to reach members. Solutions could range from awareness campaigns in existing ARRL publications (print and electronic) urging members to subscribe, to a timetable to convert all members to Opt-Out status. A policy, if developed and adopted, should be placed in the Strategic and one year Operations Plans.

Email	Total	Active	% Active	% of
	Number <u>Subscribers</u>	Member <u>Subscribers</u>	Member <u>Subscribers</u>	Active <u>Web Accounts</u>
ares_eletter	76,985	39,831	23.8%	27.5%
arrl_board_minutes	3,443	2,701	1.6%	1.9%
arrl_club_news	54,155	27,484	16.4%	19.0%
arrl_contest_update	50,616	27,423	16.4%	18.9%
arrl_instructor_teacher_eletter	22,105	11,904	7.1%	8.2%
arrl_legislative_update	17,591	10,386	6.2%	7.2%
disable_all	12,391	2,915	1.7%	2.0%
division_and_section_news	216,774	109,351	65.3%	75.4%
iaru_eletter	30,517	15,487	9.2%	10.7%
notify_of_digital_qst	199,011	140,509	83.9%	96.9%
notify_of_license_expiration	242,236	122,088	72.9%	84.2%
notify_of_membership_expiration	242,753	119,370	71.3%	82.3%
publication_announcements	222,932	95,298	56.9%	65.7%
receive_arrl_newsletter	235,909	105,285	62.9%	72.6%
w1aw_bulletin-dx	77,327	36,096	21.6%	24.9%
w1aw_bulletin-general	101,330	45,742	27.3%	31.6%
w1aw_bulletin-keplerian	35,347	13,964	8.3%	9.6%
w1aw_bulletin-propagation	78,238	36,233	21.6%	25.0%
w1aw_bulletin-satellite	56,870	23,909	14.3%	16.5%
w1aw_bulletins	49,777	28,522	17.0%	19.7%

167,485 active members

Active members have a status of A or N and their membership expiration date is greater or equal to today.

144,967 active web accounts for active members

21,999 inactive web accounts for active members

Development Report

To the ARRL Administration & Finance Committee

Wednesday, May 4, 2016

(H) 860-529-9970

Revenue results through March 31 are as follows:

Spectrum Defense Fund: \$18,794 (6.1% of goal of \$310,000)

Diamond Club: \$105,150 (31.4% of goal of \$335,000)

Education & Technology Fund: \$37,795 (29.1% of goal of \$130,000)

Legislative Issues Advocacy Fund \$245 (.1% of goal of \$35,000)

A direct mail solicitation for the Advocacy Fund was sent in mid-March. Approximate returns on this mailing to date are \$37,298.)

Misc. Unrestricted: \$32,627

Includes \$15,344 from the Estate of Jack Jackson, N4JJ

A direct mail solicitation for the Legislative Issues Advocacy Fund was sent to 50,000 members in March. This is the first direct mail solicitation implemented for this relatively new fund. Approximate returns to date are \$37,795.

The 2016 Spectrum Defense mug, pin, and certificate have been produced. This is the third year in our "series" of Defense premiums, based on the colors of ARRL's five pillars (Advocacy, Membership, Public Service, Education, and Technology). The first Spectrum Defense Fund direct mail solicitation, written by Tom Gallagher, NY2RF, sent to 75,000 members is currently at the mail house, and is scheduled to hit mailboxes in early May. The second direct mail solicitation is scheduled for October of this year.

The Diamond Club remains our greatest opportunity for unrestricted income. Individuals are encouraged to join the Diamond Club via a buckslip in the membership renewal mailing, which also includes an offer of a free gift. Additional strategies to reengage lapsed Diamond Club members, increase the number of members, and increase the gifts from current Diamond Club members are continuously employed throughout the year. Development communicates with Diamond Club members on multiple levels year-round to strengthen relationships.

The Diamond Terrace continues to be extremely popular (Diamond Club members at the Brass level [\$250] or higher may place an engraved brick in the Terrace). As of December 31, 2015, there are 1,896 engraved bricks in the Terrace. A spring installation of an additional 62 bricks is scheduled for May. We will continue to find ways to promote this benefit.

