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Issue: May 4, 2015
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Technology that allows ISPs to Provide Wireless Signals To Outdoor Networks in High Capacity

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CEOCFO: ***Mr. Fink, what is the idea behind Mimosa Networks?***
Mr. Fink: Mimosa came into business largely because we saw a huge gap in last-mile Internet access. That gap was really people who were demanding higher speeds for both consumer traffic and online content (wanting to watch Netflix without limits). But service providers have really not been expanding their footprints (largely due to cost reasons) enough to be able to deliver fiber speeds to consumers. Mimosa saw an opportunity where DSL and cable are starting to hit their limit in countries like the US. The opportunity is to provide technology that can deliver fiber speeds over wireless at fractional costs compared to fiber. This technology is going to stimulate a new class of ISPs that can really come in and compete in many urban and suburban areas. However, on a more global basis, it is actually a far more fundamental issue of getting people their first Internet connection. They have never had anything but their first smartphone on cellular networks. We see growth in both traditional consumers who have already gotten Internet access but want better access, and new markets where we are delivering Internet access for the first time. These places have a much more rickety infrastructure where they may have never had fiber or any kind of wiring in buildings. Those are the general areas that we are focusing on improving here at Mimosa.

CEOCFO: ***What is the technology that makes it possible to do this wirelessly?***
Mr. Fink: We are really ramping up the technology and capabilities behind the Wi-Fi that we are all very familiar with and love. We connect our laptops, iPhones and Android devices to it every day. What happens to make this work is that there is new technology that has just come out and it is advancing both the speeds and improving the capacity and quality of those wireless signals. Largely, the Mimosa innovations can make these networks function in outdoor environments, but now also include the ability to add many more users at much higher speeds. The goal is to wirelessly be able to deliver hundreds of Mbps, typically over 500 Mbps to every subscriber, and this is leveraging the technology with Wi-Fi because it has blazed a trail but it has never really been able to be used for outdoor networks in high capacity – until now. Wi-Fi has been the backbone of this business, but we have now had to resolve that technology to work in scale for most ISPs to be able to deploy it as a plausible consumer service.

CEOCFO: ***Is it ready today?***
Mr. Fink: Yes, we have already launched our first series of products that are designed to get high speeds delivered out to neighborhoods. The first step is really making sure that there is enough bandwidth going to the neighborhood. This summer, we will be introducing the next step, which is to cover the last mile, getting high-speed Internet into homes, building and businesses. We have taken the first major steps of getting fiber speeds to the neighborhoods, and the next step is distributing that down to the customer premise devices and deeper into neighborhoods and rural environments. We are halfway there, and the second step will happen over the summer time.

CEOCFO: ***Are you working with current providers? Who is supervising this whole thing?***
Mr. Fink: The industry popped up over the last five years with these ISPs that are traditionally called WISPS, or wireless Internet service providers. They have typically been building out networks wherever people could not get Internet. So if AT&T or Comcast was not servicing an area because it was not terribly profitable for them, with enough customers, population density and et cetera, these guys have been building out networks to deliver the first Internet connection to people in those spaces. A lot of those people are right off the bat having to upgrade their networks to comply with the new broadband requirements in the United States (25 Mbps minimum), and on a global basis the same trend has been happening where the rural technology has led the way. What we are seeing now is that with gear like ours, we can take

that technology and bring it into higher population density areas and provide product and speeds so that the new ISPs can actually go into that market and compete with cable and DSL. The marketing that these guys will want to go after to attract customers will be speeds of about 100 Mbps at the prices that customers are used to paying for low-cost DSL and higher-cost cable. You will start to see this expand with newer ISPs, and I think there will be some bigger guys who are pretty well known names that come into the space because the technology cost-performance is so incredibly good and the ease of deployment is incredibly high. There has been an existing base that was out in the fringes, and I think that is going to tighten up with our technology, entering into higher population density markets to provide a new, competitive and more independent option versus traditional cable and DSL.

CEOCFO: ***Would companies be purchasing your technology and then dealing with the end customer?***
Mr. Fink: Definitely. You will see a mix of Internet service providers that are out there today and new providers uprooting their networks with our gear. We have new ISPs that are being built from the ground up completely based off of our technology, and we have not really announced who those are yet, but there are some who are really trying to build their entire networks off of our new approach. A lot of our technology will also be used by some of the traditional providers, such as cable companies, cellular and telco DSL companies that are looking for an upgrade in their technology and providing certain features and services that people want, including support for Wi-Fi devices in their neighborhoods and homes.

