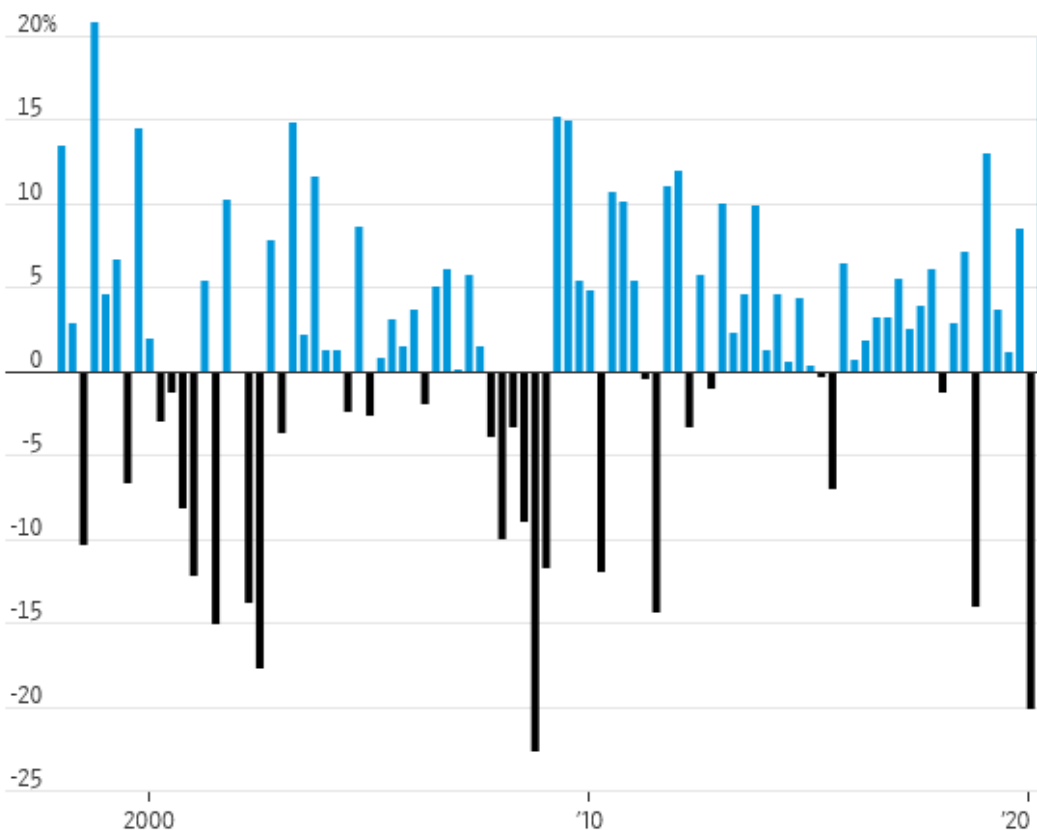


**American Radio Relay League**  
**Treasurer's Report**  
**Rick Niswander, K7GM**  
**For the quarter and six-months ended June 30, 2020**

Following a quarter that was the second-worst in 22 years, we had a quarter that was second-best in that same timeframe.

The chart below shows quarterly returns on the S&P 500 since 1998.

**S&P 500, quarterly performance**



And, no, if you go down 20% and then up 20% that does not mean that you are back to even. You are still down 4%.

All three major indices (S&P 500, Dow, and NASDAQ) had very good quarters, but only the NASDAQ moved back into positive territory for the year, as indicated on the next chart.