The Education & Technology Fund has received several large contributions from committed individuals who regularly support ARRL's educational efforts. The direct mail solicitation for the Education & Technology Fund is scheduled for September.

ARRL has once again applied to the Combined Federal Campaign to be a qualified agency for the 2016 campaign. We have not yet received approval for our application. Due to a new review process and additional information requirements, ARRL was not approved initially for the 2015 campaign. Fortunately, our appeal was accepted and ARRL was listed to receive pledges.

As of December 31, 2015, the ARRL Maxim Society boasts 189 members. 18 new members were welcomed in 2015 alone.

The 16 Annual ARRL Donor Recognition Reception is scheduled for the Thursday evening prior to Hamvention (May 19) at Meadowbrook at Clayton. ARRL CEO Tom Gallagher, NY2RF, is the keynote speaker. To date, 146 guests have RSVP'd.

Prepared: May 3, 2016

By: Lauren Clarke, KB1YDD

ARRL Development Manager

A Proposal to Create

The ARRL Virtual Museum

By Harold Kramer WJ1B
ARRL Chief Operating Officer
February 2016

Submitted to ARRL Historical Committee:

Rod Blocksome, KØDAS, Midwest Division Director, Chairman
Tom Frenaye, K1KI, New England Division Director
Richard J. Norton, N6AA, Southwestern Division Director
Mike Marinaro, WN1M, Member/HQ Volunteer
Bob Allison, WB1GCM, Staff/Product Review Engineer

And,

Jim Pace, K7CEX, Chairman ARRL Administration & Finance Committee
Dave Sumner, K1ZZ, ARRL CEO
Barry Shelley, N1VXY, ARRL CFO
Ed Hare, W1RFI, ARRL Laboratory Manager
Steve Ford, WB8IMY, ARRL Publications Manager
Lauren Clarke, KB1YDD, ARRL Development Manager
Bob Inderbitzen, NQ1R, ARRL Marketing Manager

Concept

I propose that the ARRL create a Virtual Museum. The Virtual Museum will be a website that displays the ARRL's extensive collection of historical, radio-related objects and documents. The concept of a museum has been discussed by ARRL management and Board for many years, but the ARRL has never had the resources to make it a reality. In fact, a formal proposal to build a museum on the ARRL campus was presented to the ARRL Board in 1986. However, it never received sufficient funding to make it a reality. I consider this proposal as a one-year proof of concept, rather than a completely developed plan.

The ARRL collection is comprised of approximately about 600 physical objects that are significant to the history of the ARRL and Amateur Radio. Many of these items are truly priceless. They cannot be duplicated or replaced. Some are one of a kind hardware, objects unique to the ARRL, or prototypes.

In conjunction with the ARRL's Historical Committee, and a group of dedicated volunteers and staff, have recently created an inventory of these objects. We are prepared to move ahead with the next step and make them visible, not just at ARRL Headquarters, but to the world.

There are no full time staff members dedicated to this endeavor. Staff and volunteers have been working on this project when time is available. The current volunteers who are working on the historical collection now are enthusiastic about this project and they are excited about working on the virtual museum project with me.

The team is comprised of:

Jonathan Allen, K2KKH, Volunteer, Inventory Management
Bob Allison, WB1GCM, Assistant Lab Manager and Exhibit Curator
Martin Ewing, AA6E, Lab Volunteer, Exhibit and Software Consultant
Bill Knapp, WA1WK, Lab Volunteer, Web and Media Expertise
Mike Marinaro, WN1M, ARRL Volunteer Archivist
Peter Turbide, W1PT, Lab Volunteer – Restoration Specialist

Status of Current Exhibits

About 150 objects from the collection are currently exhibited in a small room in the ARRL Lab. The ARRL's lobby also houses a small exhibit area that features one object, or a group of related objects, each month. There is a display cabinet in the entranceway of W1AW that exhibits some very extraordinary historical objects. The display cases on the second floor contain some historical objects relevant to ARRL history and there are other historic objects scattered about in various places in the building. At present, these objects can only be viewed by visitors to ARRL HQ. About 1,500 members and guests tour HQ each year, less than 1% of ARRL's total membership. The Virtual Museum would make the collection available to the other 99%.

