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July 29, 2016

Dear Fellow Investors,

The fund was up just under 6% in the second quarter, which brings YTD performance to just under 3%; this compares favorably to the Russell 2000 return of 2.2% and is approximately 1% below the S&P500, an index with which we have minimal overlap. This letter covers a lot of ground, please sure to read about some operational changes we are making in the housekeeping section near the end. Our results this quarter were aided by the performance of our largest position: the timeshare company Diamond Resorts International, which was discussed in great detail in the last letter. I outlined the possibility of a buyout taking place before management's options for 5 million shares had to be exercised in July. At the end of June, a private equity firm made an offer to buy the company for a 25% premium.

As part of the investing process, I look at multiple companies each day. To gain access to investing communities such as Sum Zero where dozens of ideas a month are presented, members have to contribute ideas every six months. Since I had already written the thesis for owning Diamond Resorts in the letter, I posted it to Sum Zero to keep my access to the site. I knew that Diamond Resorts and timeshares were controversial, and I knew that there was a high short interest in the stock. I had no idea how unpopular the idea would be to Sum Zero readers. This was an idea that returned almost 50% in less than three months and received an offer to be purchased in the timeframe predicted. If this was an academic exercise, the thesis would garner an A if just evaluated on the outcome. On Sum Zero the idea got a one-star rating from the community out of a possible five – or a virtual F. Eventually the rating rose to a three stars. The idea was also the “most discussed” idea on the site for a week. I learned the hard way that “most discussed” really means that a lot of people engage in a combination of constructive criticism and attack of the idea and the author has to address their concerns. For me the whole episode was a helpful reminder that our investments will often not resonate with the “crowd.” The easy thing to do was to pass on Diamond Resorts and just purchase a popular blue chip company. In the case of Diamond Resorts, passing would have been a mistake.

I realize that, as an investor in Greenhaven Road, you by definition are an independent thinker and willing to step outside of the herd and invest in an emerging manager instead of an index or the largest Fidelity funds. In the case of Greenhaven Road, only time will tell if this was the right decision, but I wanted to thank you for your support and reiterate that I continue to unequivocally believe that being small is a great asset in the investment management world. It gives us flexibility, and a broader opportunity set to consider than big funds. And because asset gathering is not our breadwinner, we have to be laser focused on generating returns. As a smaller emerging manager, just like Diamond Resorts, we may not be popular, but we intend to be highly profitable.

### **DON'T WHALE WATCH**

This year I had the opportunity to go whale watching. In my case, the outing was on a large catamaran that motored to a spot between two islands on the migratory path of whales from Alaska to the Baja peninsula. The glass half-full description would be that it was a chance to be outside and learn about whales and their habits. The glass half-empty description would be that it was a chance to get seasick and stare at the water with very few moments of “action.” The big events in whale watching seem to be when a whale shows its tail, exhales, and spouts water in the air, or “breaches” and you see some fins and the tail. Once in a blue moon, the whales fly out



of the water and make a huge splash (I never saw that). I was struck by how reliant I was on the captain of the boat. He was synthesizing information such as wind direction, water depth, the presence of bait fish, and reports from other captains to try and put us in a position to see whales. He would then look at the actual whale behavior and try to predict the next move. For example, certain whales come up every couple of minutes for air – so he would try and predict when a whale would come up based on when his last breath was. Apparently, mothers with baby whales behave differently than migrating males: if you know the distinction, you can make predictions on behavior.

Over the course of two hours, the captain shared more and more of the inputs that he looked at, allowing the passengers to play armchair whale spotter. Not surprisingly, it is not easy to predict the activity of wild animals when you can only observe 2% of their body and are missing everything happening under the water. The result is that the whale watching passenger basically focuses on the information provided by the captain and every few minutes there is an “ooh” or an “aaah” as you whip around to be surprised by where the whale actually reemerges. When I described the experience to a friend in finance, I said, “I think that is what my mother feels like when she watches CNBC.” She looks where the news anchor tells her, and only sees a small piece of the outside of the company, and there is insufficient context to understand all of the drivers impacting companies.

My intent is to have our investment process be quite different from whale watching in two important ways. The first is that I am far more concerned about the overall path and health of a company vs. the daily price movement. In the whale watching metaphor, we care far more about the journey from Alaska to Mexico, the food supply, and the size and composition of the pod than trying to guess any individual whale’s action from second to second.