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CEOCFO: ***Theoretically, would this service be better than my current ISP?***
Mr. Fink: Absolutely. It can provide a wireline-quality experience without the limits of the 100-year-old phone cables that have been in the ground at most people's houses. Right now, it is quite expensive for people to upgrade the stuff that is in the ground to make it fiber instead of copper or put more fiber closer and closer out to the homes of cable customers. It absolutely can become a wireless play, and because it cuts out the cost of digging up the ground or buying very expensive cellular spectrum, it will be very attractive. We are able to bring in this kind of Wi-Fi mentality, which is using the free air we all use today for Wi-Fi. We are able to deliver hundreds of Mbps of speed. There is definitely infrastructure that needs to be there to have redundancy and resiliency through these networks, and that is what the ISPs will work on with us, but in that last mile we can deliver that very high performance at very low cost and make sure you are going to get unlimited ability to watch Netflix and stream content. That is really what we are targeting here – the mentality that people want to watch more content online, and that is not really compatible with the way that most of the networks have been built, which were more for live TV or low-speed Internet access.

CEOCFO: ***Are there competing new technologies that you are up against?***
Mr. Fink: The common thing that we hear is that the end game for everybody is fiber to the home. Practically speaking, you have to bridge that end goal, which could take 20 years for many people given the cost to dig up the ground to get there. It is really a fiber to wireless story. As deep as fiber goes, you use it, and the second that the fiber ends, you let wireless take over. There really is not competition, and I would say it is really fiber companies are interested in this technology because there are places that are very long-distance or very hard to get right-of-ways to dig up the streets or hang wire on telephone poles. Fiber would be wonderful for everybody to have, but it is not a practical reality economically.

CEOCFO: ***What are you finding outside the US?***
Mr. Fink: Outside the US is actually an even more exciting opportunity because there is no ability to easily put fiber everywhere. Wireless First is the answer globally, and the larger need for the technology we are delivering. Simply put, wireless on a global level is far more exciting than even in the US.

CEOCFO: ***How do you deal with the challenges of so much opportunity?***
Mr. Fink: A lot of companies, when they get into the space, try to go big fast and go after the biggest guys, and it can take years to work with very big telcos that have a very slow mentality about testing new products and new technologies. We have chosen to build our service and our first product and business off of this more aggressive and independent type of ISP that has been building in the places where the other guys have not. They have been moving our business much faster, so I am able to get to thousands of ISPs overnight that are smaller and make quick decisions. At the same time, in parallel, I can start working with bigger guys and prove to them that it works because their competition is putting

technology out in the field and starting that process. I do not have that slow, wait for the biggest guy to decide on you, long tail. I have a very fast tail into the market, and I have a technology that is also very attractive to the big guys. I can get moving, and we are already gaining revenue very quickly, largely by selling technology online to these ISPs and moving quickly. We have a very nice growth pattern with the bigger companies that take a little bit longer to make their technology decisions. Simply put, we have the highest speeds and capacity and the best Wi-Fi technology on the planet for these ISPs, so in a matter of time we will get there, but it lets us really start from a very easy to go-to-market and into the complexities of higher scale later on.

CEOCFO: ***What is the market for the smaller to mid-size ISPs?***
Mr. Fink: It is actually very difficult to get information on this, and we have had to do a lot of studying on our own. What we can see roughly speaking on a global level, there are about 12,000 ISPs, many of which service 500 customers, and many of them serving 250,000 to 300,000 subscribers. In the US alone, I think there are about 3,000 of these smaller guys. It is a service industry that we believe right now to be around an $8 billion service industry, so it is not giant yet because it is taken in these small bites. There is not a lot of growth in rural areas, but if you can take that same model and move it into the higher density markets, the market capitalization of the services and the equipment industry can grow exponentially because you are now going into competitive, high density markets. We are taking the model of this fast-to-market, rural approach and really accelerating that market path pretty heavily.