The Lab and Lobby exhibits are the most popular parts of the HQ tour. Many visitors' react very emotionally as they remember the equipment that they used earlier in their Amateur Radio career. Based on what we have learned from these exhibits, an expanded web-based version would resonate well with ARRL members.

The ARRL Historical Committee Statement of Purpose

Creation of this virtual museum is consistent with the ARRL Historical Committee Statement of Purpose:

The historical collection is one of many ARRL activities maintained to further the Association's core purpose. The Collection provides a record of significant activities, contributions and accomplishments of ARRL and amateurs fostering a better understanding and appreciation of amateur radio's origin and development over the years.

The ARRL Historical Collection seeks to collect, identify, preserve, conserve documents, objects and images significant to the history of ARRL and amateur radio, particularly in the United States, and to facilitate their use in understanding the history and importance of amateur radio and ARRL over time.

And, with the ARRL's Mission Statement:

To advance the art, science, and enjoyment of Amateur Radio.

The ARRL Virtual Museum

Definitions

What is a Museum?

According to the ICOM (International Council of Museums) Statutes, adopted by the 22nd General Assembly in Vienna, Austria on August 24th, 2007:

A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment.

This definition is a reference in the international community.

<http://icom.museum/>

What is a Virtual Museum?

“A virtual museum is a digital entity that draws on the characteristics of a museum, in order to complement, enhance, or augment the museum experience through personalization, interactivity and richness of content.

Virtual museums can perform as the digital footprint of a physical museum, or can act independently, while maintaining the authoritative status as bestowed by the International Council of Museums (ICOM) in its definition of a museum. In tandem with the ICOM mission of a physical museum, the virtual museum is also committed to public access; to both the knowledge systems imbedded in the collections and the systematic, and coherent organization of their display, as well as to their long-term preservation.”

https://en.wikipedia.org/wiki/Virtual_museum

The ARRL Virtual Museum

The ARRL Virtual Museum will exhibit the objects in ARRL's collection on the World Wide Web, making them available to anyone who can access the Internet on their web browser, tablet, or smartphone. Initially, we will focus on exhibiting physical objects from the collection. We will add some historic ARRL documents or photographs, if they are of significance or relate to the object on display.

There are websites that display hardware for specific areas of Amateur Radio history, such as telegraph keys, or specific brands of radio, such as Collins. However, I am unaware of any website that presents a comprehensive view of Amateur Radio or ARRL history.

A museum, virtual or real, does more than just display historic objects. It tells a story about them; places them in a larger context; and demonstrates their historic and cultural value. At present, due to space and resource limitations, the objects displayed in the Lab Exhibit do not include any of this information. This type of meta-data can be easily added to the virtual museum.

The ARRL Virtual Museum will expand ARRL members' learning experiences by including additional material about an item's history and provenance. It will provide additional information such as operating manuals and accessories, making it a richer and more detailed experience for the visitors, researchers, and scholars. The Virtual Museum has the capability to make Amateur Radio history come alive through multimedia pages that can display audio, video clips, and photographs related to each object. It will also feature links to any related websites. We will also solicit member input for information about particular objects.

I suggest that the museum be organized chronologically roughly by decades beginning circa 1915, the first year of *QST*'s publication. The organizational structure will be based on the work that was done for the ARRL Centennial Timeline that is exhibited in our hallway and was published in *QST*. The organizational structure is not critical since the web search engine will be able to locate objects in the museum based on many different search criteria.

I also will feature some of the more interesting objects on the ARRL Facebook Page and on the ARRL website. I have some experience with this since I have posted unusual and interesting historical objects on the ARRL Facebook during the past few years. I have called this feature "From the ARRL Attic." These posts usually generate more than 10,000 "Likes" and many "Comments" and "Shares."