To extend the metaphor, I care a lot more about what is going on under the water than on the surface. In the parlance of investing, daily price movements and estimating quarterly earnings to the penny are surface events. If we are going to be successful, we are going to try and understand management incentives, customer value propositions, the competitive landscape, and the quality of the team. Those will be the inputs that actually get us to the beach in Mexico.

## TOP 5 POSITIONS

Careful readers will notice that none of the investments in the top five are new investments. These are all companies that have been discussed in previous letters. As such I will keep this section brief:

**Diamond Resorts:** The company received an all-cash buyout offer from Apollo Group right before the end of the quarter. There is still a small chance of an “overbid” from a strategic buyer such as Wyndham. On a day-to-day basis, the shares are a proxy for cash, trading within a very narrow range. As a shareholder we have the option to exercise “appraisal rights”. This means that we have a right to have a judge determine if the price paid by Apollo is fair. Several funds were successful in obtaining a higher payout in the Dell private transaction by exercising their appraisal rights. We may pursue this strategy. The deadline to decide is August 10.

**Fortress Investment Group:** The thesis remains the same: the market is undervaluing the quality of the management fees and ignoring the cash and investments on the balance sheet. This year the company tendered for shares and paid a “top off” dividend of more than 4%. The largest shareholders are the



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employees. The setup remains constructive on this sub-\$5 stock; with more than \$3.50 in cash, investments, and embedded incentive fees, there is significant downside protection. There is also a stable base of \$70B in fee-paying assets. There have been headwinds in the price performance of permanent capital vehicles, which have made raising additional capital a challenge. This investment continues to appreciate materially.

**Halogen Software:** There have been no major developments since the last quarterly letter. I have heard anecdotally of both customer wins and losses. There remain multiple ways to “win” here, with the most likely being the sale to a payroll company. Insider ownership remains high at more than 40%, the valuation on an Enterprise to Revenue basis is less than 2, which implies a business in decline. The company is experiencing double-digit growth and has a new CEO with reasonable and promising customer retention and growth strategies. Time will tell with this unloved Canadian technology company, but the risk/reward remains compelling.

**Radisys:** We have owned Radisys since the first quarter of 2015. It began as a smaller position as there was uncertainty as to the future of the company. The company operates in the telecommunications space. As you may remember, there was a declining hardware business masking the growth of a high-margin software company. The shares have appreciated in price more than 100% from our initial purchases as the hardware sales are no longer declining, the software continues to grow, and the company has launched new hardware offerings that incorporate the software. This small company has secured Verizon as a customer, which is both a tremendous reference account as well as material from a revenue perspective. Interestingly, based on hiring activity, Verizon is likely not the final large customer. Management, which has historically been conservative in discussing the company’s prospects, has shifted to worrying about execution and meeting demand. The quarterly results will be “lumpy” for Radisys, but there is still an opportunity for substantial share appreciation as their software-based products gain traction. Radisys would be a logical acquisition for Cisco and a number of larger telecom hardware manufacturers.

**Interactive Brokers:** This remains a business with a very long runway for growth, healthy margins, and high insider ownership. You can find more than 20 pages of detail on the company on our website at [www.greenhavenroad.com](http://www.greenhavenroad.com). The “Investor Letters” section has a long presentation I did for the Manual of Ideas Wide Moat Conference discussing our thesis. While not the least expensive company we own, the quality of the management, the growth runway, and the value proposition to customers are heavily weighted in our favor.

## SHORT POSITIONS

With our long bias, there was very little activity on the short side. We currently do not have any “index” shorts and have six very small (less than 2%) short positions in individual companies, including a retailer that has endured a management change and strategy change that appear to have a low likelihood of success. With the high level of debt, it may well turn out to be a profitable short. Other shorts include a fitness company, a pipe manufacturer, a semiconductor company, and an automobile manufacturer. For those of you who are curious, Code Rebel a short position the fund held earlier in the year and discussed in previous letters, has filed for bankruptcy. Code Rebel was valued at hundreds of millions of dollars in the past year. It is a helpful reminder that markets are not efficient and the “market does not know” – particularly with smaller companies with no analyst coverage.



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## RECENT SALE: JW MAYS

Like many fathers, I think my children are special. My oldest daughter has the ability to have a sincere and deeply held opinion and the ability to change her mind almost instantly when new facts emerge. While in political circles changing one's mind is called flip-flopping and frowned upon, in the Miller household it is celebrated as flexible thinking and my oldest daughter is a master.

