



All photos courtesy of Xiplink.

Quality, innovation and return on investment

Up and coming North American-based company, Xiplink, is making its mark in the industry with its innovative bandwidth optimisation products. At CABSAT 2010, Helen Jameson managed to speak to Jack Waters, CEO of Xiplink and Warren Brown, Senior Vice President, Marketing to talk about the products they offer, their uniqueness, and the expansion of the company.

Question: I wonder if you could begin by giving us a bit of background on the company?

Jack Waters: The foundation of XipLink Optimisation Software (XipOS) is based on 12 years of aerospace research and development related to speeding up communication between TCP based spacecraft payloads and the earth. When researchers determined how well these techniques worked and how the solution could be extended by the vendor community to enhance virtually any wireless link - the

wireless optimiser was born.

In 2007, we spun the company out and capitalised the company into what it is today – Xiplink Incorporated. So the technology itself is 12 years old and the company is officially three years old. For the early part of the business, it was a custom shop that would just build acceleration software for people that asked for it. XipOS was originally required to accelerate traffic to satellite devices and lunar-type devices using the Space Communications Protocol Standard or SCPS. The founder of Xiplink, Charlie

Younghusband, developed the technology and developed the SCPS software to be used in spacecraft, and later on added the application to satellite ground equipment. This is the history of the company.

When I came along, in 2007, I had retired from iDirect. We decided we needed to take the company in the direction of bandwidth optimisation, so acceleration became just one feature of a bandwidth optimiser that has many features. The acceleration ensures that the RF spectrum is utilised to its full capacity but in addition, we have some advanced



compression techniques that will actually exceed the capacity of the pipe and there are also about ten other values involved.

We re-branded the company. You will have seen the new big blue 'X'. That came out about a year and a half ago. We have also increased our number of employees from roughly eight to 32 people today.

Question: The company has basically started up during a recession. Has it been particularly challenging to get the company to this point at this difficult time?

Jack Waters: Well, we went through the dot com crash and really after that, you learn to just get on with it. I think that when you are in a recession that it makes even more sense to look to a company like Xiplink that is actually helping operators to get more out of their existing networks. If you are an operator and your network is maxed out, are you going to invest in new infrastructure or do you approach a company like Xiplink? With Xiplink, you can double or triple your throughput without having to invest a huge amount of money and you get a quick return on investment. It makes a lot of sense in this economy.

Mentat used to be the accelerator in the satellite business. They were part of a company called Packeteer and were then acquired by Blue Coat. To a large degree, Mentat faded away and, one of our objectives was that we wanted to become the new de facto accelerator to replace Mentat. This helped during the recession because we have been able to replace that technology with our technology. Secondary to that, the bandwidth optimisation market has really taken off with companies like Riverbed and Terrestrial Wireless growing astronomically. We fit in well with this growing market. That

has worked pretty well for us. We like to start small and work on becoming bigger. When you're small, it is actually easier to grow through a recession. You don't have to worry about the sales you're counting on from the previous year. You are building from zero up.

Warren Brown: It is very similar to what we both went through at iDirect. I was at iDirect along with Jack. We had great technology. We had the right time to market and a good team of people who worked well together. That is what we have found at Xiplink. It is a lot of fun to build something out of that when you know what the potential is.

Question: Can you please tell us more about the announcement you have just made concerning the Taiwanese Government?

Jack Waters: Certainly. There is a company called Tai E. Trading in Taiwan. They specialise in satellite communications and they are tied into the Taiwanese government in terms of integration and development of new networks and secure networks. The company has several tens of SCPC links that were installed but not performing up to speed, so our accelerators were installed to optimise the performance on those links. In fact, they more than doubled throughput on each of the links. This helps them to save money and to meet their project obligations on time.

Question: What are your target markets?

Jack Waters: There are really three sectors that we are going after. The VSAT market is probably our number one and most mature market. The second is the MSS market, particularly the BGAN market and we have been pursuing this for about a year now. Then, and very new to us, is the terrestrial

wireless market and we have a business development team working on this market while we continue to develop the VSAT and MSS markets. We are also concentrating on some particular vertical markets. The military is one, and we can divide that into two sub-markets – aeronautical and maritime. They are great users of our technology. Another vertical market we focus on is the science and exploration market. Then there is the telecoms infrastructure market. Network operators want to be able to sell more value to their customers than their competitors so they buy our equipment and sell a bandwidth plus service that has optimisation built in.