## Index performance

- Nasdaq Composite
- S&P 500
- Dow Jones Industrial Average

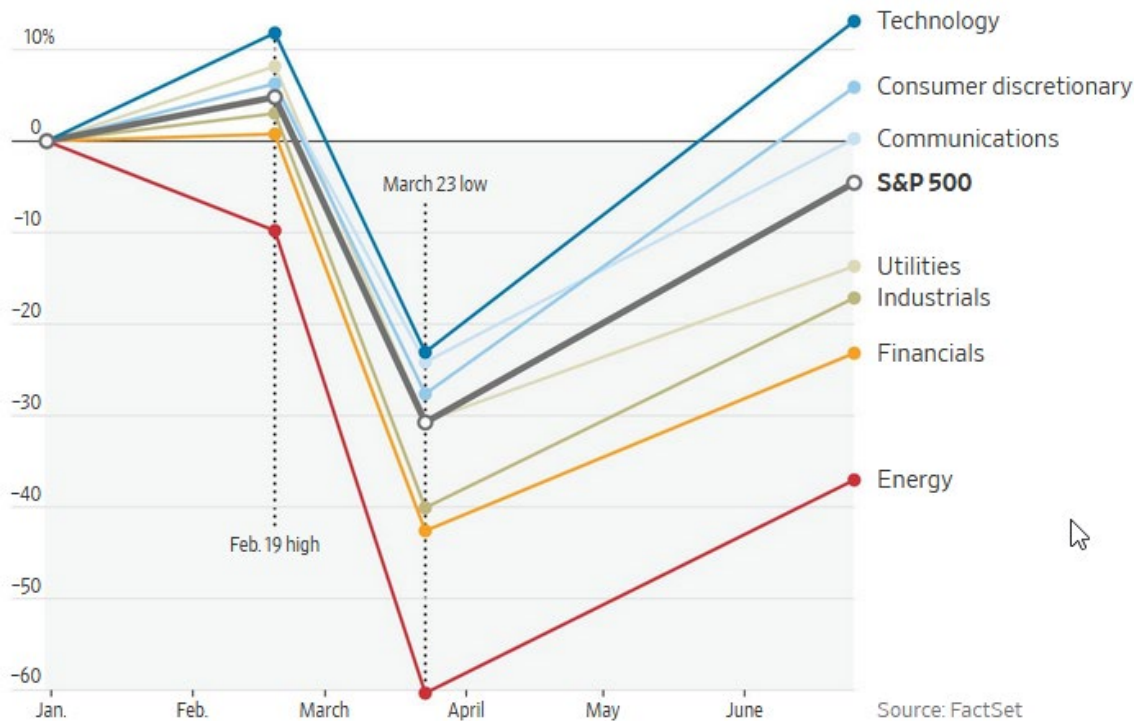


An index return is simply a weighted average of returns across a defined number of stocks. The DJIA is 40 selected stocks, the S&P 500 contains 500 of the largest stocks and the NASDAQ covers about 3,000 companies traded on the NASDAQ. With any stock index, some of the underlying stocks will be above average and some below. Always true. It is also the case that, while the ups and downs often persist for a while, the industries above average and below average do not stay that way forever.

Here is an interesting chart that illustrates the movements of some of the industry components in the S&P 500 index. The chart is for 2020 through 6/25/20 so it is not quite at quarter-end, but the last three trading days did not materially affect the values or relationships.

### S&P 500 change in 2020, selected sectors

As of the index's Feb. 19 record close, its March 23 low and Thursday



With the exception of Energy, the noted sectors were fairly tightly grouped at the February 19 high. Dispersion increased on the downward and upward legs. Again, setting aside Energy, the difference between the high and low on February 19 was about 10%. On June 25, the difference was around 35%. That is a significant swing in a relatively short period.

The chart above also illustrates the shifting fortunes of sectors normally considered growth (the three above the S&P average) and those normally considered value (the four below the average). For a number of years, growth has generally outperformed value. Not every quarter, but more often than not. Clearly, the growth-oriented industries outperformed the value-oriented industries during the first six months of 2020, and that outperformance accelerated as the period progressed. That notion is reinforced in the following two charts.

The first chart below is the Morningstar market performance matrix for the second quarter of 2020. All sectors did well, but growth outperformed value, on average, for any company size. Using the top line, growth outperformed value by 16 percentage points in the quarter (29.86% vs 13.82%).

		Value	Core	Growth
	US Market 21.98%	13.82%	20.19%	29.86%
Large Cap	20.91%	12.45%	19.74%	26.60%
Mid Cap	25.19%	18.78%	20.74%	34.66%
Small Cap	25.49%	21.85%	20.92%	32.84%

Data as of 06-30-20

The second chart (below) is the matrix for the first six months of 2020. The growth vs value effect is stark. For the first six months, the market is, on average, down with growth the only sector that had a positive return.