This quarter we sold our position in JW Mays. This was a company that fit so many criteria we look for in an investment. For those who have forgotten, the company has the worst website in the world [www.jwmays.com](http://www.jwmays.com) but has a valuable collection of assets. JW Mays was a regional department store that did not survive the consolidation in retail. JW Mays, however, holds the real estate of the old store chain. In particular, they hold two properties in the heart of the rebirth of Brooklyn near the Barclays Center, seven subway lines, and a large new retail complex. Two properties have substantial air rights. These gems are buried inside a company doing nothing to advertise this to the world – no website, no investor presentation, no analyst coverage, no conference calls. This is exactly the type of off-the-beaten path investment I love. The company is quiet, and the value is not showing up on the balance sheet since the buildings have been owned for decades. Throw in high insider ownership and the tailwind of gentrification and I don't regret the initial decision to invest. There are multiple ways to win with JW Mays. As property values go up in Brooklyn, rents are rising, so property income should rise. The other way to "win" would be to sell to developers who can build condos or higher-end properties. Given the air rights and prices paid by condo developers, more than the entire market cap of the company could be in just the Brooklyn buildings. In general, developers like vacant buildings since they speed up the construction process. Tenants can block development. In fact, JW Mays received \$3M to temporarily vacate a storage space held in a non-JW Mays building to allow the developer to proceed.

So why did we change our mind and sell the shares? The company is not very communicative. As a result I went to the annual meeting last year. I got my first in-person exposure to the CEO, Lloyd Shulman. I could not tell if the CEO was posturing and dampening expectations, but he seemed convinced that the Brooklyn real estate renaissance would not last. He also seemed intent on not trying to realize value by selling the buildings. He effectively said, "what would we do with the money if we sold?" Mr. Shulman and his family inherited their ownership of JW Mays, and it appeared that he was intent on passing along the buildings. A couple of long-term holders assured me that he was posturing and just keeping his cards close to his vest. The decision to sell JW Mays came down to a single sentence buried on page 17 of the 10Q. The sentence read, "In March 2016, the Company extended a lease with a retail tenant who occupies 126,996 square feet at the Company's Nine Bond Street Brooklyn, New York property. The original expiration date was April 29, 2021 and was extended until January 31, 2036. The tenant also has two five year option periods." Effectively the company signed a 25-year lease on one of its most valuable assets five years early. The terms of the lease were not disclosed, and it is possible the terms were incredibly favorable, but given the tenant is a discount retailer with low margins and management's disbelief in Brooklyn real estate, an incredible lease is unlikely. I would like to think that I have a very long investment time horizon, but pushing out the crystallization of value 30 years was beyond even my time horizon. If it were possible to short the management and to go long the assets, I would have. Instead, much like my daughter when presented with a new fact, I completely changed my opinion of the opportunity and we exited the position that day with a reasonable profit.



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## NEW POSITIONS

There is a theory that every individual is the average of the five people that person interacts with the most. As you will see, each of the new positions this quarter was influenced by another investor. Given the time I spend with Chuck Royce, the three portfolio managers thanked in this letter, and my wife, I certainly hope there is truth to that axiom – because I am definitely averaging up.

### **IDW Media (\$22)**

Our purchase of IDW Media is very much in the vein of focusing on the journey of the company, which is very promising, as opposed to the quarterly earnings, which are not particularly promising or indicative of the future of the company. Since IDW has no analyst coverage, does not do quarterly conference calls, and historically has not done any investor presentations or investor relations, there is arguably not a consensus view of the company. IDW Media is a large holding of Adam Wyden of ADW capital. He was helpful in both highlighting the trajectory of the business as well as providing historical context. Adam generally holds fewer than 10 positions, so he knows as much about what is going on beneath the surface as is possible for his companies and was a far better guide than the whale watching captain.

IDW Media has several attributes that we look for in an investment, including high insider ownership. In fact more than half of the company is owned by Howard Jonas. Howard's name may be familiar, since IDW Media is a spinout from IDT, another Howard Jonas company. In the past we made several multiples of our money on our investment in Straight Path (STRP), was also a spinout from IDT and yet another Howard Jonas company. In addition to the Jonas family ownership, management owns another 15% of the company. In addition, the company has been able to grow revenue by more than 50% and EBITDA by more than 100% the last five years without raising additional capital through a combination of frugality, execution, and the asset light nature of the industries they operate in. There is also an "ick" factor. Specifically, IDW Media trades "over the counter" or on the "pink sheets," which is a non-starter for many investors. For me, the bar is higher with a pink sheet company. It requires more diligence as the likelihood of fraud is just higher. In the history of the fund, we have made one other pink sheet investment (Taro Pharmaceutical), which was ultimately a very profitable investment.