Website and Database Software

We will use Past Perfect Software (PPS) as the collection database. From their website: “PPS is museum software that currently hosts hundreds of virtual museums websites. PastPerfect software brings millions of artifacts from museums, libraries, archives and other organizations to web users around the world and it permits users to search through hundreds of collections at once to find images and information. Users may also browse through the collections, filtering by Region or Specialty to narrow down the list.”

The ARRL has already purchased PastPerfect, but it has not been used since the resources have not been available to configure it for the collection and provide the necessary training for its operation.

PPS, along with serving as a database for historical objects, provides a template solution to developing a virtual museum site. It can create searchable HTML Web website pages directly from the database. These pages can be hosted on PPS servers for a modest annual fee (\$440). Here are some examples of these Virtual Museum websites on the PPS platform:
<http://pastperfect-online.com/>

ARRL has successfully used similar template solutions for other applications. These include RegOnline that was used as the registration software for the ARRL Centennial Convention, and Weebly, a website template, that is used for the ARISS and IARU websites.

PastPerfect’s virtual museum template can be modified to make the site visually compatible with the ARRL’s current website. It will not look exactly like the ARRL website design, but it will be sufficiently branded as ARRL. Because PPS hosts the web pages, there is no need for the ARRL’s busy IT Department to be involved. To integrate The Virtual Museum with the ARRL website, I plan to create an information page on the arrl.org website that provides information about and links to the virtual museum. This would be similar to the arrangement that we currently use for Logbook of the World.

Task List

How do we make it happen? Here is what I suggest.

Phase 1 – Object Classification – Approximately one month

1. Install the PastPerfect software on the ARRL Network and define users.
2. Configure the software.
3. Learn the PastPerfect software.
4. Create a formal object classification system for our 600+ objects based on the PPS standard classification system

Phase 2 – Database Entry – Approximately two - three months

5. Develop a prioritization system for items to be included in the ARRL Virtual Museum and database. The Historical Committee has done much of this work already.
6. Classify the objects and enter the selected objects into the PPS database.
7. Implement a barcode system for labeling the objects. (Optional)
8. Research the objects including stories from actual users, manufacturers and others and add them to the database.
9. Photograph selected objects and add them to the database,

Phase 3 – Build and Activate Virtual Museum - Determine the overall organizational structure of the ARRL Virtual Museum. Approximately two - three months

10. Create the ARRL PastPerfect website template.
11. Activate the Virtual Museum website
12. Conduct Beta testing with selected users.
13. Develop communications plan with ARRL staff
14. Formally launch ARRL Virtual Museum

Phase 4 – Sustainability - Ongoing

15. Create a long-range funding plan to maintain and grow the museum. Once the virtual museum has been created, a part-time person will be needed to maintain it. This could be a volunteer, contractor, or staff person. This person would be responsible for website maintenance, communications, and adding new items to the museum.
16. Make requests for donations of artifacts, documents, photographs, and media that have historical significance to Amateur Radio and ARRL.
17. Work with the ARRL Development Department to solicit funds to support the museum including soliciting funds on the Virtual Museum website itself.
18. Since there is already an ARRL Historical Fund, I would integrate fundraising for the Virtual Museum within the terms and conditions of this fund.

Budget

I propose to be the part-time project leader for the ARRL Virtual Museum. I propose to work on a contract basis at a mutually agreeable hourly rate. I have used \$40/hour as a placeholder, subject to further discussion. I would like to start sometime after my retirement, most likely in late May or early June. I would plan to work 6 -15 hours a week. I have used ten hours a week as an average in the budget since the actual number of hours may vary.

I can do much of the work off-site, depending on my ability to connect to the PastPerfect software database at headquarters. I would still need a small workspace and a computer at ARRL Headquarters. Ed Hare will permit me to use the Volunteer Office in the Lab. That would work fine, particularly since many of the objects for the collection are already located in the Lab. I would also need occasional use of the ARRL Media Room for photography and access to "the cage" on the second floor of headquarters where many historical objects are stored.