		Value	Core	Growth
	US Market -3.11%	-18.53%	-6.75%	14.92%
Large Cap	-0.69%	-15.77%	-4.46%	12.03%
Mid Cap	-7.89%	-23.41%	-11.39%	11.77%
Small Cap	-14.17%	-26.50%	-19.13%	4.35%

Data as of 06-30-20

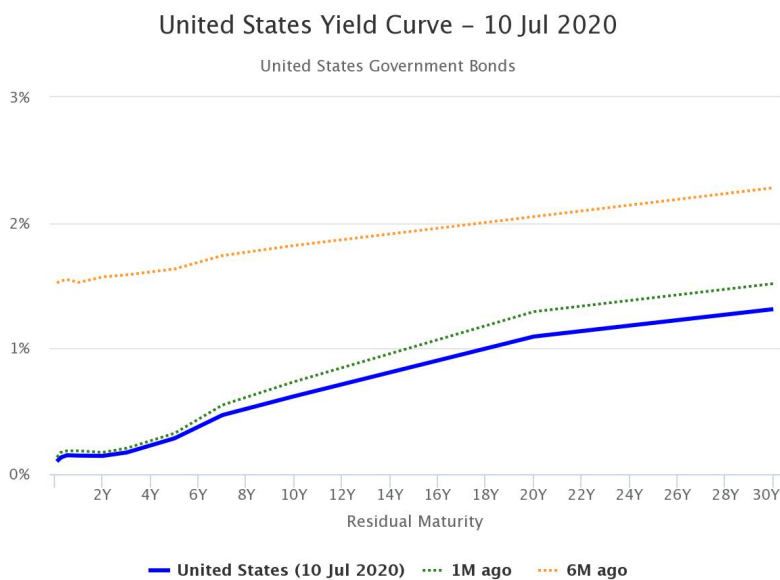
For the second quarter and the first six months, our top three percentage winners and losers are as follows.

Winners					
Second Quarter 2020			First Half 2020		
Paypal	Large Grwth	+82%	Teladoc	Mid Grwth	+128%
Esperion Therapeutics	Sm Value	+63%	Regeneron Pharma	Large Grwth	+66%
Vanek Gold Miners	Mid Core	+59%	Paypal	Large Grwth	+61%
Losers					
Second Quarter 2020			First Half 2020		
Novocure	Mid Grwth	-12%	VG Energy ETF	Large Value	-37%
Huntington Ingalls Ind.	Mid Core	-4%	Raytheon	Large Value	-34%
Berkshire Hathaway	Large Core	-2%	Exxon Mobil	Large Value	-33%