IDW Media has two distinct businesses. The first is a boring, cash-flowing brochure distribution business. The company owns and manages more than 14,000 brochure stands in hotel lobbies that have paper brochures for all of the local attractions. This is a business where scale and route density matter. To be profitable, having as many stands as possible in a tight geographic proximity is ideal. IDW has grown through acquisition and is the largest player east of the Mississippi. This business generates a couple of million dollars per year in cash flow. We did not go wading into the pink sheets to own a piece of the brochure distribution business. It is a fine business with recurring revenue and reasonable margins, but it does not have the potential to return multiples of our investment, which is what we really need to be compensated for the lack of liquidity that comes with trading on the pink sheets. The more dynamic segment of IDW is its media business. IDW Media is the fourth largest publisher of comic books in the United States. They publish comic books for some widely known characters such as Teenage Mutant Ninja Turtles, Transformers, and Star Wars, but most of the content is far more niche. The company produces approximately 70 comic books and/or graphic novels per month.



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Two years ago, the company made a conscious decision to stop licensing its characters to others media companies and to attempt to produce television shows and movies themselves. While this would require more work and upfront expense, if successful it would provide the company with creative and business control, as well as improved economics. Over the last two years, the company has invested substantial time and millions of dollars into this effort, without offsetting revenue. Revenues from TV shows are not recognized until a show is delivered to a network, which typically happens a week or two before the show airs. Even though the media production efforts are not currently showing up in the financials, in reality, the TV effort is off to a very promising start. The small IDW team has sold two shows to networks with a substantial and promising pipeline of additional opportunities. This year, the first show, “Wynonna Earp,” aired on SYFY Network. The second show, based off of a British detective series, “Dirk Gently,” will air this fall. The “Dirk Gently” show will star Elijah Wood, who previously starred in “The Lord of the Rings.” In addition to the two shows that will air, there is a pipeline of other shows in different stages of development. It is quite possible the company will have three to five shows on air in 2017. This is impressive from a standing start and would imply a more than \$25M increase in revenue for a media company that did less than \$30M last year, or almost a doubling. The company has been slow to disclose financial details on specific shows. The exact economics are difficult to model because each show will have a different revenue and contribution profile depending on the network it airs on, where it is shot, and its international appeal. From looking at the margin structures of other small television production companies such as DHX Media, EBITDA in excess of \$12M is possible for the television segment, implying a company-wide EBITDA in excess of \$20M with the potential to grow another 50% in 2018 as international rights revenues are received for the shows.

In addition to television, the company is set to have success in movies and in games. For example, Stephen Spielberg’s Amblin Entertainment has announced a movie starring Jim Carrey based on IDW’s horror comic book title “Aleister Arcane.” The games division is small, with a little more than \$2M in revenue for FY15 vs. an overall revenue base of just under \$50M. The games division is attractive for a number of reasons. The first is that games can have a much longer shelf life than TV and comic books. This can lead to a base of more predictable earnings. It is also another way to monetize characters and fan engagement. The company recently announced that their Teenage Mutant Ninja Turtles game that will be released for the holidays will be the largest product in the history of the company.

The core thesis behind our investment in IDW Media is that content is being increasingly fragmented. As we have gone from a media landscape with three broadcast channels to cable systems with hundreds of channels and YouTube, Netflix, Amazon, and other video platforms, there is a dramatic increase in the need for original content. In addition, as outlets increase and production costs decrease, increasingly niche content is viable. There are hundreds of cable channels trying to differentiate themselves based on original content, and for quality content, the lifespan is longer as video on demand becomes a preferred way to consume content. In addition, there are international rights, which can be as big or bigger than the domestic rights for shows. If the company executes on the plan, IDW will be able to monetize its library and storytelling skills in movies, television, and games. Effectively, there is a much larger opportunity beyond comic books. Our share purchases were made with an enterprise value of approximately \$100M. As the economics of multiple television and movie products with their domestic and international rights begin to flow through the income statement, earnings can easily grow more than three times.



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In addition to earnings growth, the company may benefit from multiple expansion as management has indicated it will eventually “up list” and leave the pink sheets for the NASDAQ. Given all of the other Howard Jonas companies are trading on the Nasdaq in addition to several sound business reasons to “up list” I think it is matter of *when* and not *if*. Often when companies do this, a new segment of buyers who were either turned off by the pink sheet status – or even restricted from investing in companies listed on the pink sheets -- will invest.

