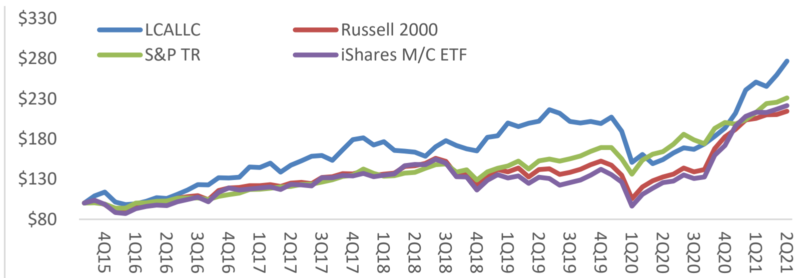
Long Cast ADVISERS LLC

Dear Friends:

For the 2Q21 quarter ended June 30 2021, cumulative returns on accounts managed by Long Cast Advisers improved 10%, net of applicable fees, ahead of the baseline (S&P Total Return index, iShares MicroCap ETF and the Russell 2000 index). Individual account returns ranged from 8% to 13%. Year to date cumulative returns through 2Q21 is 43%, also ahead of "baseline indexes". Since inception in November 2015 through quarter end 2Q21, LCA returned a cumulative 177% net of fees, or 20% CAGR. *Past performance is no guarantee of future results.*

Because our portfolio is comprised of just a handful of typically small "off the beaten path" businesses that we tend to own for long periods, it is expected that returns will vary considerably from the major indices.

	Long Cast	R2000	IWC	S&P TR
2015 (2-mos)	14%	-2%	-2%	-1%
2016	15%	21%	21%	12%
2017	36%	15%	13%	22%
2018	-8%	-11%	-13%	-4%
2019	21%	25%	22%	31%
2020	-3%	20%	21%	18%
1Q21	30%	13%	24%	6%
2Q21	10%	4%	4%	9%
Cumulative chg	177%	106%	113%	113%
CAGR	20%	14%	14%	14%
YTD	43%	18%	29%	15%
LTM	80%	62%	76%	41%



I continue to focus on growing Long Cast slowly and incrementally and feel fortunate to have clients aligned with my small company centric, research intensive investment strategy, who also understand that compounding comes from long term ownership of well-run growing companies. I welcome conversations with other like-minded investors seeking a manager who adheres to these principles. As a reminder, LCA does not invest in companies exposed to the hydrocarbon or defense industries, a small effort to align capital growth, business ownership and my personal ethics.

PERFORMANCE / PORTFOLIO HOLDINGS

QRHC, **DAIO** and **CCRN** were the most significant contributors to returns in the quarter and we still own all three at meaningful levels. **INS** was the most significant detractor, and I continue to add to it. Our top-five holdings (these four among them) represent ~50% of the portfolio. There were no material new additions in the quarter. For all these companies, I think the opportunity set remains large enough to support another doubling in size in three to five years, which is our general investment threshold.

It's not unreasonable to expect QRHC to report $8M in EBITDA in 2021. At $6 this infers a 15x forward EBITDA multiple, in-line with the industry, so not especially expensive for a growing company with ample room for additional long term-growth. They've at long last, five years into the CEO's tenure and in his second year with a functional Board, started doing *the ordinary* of running a business well. I think there's an opportunity with a little *serendipity*, to do something truly extraordinary. (As a deep dive for newbies on what the business does, this comprehensive two-part writeup I recently found via reddit is quite good.)

From a high-level view, in their role as a waste broker (just don't call them that to their faces) QRHC sits in the middle of an evolving two-sided marketplace. Historically however, they've only faced in one direction, towards the customer. This is the traditional business model, where the customer benefits from brokers bidding out waste pickup to the lowest cost independent regional hauler (ie the vendor). Within this traditional paradigm, there is ample room for QRHC to grow because it remains a highly fragmented market ripe for consolidation, which they are finally doing.

But the market is concurrently changing and this creates what I think could be an incredible opportunity, provided management and the Board can see it, understand it and pursue it.

Among the changes, customers are willing to trade low price for conscientious waste management. Furthermore, the complexity of pickups is growing since vendors are required to split waste streams (organics vs recycling vs landfill) or more vendors are required for each customer. In the background of it all, the vertically integrated players (RSG, WM, et al) are expanding their municipal franchise agreements, which now cover ~20% of QRHC's addressable geography. These agreements create pockets where QRHC's margins are capped below target levels. *These larger players threaten both the independent regional haulers and QRHC.*

In this dynamic marketplace, it looks like there should be an opportunity to go against the traditional model and nurture *tighter* relationships with vendors in order to solve a number of problems including fending off competition from the vertically integrated players and easing the complexity of invoice management all while continuing to offer the customer more value-added services and metrics around conscientious waste management.

Let's start by inverting the business model. QRHC isn't just solving the "one throat to choke" problem for multi-location customers, they are solving the problem of bulk breaking national multi-location customers for regional vendors. To be clear, these could be customers QRHC stole from the regional haulers through higher level sales negotiations, then sold back to them. This is why QRHC and its vendors are generally viewed as frenemies but it's also evidence of growing leverage.