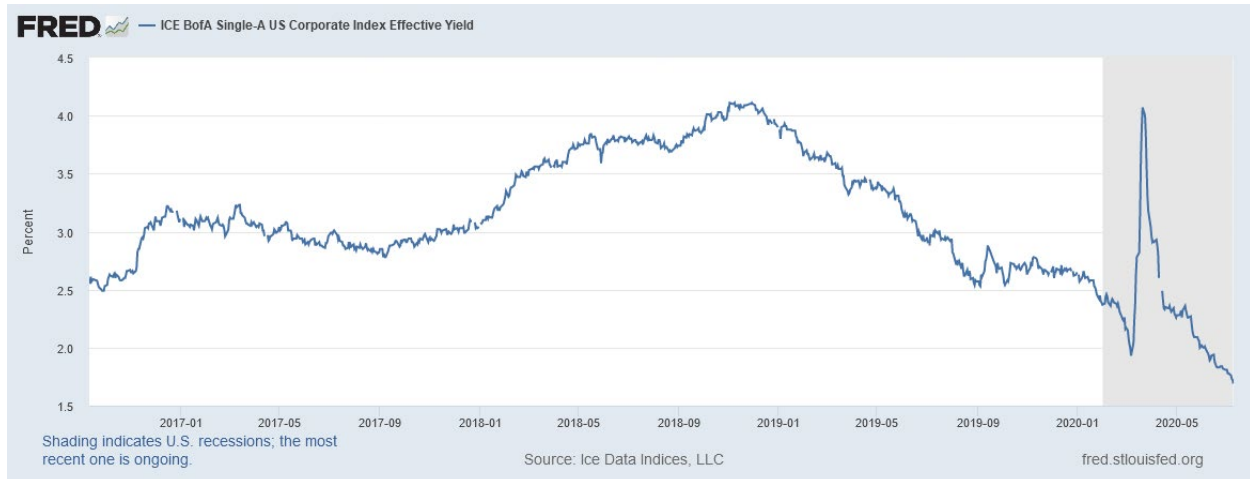
## Bonds

Bonds continued to plug along in the second quarter with the BBGBarc 1-5 year total return index rising 1.32% after a 2.35% increase in the first quarter. The primary factor in the price increase is the continued drop in interest rates, in general and in the first half of 2020.

Yields on government debt dropped about a full percent across all maturities. While the chart below is as of July 10, the lines were materially the same at June 30. The top line is the first week of January and the bottom line is July 10.



Yields on corporate debt also continued to slide. The chart below shows rates on A-rated corporate debt. The spike in March was when the bond market was under considerable stress and prices fell considerably (which caused yields to rise). Once the Fed said that they would support corporate bonds (and they actually did it) prices recovered, yields calmed down, and the slow yield slide continued.



The bond portfolio did well in the quarter and six months, benefitting from increased prices. Since we hold bonds until maturity, that embedded gain will eventually be given back as the bond drops in value to face value when the bond matures. And, as I mentioned last time, selling higher priced bonds at a gain and reinvesting the proceeds in lower priced bonds is fiscally a losing proposition. The discussion is a bit complicated, but I will be happy to explain the math behind that if you want to know.

The continued slide in interest rates and governmental support for corporate debt are both indicators that low rates are here for a while. The big question is whether rates will go negative. I am hoping the answer is no, but I am not confident.

### **ARRL Portfolio**

In Q2 2020, the total return (price changes plus interest and dividends) on our portfolio was \$2,509,707, an increase of 8.76%. For the first half of 2020, our portfolio total return was a loss of \$587,742, or (1.85%). The portfolio benchmark (45% US stocks, 5% international stocks, 45% bonds, 5% money market) was 11.34% in the second quarter and a loss of 0.43% for the first half. So, we were behind the benchmark by 2.58% for the quarter and 1.42% for the first half.

Our portfolio underperformed the benchmark in the second quarter and first half a result, primarily, of our value stock tilt (until recently) and my purposeful underweighting of stocks in general. During the second quarter I increased our stock proportion from 39% to 42% and I shifted from a \$1m overweight in value stocks to a \$1m overweight in growth stocks.

As I mentioned in my March report, I believe the market turmoil is not over. I also think that the market recovery in the quarter is overdone. It is true that there is a lot of money that has been pushed into the economy by the Fed and Congress in the last few months and a bunch of it has found its way to the stock market. But I also think that too many people are wearing rose colored COVID recovery glasses. Until the virus is substantively under control (and it is not), the economic recovery will be uncertain as to timing and strength. In my view, over the next three months the risks are to the downside and I intend to be cautious.

The top of Appendix B provides detail concerning the dispersion of investment portfolio assets across investment classes. The portfolio conforms to the parameters in the Investment Policy Statement.

We started the second quarter with \$28,666,398, had a total return loss for the quarter of \$2,509,707, added contributions of \$329,767 (primarily from an estate), transferred zero to the general account, and ended the first quarter with \$31,505,872.

For the six months, we started 2020 with \$31,726,590, had a total return loss for the quarter of (\$587,742), added contributions of \$367,024, transferred zero to the general account, and ended with \$31,505,872 on June 30, 2020.