Interestingly, for investors who solely rely on Bloomberg, none of the progress in entertainment is evident. Not a single one of the press releases is listed in the news section. The pink sheets are littered with frauds and “story stocks.” Much like the minute-to-minute movements of a whale, the short-term economics of IDW Media are difficult to model as the company continues to invest in the division and the profitability is backend loaded after shows are delivered. Nevertheless, it is clear the company is headed in a very productive direction and, if Ted Adams and his team continue to execute, there is substantial upside in IDW Media’s journey from the pink sheets to the NASDAQ.

### **LINDBLAD EXPEDITIONS WARRANTS (\$1.95)**

This investment predates the second quarter, but it has grown in size over the quarter and I think merits a brief discussion. Often in investing there is a tradeoff between quality and upside. With great risk can come great reward. Finding great risk is actually very easy: 90% of options expire worthless, so that would be a good place to start. In fact, if we were willing to settle for great risk, managing the fund could be accomplished by simply reading a couple of websites. Obviously we are far more interested in limited risk and substantial reward. Lindblad Expeditions is not without risks, but I think the opportunity is asymmetric. Further, the way we have structured our investment could lead to a permanent loss of capital, thus it is a small position.

Lindblad Expeditions came to the public markets via a SPAC transaction, which is a red flag as the aggregate performance of SPACS over the last decade has been negative. However, with the assistance of Eric Gomberg of Dane Capital, I increasingly think that Lindblad can buck the SPAC trend. On the surface, Lindblad Expeditions is a cruise company. If you think about the moats around a business, cruise companies typically score quite low because they compete on how large their boats are and how cheap their cruises are. If there was a stereotype for a cruise company, it would be a capital-intensive, cyclical race to the bottom business. Lindblad is atypical in a number of ways, starting with its customers. The typical Lindblad passenger is paying in excess of \$1,000 per night. Lindblad is not competing on price and is not offering all-you-can-eat buffets. Rather, Lindblad runs very high-end cruises to places like Antarctica and the Galapagos Islands. They provide experiential travel. In these destinations, there is significant logistical competence required and a limited numbers of cruises allowed. The company distinguishes itself through its exclusive partnership with National Geographic. National Geographic provides its brand, assists in marketing, and, for certain itineraries, has naturalists on Lindblad ships and even photographers to help passengers take better pictures. National Geographic has the right to purchase 5% of the company, so they are well incentivized to help Lindblad succeed. The company benefits from an aging wealthy population and a trend in travel towards “experiences.” Customer satisfaction is very high with 37% of guests being “repeat customers” and 10% of guests going on five expeditions or more. Inside ownership is high: the CEO owns 31% and insiders own almost 50% of the company.

Perhaps because I have an operating background, I run what management says and does through the filter of “what would I do.” Sometimes, like in the case of JW Mays, management disappoints dramatically. Fortunately,



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there are other times where management is operating at a much higher level than I could aspire to. Lindblad Expeditions is one of those situations where management's actions are not consistent with what I would do – they are far better. The founder Sven-Olaf Lindblad is exceptional. He is a fanatical operator who understands the business, the customer base, and is sensitive to the needs of the countries that Lindblad operates in. He valued the National Geographic partnership so much that he made his personal shares available to them to purchase. He is also giving personal shares to employees (as opposed to issuing new shares) because he thinks it is the right thing to do. The company is successful because of the employees, and he has become wealthy due to the employees, so he is rewarding them without diluting new shareholders. He argues, "I don't understand why more CEOs wouldn't do this – I have profited significantly, it makes sense." To quote a previous letter, I think Sven is "good different."

Amazon CEO Jeff Bezos has spoken about the difference between missionary CEOs and mercenary CEOs. For the mercenary it is all about the money, for the missionary CEO it is about the mission. Sven is clearly a missionary CEO, which, given his customer base, National Geographic partnership, and countries the company operates in, is exactly what we want. He does not want to be the biggest operator, he wants to be the best operator to all of his constituents including customers, employees, partners, and countries of operation. The team is not cutting corners, they are pursuing intelligent growth consistent with company values. Sven is clearly focused on offering innovative and educational travel expeditions. Every decision is run through the lens of "does it add value to the guest experience?" One of the biggest events in the cruise industry is the opening for Cuba to Americans. Lindblad could jump headlong into this opportunity, however, on initial fact-finding expeditions, the company became concerned about the country's infrastructure. As a result they are starting slowly with one 49-passenger boat -- trying to be great instead of big.