And as QRHC grows, in theory it should have more control over the national sales space and taken another step, more control over allocating routes to regional vendors. In the traditional model, it would use that leverage to bid for the most aggressive prices.

But what if it used that leverage to make the vendor relationship *less transactional*? It could create (or buy) a unified billing and invoice system and push the regional haulers onto that system. This would alleviate QRHC's single biggest issue of the complexity of managing invoices, since this is an industry where paper invoices remain the norm. It could even potentially create (or buy) a sophisticated logistics platform to help the haulers manage their routes better, which could be important to the end customer who might want to track its carbon footprint.

In short, QRHC could leverage its growing position in the middle of a two-sided marketplace to become the center of niche tech enabled ecosystem. This would solve some of the competitive issue for themselves and their regional haulers, provide those regional vendors with technology they couldn't otherwise get themselves and offer the customer more sophisticated and conscientious solutions.

It seems inevitable as this market unfolds that something like this will take shape over the next five to ten years. If QRHC can recognize this opportunity and fulfill that role as an asset lite center of a deconsolidated network of regional haulers serving national customers – an independent alternative to the vertically integrated players – I think it would add and create *more value* than it does as a one-sided customer facing solution. This idea is small part of my investment thesis, but it represents optionality on something truly bigger and more extraordinary than where they are today.

IN CLOSING: ON SERENDIPITY

Recently, I read an article about Frederik Bang, an infectious and parasitic disease expert who died in 1982. As a scientist, he was curious about (among other things) the profundity of horseshoe crabs in waters teeming with bacteria. He speculated on the species' antimicrobial defenses and in 1956 wrote a paper based on a series of experiments, observing that horseshoe crab blood coagulated around certain bacteria, locking it in what he called a protective "gel".

Then he moved on to other areas of research.

It wasn't until 1963, convinced by a colleague that solving the mystery of horseshoe crab blood required collaborating with a hematologist, that he took on a research fellow, Jack Levin, who had been studying the coagulation properties of rabbit blood. At that time, the Rabbit Pyrogene Test was the industry standard test for contamination in medications, but this procedure required injecting rabbits with samples and waiting several hours to see if they developed fevers. (No fevers, no contamination.)

Over a series of experiments throughout the 1960's and leaning on work he'd down with rabbits, Levin identified and isolated the amebocyte within the blood of the *Limulus Polyphemus* (the scientific name for the horseshoe crab). In a 1965 paper, he proposed that this enzyme could be used to accurately (within one part per trillion) and rapidly (within 45 minutes) test for endotoxin contamination. In 1977, the FDA approved the *Limulus Amebocyte Lysate* as a method for testing for endotoxin contamination. New reagents are now used, but the LAL remains the industry benchmark.

Bang and Levin both recognized the *serendipity* behind their discovery, the alignment of small random events and open minds to achieve something extraordinary. In a speech given in the early 1980's at the Woods Hole Oceanographic Institute, Bang described his three rules of serendipity:

- Take a fresh look at old phenomena
- Remain naïve, but carry knowledge of past experience
- Ask new questions and seek new answers

My focus, when it comes to small company investing, is trying to find businesses with long and wide opportunity pathways. Long, so growth can compound over time and wide, so when they inevitably fall down, they won't end up in the gutter.

My method starts with understanding what problem the company solves for its customers and management's ability to consistently address that problem. Then it considers how big that market is (or could be) and what alternatives are available to the customer. These base principles offer a foundation upon which rests a world of exploration, into supply cycles, unit costs, margins, etc, occasionally winding up with a sharp pencil on valuation and position sizing.

Most of the information gathered in the process of learning about a business or industry is available to everyone. Information is the commodity. But those aforementioned ingredients for serendipity, rare and unusual as they may be, is where something special happens for companies and their investors. As an example, I think back on INS, which in 2015 sold its only profitable and cash flow positive business to go all in on a then tiny and money losing software business. Whether or not it was the right move, it showed a management team capable of fresh thinking about where their business. (That software business is now growing +20% CAGR, profitable and cash flow positive).

Investors can't and shouldn't invest wholly in the idea of a serendipitous transformation, but they should seek managers and / or Boards who can incorporate the attributes of serendipity into their operating processes. Are they willing to ask new questions and seek new answers? Are they willing to take a fresh look at their customers' problems and their own solutions? It is the kind of thing that cannot be screened for but can pay forward years of outstanding returns for the patient investors. To be honest, I don't know that the QRHC Board or management has those attributes – the management is all pretty steeped in the traditional model - but it's an idea I'll continue to promote and it's possible over time they will recognize it in their pursuit of better and higher uses of capital.

As always, I appreciate your entrusting me with your capital and the responsibility of being its steward. I look forward to continuing this conversation in the future.

Sincerely / Avi
July, 2021
Brooklyn, NY