The Past Perfect software has already been purchased, but the ARRL IT department would need to install it manage any updates and maintenance. The PastPerfect budget is \$400 to host up to 10,000 web pages for a year and about \$400 for their one-time configuration and training.

I have met with ARRL Development Manager, Lauren Clarke KB1YDD, about obtaining funding for this project in 2016. Lauren already has many established development priorities in the 2016 budget and she cannot devote any extra time to this project. The project would require a separate allocation, possibly from the Historical Preservation Fund or other source.

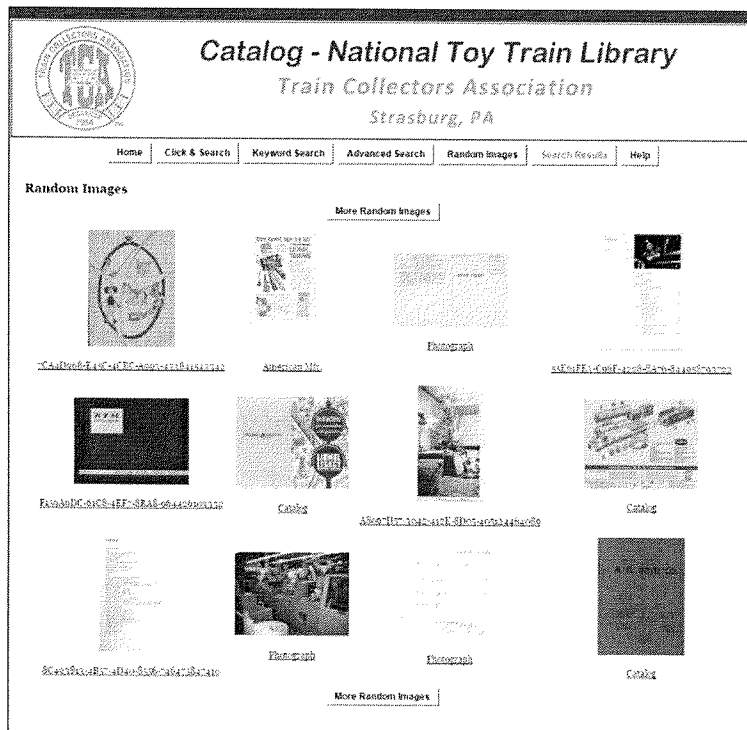
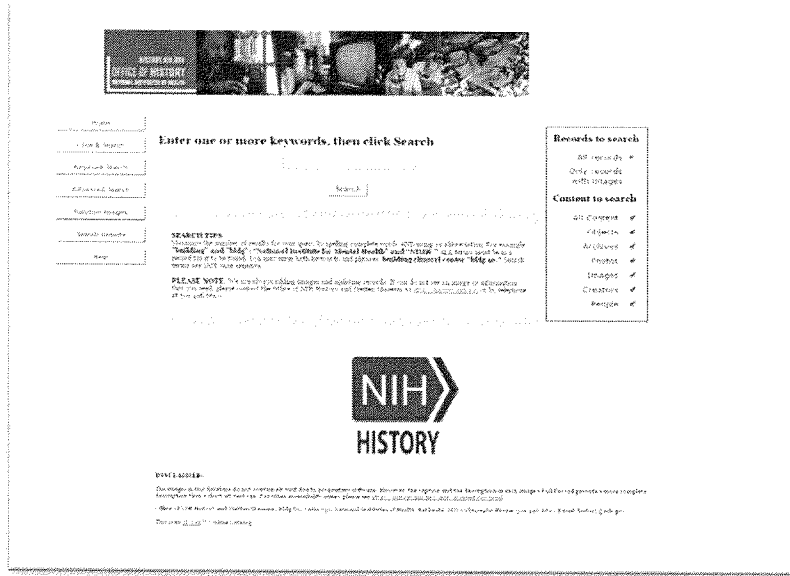
Projected Budget for 12 Months

Project Leader) estimated \$40/hr *10hrs/wk * 40 weeks	16,000
Misc. Supplies	300
Bar Coding (optional)	200
PastPerfect Hosting /year	440
PastPerfect Setup/Training (one time)	300
Funding Request Year 1	\$17,240

I am requesting this funding from the ARRL and I hope that we can find a way to move ahead with this project. Please feel free to ask me any questions about this proposal.