In my estimation, the team is great, the product is loved by those who can afford it, and while susceptible to economic cycles, the market for these types of expedition experiences is only growing. The company is tiny relative to the industry. They are currently scheduled to add one ship in 2017 and another one in 2018. After adding these additional ships capacity will have grown by 50%, yet the company will still have to sell fewer than 30,000 guest nights per year. To put how small this is in the context of the cruise industry, Carnival and Royal Caribbean have individual ships that have that many guest nights to fill in a week.

The addition of two new ships will have a large impact financially for the company. The company has projected the new ships will have ROIC (return on invested capital) of 20%. The company currently has more than \$170M in cash on the balance sheet, which will go from earning almost nothing to generating revenue and earnings as new ships are deployed. The company also recently made an opportunistic purchase of a land-based travel company for less than six times trailing EBITDA and ten times earnings. This is before any cross-selling opportunities are realized.

Lindblad is currently operating in a section of Wall Street called "nobody cares." The company has only one analyst, who has published less than 15 pages of research this year (excluding disclaimers), covering it. Conference calls are Eric Gomberg asking questions. The analyst covering the company only publishes a model through 2017 and does not include any of the new ship deliveries, new routes such as Cuba, or land-based travel. For a company with a bright future, it appears few are looking beyond the next couple of quarters.



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For investors willing to look out three to five years, the returns could be quite attractive. If one takes a conservative approach of ignoring the impact of land-based travel and the small Cuba “experiment” in 2016 – with just the addition of the new ships the free cash flow available to the equity holders (post-debt service) should more than double to \$60M+. Adjusted EBITDA should also nearly double, assuming higher margins from the new ships. With a clear path to revenue growth and earnings growth if one applies industry multiples, there is a clear path to a doubling of share price in the next four years.

A double for shares in four years sounds promising, but we actually don’t own the shares of the company, we own warrants. These are left over from the SPAC transaction and actually have more upside. The warrants expire in four years, so the clock is ticking – but they give us the right to buy shares at \$11.50. Our average cost is a bit under \$2, so we will break even if the shares are worth more than \$13.50 in four years. If the shares double, our warrants will more than quadruple in value. Management seems to agree that warrants are where the value lies. There are 12 million warrants outstanding, and insiders own almost half of them. A recently approved \$20M buyback has been focused exclusively on buying 4 million warrants, including at prices 30% above where they are trading today. For management, reducing the warrant count is the best way to diminish dilution if one believes the shares will be materially higher in four years. One example the company may follow is that of another SPAC, Del Taco Restaurants, which recently announced a tender offer for its warrants. Others SPACS have done exchange offers to convert warrants into shares. Given the quality of the management team, the new ships on the horizon, and the valuation – it is highly likely we will be a holder of the warrants until the end (I suspect management will be right there with us).

### **ITERIS (\$2.55)**

For those of you who find these letters interesting to read, Matt Sweeney, who runs Laughing Water Capital, is to thank. I got to know Matt over three years of attending Value X Vail. He has a strong contrarian streak and we share similar approaches to investing. Along the way, Matt offered to help edit the letters. So the ones that you like are because of Matt, and the ones that you don’t, I probably ignored his suggestions. Back in February Matt started whispering in my ear about a small cap company he was buying. It took me some time, but I eventually made an investment in June. The company is Iteris. Similar to IDW Media, the company is making investments with depressing short-term financial results, but they could yield large dividends in the future.

Iteris has two business segments. There is a slow-growing, cash-flow generating traffic business and a money-losing agriculture technology business. In my initial analysis of Radisys, I mentioned venture capitalist Marc Andressen’s theory that “Software is Eating the World.” In an article for the Wall Street Journal, he pointed out that software was not just on our desktops in applications like Microsoft, but was also seeping its way into all parts of our lives. Iteris is really an embodiment of this phenomenon of software eating the world. The “boring” traffic business provides consulting services, analytics, and products such as sensors to municipalities including Los Angeles and San Francisco. Traffic is a non-trivial issue; it is estimated that \$140B is wasted annually on traffic congestion in addition to the 35,000 annual deaths in the United States. Managing traffic has been a slow evolution from humans directing traffic to self-driving cars that communicate with each other. Traffic lights have evolved from standalone entities operating independently on fixed timers in the 1950s, to traffic lights linked to buried sensors in the road to detect traffic in the 1970s, to synchronized traffic lights in the 1980s, to the types of sensors that Iteris builds. The Iteris sensors have sophisticated software that allows traffic lights to accommodate



bicyclists and gauge approaching drivers, ensuring that the light will not turn from yellow to red just as the driver reaches the light based on the approach speed. The company builds sophisticated systems to help municipalities manage traffic from simple displays that tell drivers the fastest routes and expected arrival times, to systems that adapt traffic lights to accommodate stadiums emptying after football games when large numbers of drivers attempting to reach highways. Iteris is also involved with the U.S. Department of Transportation in setting standards for how cars speak to each other.