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
<b>Balance, June 30, 2018</b>	28,114,771
Additions from contributions	12,060
Subtractions	0
Total Return	1,057,816
<b>Balance, September 30, 2018</b>	<u>29,184,647</u>
<b>Balance, September 30, 2018</b>	29,184,647
Additions from contributions	39,985
Subtractions	0
Total Return	(1,606,791)
<b>Balance, December 31, 2018</b>	<u>27,617,841</u>
<b>Balance, December 31, 2018</b>	27,617,841
Additions from contributions	373,475
Subtractions	0
Total Return	1,907,612
<b>Balance, March 31, 2019</b>	<u>29,898,928</u>
<b>Balance, March 31, 2019</b>	29,898,928
Additions from contributions	66,491
Subtractions	0
Total Return	907,120
<b>Balance, June 30, 2019</b>	<u>30,872,539</u>
<b>Balance, June 30, 2019</b>	30,872,539
Additions from contributions	4,291
Subtractions	(250,000)
Total Return	313,361
<b>Balance, September 30, 2019</b>	<u>30,940,191</u>
<b>Balance, September 30, 2019</b>	30,940,191
Additions from contributions	29,491
Subtractions	(500,000)
Total Return	1,256,908
<b>Balance, December 31, 2019</b>	<u>31,726,590</u>
<b>Balance, December 31, 2019</b>	31,726,590
Additions from contributions	37,257
Subtractions	0
Total Return	(3,097,449)
<b>Balance, March 31, 2020</b>	<u>28,666,398</u>
<b>Balance, March 31, 2020</b>	28,666,398
Additions from contributions	329,767
Subtractions	0
Total Return	2,509,707
<b>Balance, June 30, 2020</b>	<u>31,505,872</u>
<b>Two-Year Summary</b>	
Beginning Balance, June 30, 2018	28,114,771
Cumulative Additions from contributions	892,817
Cumulative Subtractions	(750,000)
Cumulative Market Returns	3,248,284
Ending Balance, June 30, 2020	<u>31,505,872</u>



## Appendix B

### American Radio Relay League Portfolio Composition as of March 31, 2020

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	Fair Value	Portfolio Percentage	Amortized Cost
Investment Portfolio			
Stock (of which \$1,217,315 is international)	13,173,047	41.8%	9,642,804
Bond (of which \$173,200 is preferred)	15,511,280	49.2%	14,726,575
Cash	2,821,545	9.0%	2,821,545
Total Investment Portfolio	<u>31,505,872</u>	<u>100.0%</u>	<u>27,190,924</u>

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

	2020 1st Quarter	2020 2nd Quarter	2020 First Half	Calendar Year 2019	Calendar Year 2018	Calendar Year 2017	Calendar Year 2016	Calendar Year 2015	Calendar Year 2014	Calendar Year 2013	Calendar Year 2012
Applicable Total Return Indices											
US Stock - Russell 3000 TR	-20.90%	22.03%	-3.48%	31.02%	-5.21%	21.13%	12.74%	0.48%	12.56%	33.55%	16.42%
Foreign Stock - FTSE AW Ex US TR	-23.35%	16.56%	-10.65%	22.20%	-13.87%	27.47%	5.12%	-4.46%	-3.04%	15.63%	17.80%
Bonds - Barclays US Agg 1-5Yr TR	2.35%	1.32%	3.70%	5.13%	1.37%	1.30%	1.65%	1.07%	1.69%	0.25%	2.21%
Federal Money Market	0.05%	0.01%	0.06%	0.60%	0.20%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%
Benchmark Blended Total Return (45% US, 5% intl, 45% bonds, 5% mmkt)	-9.51%	11.34%	-0.43%	16.98%	-2.11%	11.11%	6.66%	0.48%	6.26%	15.99%	9.28%
Benchmark Bended Total Return (above)	-9.51%	11.34%	-0.43%	16.98%	-2.11%	11.11%	6.66%	0.48%	6.26%	15.99%	9.28%
Actual Total Return											
In Percent	-9.76%	8.76%	-1.85%	15.86%	-1.75%	10.11%	6.49%	-0.74%	5.77%	14.66%	11.04%
In Dollars	(3,097,449)	2,509,707	(587,742)	4,385,001	(486,201)	675,202	1,424,271	(160,892)	1,220,626	2,654,016	1,769,299

#### 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 (All World) stock market, minus the US market

The Barclays index measures the aggregate US bond market for maturities of 1-5 years (generally the maturity of our portfolio)

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.