Examples of PastPerfect Virtual Museum Websites:

<http://pastperfect-online.com/>



Collections
Catalogue

Name

Click & Search


Keyword Search

Advanced Search

Search Results

Help

[Print](#)



Object ID: 2014.011

Name: Radio

Receiver: Crystal Receiver Radio

Description: Black plastic rectangular crystal receiver with six face, four controls and three dials. (readable Crystal Receiver - Model CR-11, Made by Heath Company of Holliston, USA. A sticker on the bottom of the receiver shows that it was bought in 1967 for \$25.00 at a flea market, Joseph. The receiver is still functioning.

Buy: 1967 \$25.00

This object: The donor (born 1927) bought this crystal receiver from Value Village (Quebec) in 1997 for \$50.

The donor aka born in Hialeah, New Tencaria, he received the components to build his first radio from a man named John Cook (from England) circa 1941. He installed an electric light system in Hialeah Pentecostal Church that was powered by storage battery charged by a wind turbine on the church's roof. He had a radio (cotton) but used in his home that also had a homemade radio.

Notes: Amputation, Elbow

Genre: General






Area: Elbow

Topic: [Elbow](#)

Our database matches the Museum and Center's collections of digital artifacts and to 100 archival records reflecting the history of the people, places and organizations in Wake County. Significant artifact collections include textiles, horticulture, instruments, furniture and household items. Artifacts include: mobile photographic image, correspondence, diaries, postcards, etc. - please use "page" and "image" tags.

A visit to the Wake County Museum and Archives is recommended to view original records and for more extensive research.

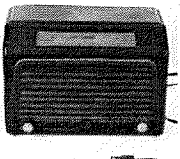
This is an [ARRL](#) online listing.

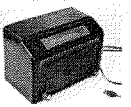
[CLICK & SEARCH](#) [KEYWORD SEARCH](#) [ADVANCED SEARCH](#) [RANDOM IMAGES](#) [SEARCH RESULTS](#) [HELP](#)

Object Record


[Zoom All Images](#)




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Object Name: Radio

Object ID Number: 09.515

Description: Radio receiver/scanner for monitoring fire department broadcasts. "Fire Pal" model produced by Harron Labs, R.N.Y. Dark brown Bakelite casing with cardboard back panel. External antenna and ground screw-type connections. Volume and tuning knobs on front, tuning indicator: 153.7 megacycles to 155 megacycles.

Label on back:
FIRE-PAL/Serial No/2806/HFD. BY/Harron Labs./42-10 220th St., Bayside 61, N.Y.

Height (in): 7
Height (cm): 17.78
Width (cm): 10
Width (cm): 25.4
Depth (cm): 6
Depth (cm): 15.24

Images: [09.515](#)
[09.515](#)
[09.515](#)
[09.515](#)

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V 2.0 Harold Kramer

1/21/2016

Harold Kramer, WJ1B

Related Bio Information

ARRL Chief Operating Officer and Publisher of *QST* for the past 10+ years

Responsible for all ARRL Web Content

Author of four "Vintage Radio" columns and other general articles for *QST*

Author of more than 125 "Inside HQ" Columns for *QST*

Websites Created:

IARU website and ARISS website for the ARRL

WJ1B.com –Telegraphy Apparatus/History website

Cheshire CT Democratic Town Committee website

Connecticut Public Broadcasting, Inc. Created first website

Other Museums and Exhibits Experience:

Co-originator (with Bob Allison) of ARRL Lab Exhibit Space

Former Board of Directors, Yale University, Peabody Museum New Haven, CT

Former On-Loan Executive from AT&T to the Discovery Museum, Bridgeport, CT