The traffic business generates \$8M a year in cash flow and this number is growing. With the prices we were buying shares at, the company had an \$82M market capitalization. If you back out the \$16M in cash, we paid \$66M and got a traffic business generating \$8M of cash a year. The traffic business is growing north of 5% per year, and back log is growing even faster. The stated backlog grew 61% to \$63M and, in fact, is growing more quickly because the \$63M figure excludes a federal contract of \$19M which is excluded from the backlog for technical reasons (they have not received the statement of work). Since the company had \$77M in revenue, the backlog and the backlog growth are material. We would be happy to just own the transportation business that doubled its backlog, grew revenue, has a healthy cash balance, and trades at a double-digit free cash flow yield.

The second business, known as Clear Ag, is admittedly harder to value and evaluate, but I believe it is worth more than zero, which is what we have paid for it - and perhaps a lot more. The second business is SAAS (software as a service) focused on agriculture (farming). It turns out that agriculture technology is actually attracting billions of dollars in venture capital, so success is far from assured in this crowded space. How did a traffic company get into farming? That is a fair question. One of the services that Iteris offers is snow plow deployment in 31 states. They advise on how many snow plows to send out and where to send them. This requires two competencies. The first is understanding the roads and traffic patterns and the second is predicting the weather on the ground at a very local level: Will there be snow or rain? Will the roads freeze or not? This hyper-local, on-the-ground data is also useful in agriculture. Farmers factor in current data such as temperature, soil moisture, and wind, as well as future weather when they decide to plant, spray, or fertilize. Effectively, the company's core competency of understanding ground temperatures and predicting weather and its impact on ground conditions applies to farms as well as roads. The data can be of value to large farms spread over hundreds of miles, and the data can be of value to crop insurers. A simple example would be that Iteris can tell exactly how much rain a patch of land received over a growing season and what the moisture content of the soil was. The company is pursuing a dual strategy of developing products based on their expertise as well as licensing their data to third-party applications.

I am always skeptical of the new sexy business. A basic trick that even my four year old can deploy is distraction. Management will often crow about the new, sexy, and emerging businesses when the core is rotting. I am even less excited when the business is not in an area I feel comfortable with, like farming, yet we purchased shares. Here is what we know. First the core business of traffic is not deteriorating. Second, we are arguably paying zero for the new technology. Third, the company has \$25M in historical investments in the ag division and has 18 patents and 28 pending patents, so there is probably some value north of zero here. Fourth, the company has attracted a number of large partners and pilot customers, including Bayer. The division will do more than \$1M in revenue this year and data is being incorporated into a number of other third-party offerings. This is to say that there is at least some traction. Lastly, there is precedence for acquisitions in this space. In particular, Monsanto paid \$1B for The Climate Corporation, which had a similar offering to Iteris Clear Ag. When Monsanto made the purchase, Climate Corp had less than \$10M in revenue. I am not saying that Iteris Clear Ag is worth anything



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close to \$1B, but there is clearly value if you can help optimize the operation of farms, help farmers select the right seeds based on historical data, and help crop insurance companies. The path for the agriculture business is uncertain, but the price is right and the upside is substantial. The biggest risk for the company is that they over-invest in agriculture and gain no traction. The company has stated it will use the cash flows from traffic to fund agriculture, but there is little stopping it from accessing the \$16M in cash on the balance sheet. Unfortunately, insider ownership is limited with the CEO and the CFO joining the company in the last two years. There is a 15% shareholder in Lloyd Miller (no relation) and a smaller shareholder, Realm Wireless, that has requested board seats. While the risk of management turning agriculture into a black hole looms, there is the opportunity for share appreciation as the agriculture business gains traction, and the company gets more than one analyst covering it. The stock appreciated after the end of the quarter when the company pre-announced and said it was seeing strength in all business segments – so agriculture has not fallen off a cliff yet