CEOCFO: ***What is the business model?***
Mr. Fink: We are pretty straight-forward equipment and services, and the name of the game here is delivering a last-mile solution that does not break the bank. ISPs are very capitally constrained, so they need to be able to make back their return on investment on you as a subscriber in typically less than 18 months. We want to see that happen much faster, so our mantra here is to build very good infrastructure gear with amazing price performance and low-cost client devices. That way, I can have ISPs in sub-Saharan Africa selling $19 per month service and being very profitable doing it, and then I can have ISPs selling fiber-like Internet in the US for $50 per month. They are very different models, but I can enable that because of my cost basis from leveraging this Wi-Fi technology. For us, it is equipment and services. We have a number of cloud technologies that also help to do maintenance on the networks and help them operate the network, and we kind of consider that software-and-services revenue for us that help us keep our profit margins nice and high. We are lucky to be in a space that we can have very a high growth margin on equipment while also delivering the best price performance in the industry.

CEOCFO: ***Where do the new government regulatory issues fit into your plan?***
Mr. Fink: It varies quite a bit, so I will talk more about what your readers would probably be more familiar with on the American side. First and foremost, we are using unlicensed spectrum as does Wi-Fi today, which is what makes it so attractive and easy to deploy quickly. The challenge is in unlicensed Wi-Fi spectrum, and in this case it is the congestion of spectrum. There is a lot of spectrum here in the US, and we constantly have to keep working with the government to make sure that the technology is compatible with all of the other stuff in the spectrum and will not cause interference and things like that. Interference is the name of the game, and what we have to do better than anybody else is work really well in high-interference environments and get higher capacity out of the same amount as spectrum. We will do the best job in the industry at getting more traffic out of the smallest amounts of wireless spectrum available and taking advantage of that unlicensed spectrum the government has given us. On the flipside, we cannot just use the spectrum willy nilly and pretend that everything is going to run through it, so much of our work is with the FCC to gain access to additional spectrum for the infrastructure or backhaul network that carries the backbone of the consumer and business traffic. While the last mile will likely be in the Wi-Fi band for the equipment and technology we are building, the backbone will typically go after licensed frequencies. Mimosa has been incredibly aggressive with FCC, petitioning to open up new spectrum opportunities. In particular, we are in the process of trying to open and share the 10 GHz spectrum, which would enable a very high-reliability nationwide broadband network over which we could bring more expansive Internet at a low cost. The policy is changing in the country.

CEOCFO: ***What have you learned from prior business experiences that has been most helpful as Mimosa has developed?***
Mr. Fink: My first experience was with my co-founder and CEO, Brian Hinman, at Polycom. The thing that we both learned and what he has become expert on is really taking advantage of technology and chip technology in ways that people have not creatively thought of yet. At Polycom, we found a way to take digital audio processing and turn it into an amazing speaker phone. That was something that had never really been envisioned, but it became a global phenomenon. Finding these interesting opportunities where technology has been developed but has not really advanced into certain verticals. That is where we became experts. The second company was at 2Wire, and 2Wire was at the forefront of

broadband and DSL home networking and Wi-Fi technology. First of all, we learned about Wi-Fi there and how powerful it was at a consumer level of what it could deliver at low cost to consumers for running your bandwidth around your home. We also learned a lot about ISPs and how they work, and the importance of understanding what customers want versus what makes an ISP good. We saw that as things got more expensive to deploy, like fiber technology, not as many people wanted to put it into areas that needed coverage because it would cost more per subscriber in those less dense areas. We really have understood now the model of the Internet and the model of building creative products and coming up with a right model that is right size for people who want to deliver communications. It has kind of been a progression out of all of those companies to come to where we are in Mimosa. We garner the rest of the industry's weight at getting something low-cost and using chip technology that has a basis in Wi-Fi, and really the experience of making a business model for ISPs that can completely disrupt major markets. That disruption is set to occur over the next two years as people realize fiber is not a truly financially viable alternative in those markets.

CEOCFO: ***Why pay attention to Mimosa Networks today?***
Mr. Fink: I think we have seen the Wi-Fi industry burst into an incredible success, and we have seen that with a number of companies that have gone public recently. Looking at it, while it seems like Wi-Fi is a crowded space and wireless technology in general, we have only scratched the surface technologically. There are so many more advancements that we have learned at previous companies and from wireline technology that we are applying to wireless that will make it incredibly reliable and absolutely a next-wave of Internet progression. What we are seeing is that everybody loves these Wi-Fi enterprise companies and outdoor wireless and Wi-Fi companies on the open market, and you are going to see the next wave of that in Mimosa going out to a much larger-scale opportunity. That is where I think we can really move the market into these higher population densities and much bigger opportunities long term for investors.

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