### **OPERATIONAL UPDATES: AUDIT & TRANSITION TO SS&C**

Careful readers will notice I used the term gross performance in the first paragraph. Because of the fund's 6% hurdle rate (you only pay incentive fees when returns are above 6% in a year), our high watermark, and different investor classes, going forward I will speak of gross returns. Please check your actual statement to see your net returns, which is what you actually care about. In another housekeeping matter, this should be the last statement from Halpern and Associates. Going forward statements will come from SS&C via email. SS&C will also have an investor portal which you will be able to log into to see your statements online. Our annual independent audit by Spicer Jeffries is now complete; in my opinion it was uneventful. The audit will be posted on the portal. If you would like to see it sooner, just drop me a line, and I will be happy to forward it. The transition to SS&C has been without incident to date. This is a credit to Mark Rubin and the Stride team as well as Brian Halpern from Halpern and Associates who have carried the water here while I focus on investing. SS&C serves thousands of investment partnerships and is considered a blue chip provider of institutional quality. As the fund has grown in terms of assets and limited partners, it is a natural evolution to transition to a more established provider. Like most things in life, best of breed is not cheap. This year I am going to end the practice of waiving, personally absorbing the administrative expenses which I have done for the last two-plus years. As called for in the original documents, there will be a charge capped at 50-basis-points which will cover audit, tax preparation, and monthly accounting. This is how the fund operated in the early years and is consistent with the offering documents and subscription documents. There is still no management fee for investors in the Founders class and Long Term class. Personally footing the bill was one thing when it was \$25K, but as we approach \$80K those expenses will revert back to the partnership subject to a half of a 1% cap. I will absorb the expenses above the cap.

### **ANNUAL MEETING**

As the number of limited partners approaches 50 and we have grown beyond the friends and family that I see on a consistent basis, it is time for an annual meeting. The format will be quite simple, a brief presentation, an opportunity to ask questions, and some good food and wine. We will have the meeting in the NYC/Westchester area in September (exact date and location are to be determined). Here is what I know: if everybody shows up, it will be the only meeting any of us attend that has a cattle rancher, an app developer, doctors, a Relais & Chateau hotel owner, a large McDonald's franchisee, and many more bright curious independent thinking individuals. There would be multiple real estate developers, private investors, wealth managers, estate lawyers, doctors,



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professors, factory managers, oil and gas executives, and fund managers who control billions of dollars. We would have my wife, parents, in-laws, three former “bosses,” my children, and an uncle. It would be wonderful. The reality is that, given our geographic dispersion across four continents and ten time zones, we are not going to get everybody. You will receive an email invitation. I will also send the “gift” to everyone who RSVPs yes or no. I hope you can make it. I am happy to catch up with anybody who cannot make it, but has questions. The beauty of a small partnership is we can talk.

## **OUTLOOK**

It seems like times never feel simple, and this period is no different. I suspect that Brexit will turn out to be, in the words of Jim Grant, “a great day for journalists” and will not in fact be the unwinding of the European Union, but I do appreciate the potential. Perhaps more concerning and puzzling to me is the proliferation of negative interest rates. Negative rates on 10-year bonds are both counterintuitive and concerning. Do negative interest rates impact IDW Media’s ability to sell TV shows or make the need for Iteris’ traffic or agriculture businesses to go away? Clearly not. With discontent in Europe and negative rates proliferating, are we headed for another great recession? I don’t know. I do know that better investors attempt to recognize their cognitive biases – flaws in how we think – and attempt to adjust for them. Charlie Munger has detailed more than 100 cognitive biases which he counsels people to be aware of in investing and life. One of the biases is “recency bias.” As humans, we ascribe a greater probability to the repetition of an event that just happened than it should actually have. We think that trends and patterns we observe in the recent past will continue in the future. From an investing standpoint, I think most market participants overestimate the likelihood that the next recession is another “Great Recession” that comes with a credit crisis. What if the next recession is a small 1% pullback in GDP vs. a 5% pullback? What if credit markets continue to function? At this point, I don’t think this overestimation of another great recession is easily investable, but it is a prism through which I run potential investments. My general sense is that we will continue with slow growth and get very little to no multiple expansion from the market. This makes buying higher-quality companies that will compound earnings more difficult, as they are currently expensive. There are a lot of great companies at 25 times earnings growing at 3%. We need to do better than that. As a result, most of the investments I am looking at right now are special situations such as spinoffs and rights offerings. Situations that do not screen well, situations where there is a lot going on “under the water.” Much like my daughter’s opinions, this could change on a moment’s notice with a simple pullback in the market or the discovery of a hidden gem. The good news is that we only have to find a few new investments per year and, given our small size and broad mandate, I remain optimistic.

Sincerely,

A handwritten signature in blue ink that reads "Scott Miller".

Scott Miller



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