Warren Brown: If you think about it, it has been a natural progression. We developed our technology out of space communications, then we moved the technology down to the VSAT market and now it just makes sense to go down the terrestrial wireless route. We can optimise any wireless network, point-to-point or point-to-multipoint. It just fits within our whole scheme. As you drive deeper, you can see the relevance of our technology to many different markets.

Question: You obviously put a lot of emphasis on research and development. Is this a key part of your business?

Jack Waters: Well, we started out as eight employees and all of those employees were in research and development – all software developers, and Charlie Younghusband, our founder is an engineer by trade. The reason we are now 32 employees is because we have increased our R&D staff to around 18 people.

We are currently in an R&D phase as a company. If you were to look at R&D expenditure as a percentage of revenue, it would be astronomically high as we are still in the early stages.

Warren Brown: You would expect this transition as you build a company up. You start with excellent R&D and build a solid technological foundation. Then you start to bring in the sales team and the marketing, and the company begins to grow and develop.





Question: What makes Xiplink unique and differentiates you from other bandwidth optimisation companies?

Jack Waters: There are a lot of ways to do what we do. Some people develop their own software, and they are our competitors. So what sets us apart? We can scale our product very low and very high. That is one of the biggest benefits that we offer. We can go from a tiny little handheld device to the fastest accelerator on the market. We have all the ingredients in between as well. The real ace of our story is the fact that our software is portable so we can put it into other devices as well.

Take a router on board an aircraft for example. We can add our software to their router and it is already certified by the aircraft association. Our software is extended to other devices. This allows you to consolidate two pieces of equipment into one so it reduces weight, size and cost. Our competitors can add functionality but their boxes keep getting bigger. We have a real focus on keeping the software footprint small, but very effective. We obviously have to compete with them at the high end but we won't sacrifice our portability for that.

Warren Brown: It also adds multiple points of entry to the market.

Jack Waters: For years, SCPC modems were sold without acceleration in them but now Datum is going to release a modem with Xiplink built in. We sell a software license to Datum and they will build in this capability into their modems.

Question: Do you see that approach continuing in the sense that manufacturers will simply embed Xiplink software into their products?

Jack Waters: Yes. It's a huge competitive advantage - and the customers don't like to buy extra boxes if they can help it.

Warren Brown: We really hope to become the 'intel inside' as it were. That would be the ideal.

Question: Moving onto the wireless market, are there any specific challenges?

Jack Waters: A little bit. The satellite side was the most challenging because it has the longest latency. There is none of this with terrestrial wireless. The bandwidth cost isn't as high either. Sometimes it's free - like WiFi. It's not as expensive as satellite per bit. So the challenge is, can we still deliver value at low enough cost? We believe that we can, but that remains to be seen. However, the early returns have been pretty good so far.

There are certain areas where spectrum is costly or for example, on free radios, the service is so poor because of re-transmissions that they can't deliver a service at all. It is worth buying an accelerator to deliver a service on a free network. I think everyone will have been in a hotel and found that the WiFi service is lousy and they make you pay for it. Our technology would ease the situation and make it much less frustrating and people are more likely to pay for connectivity.

Warren Brown: For the investor in Xiplink's technology, the rate of return is on average 6 months, depending on what they are doing. So it's a pretty simple decision. If you can offer that kind of service for that rate of return, why not do it?

Question: If we look at the next 12-18 months, where do you see Xiplink?

Jack Waters: This is something we think about a lot! I think there are three things I would like to see happen in that period. Firstly, I would like to see Xiplink as the default selection in satellite acceleration technology. If someone has a requirement for optimisation, Xiplink will be first choice.

Secondly, I would like to see half of our business as embedded systems and half as external appliances. Finally, I would like to see the company grow to about 50 employees, but we don't want 50,000. We just want a team of 50 excellent people.

Warren Brown: I believe that it is still a niche

market so to remain small, nimble and highly responsive is in our best interests. To become a 50,000 person-strong business really doesn't make sense for us.

Question: How is the EMEA market looking for Xiplink at the moment?

Jack Waters: I actually think that the EMEA market will be the biggest for us. It isn't at the moment because we started in Canada and worked our way into the US so our revenues are skewed towards North America. However, the market in EMEA for satellite is huge. We knew that from our days at iDirect. I would expect to see a lot of our revenues coming from EMEA in the future, over a two-year timeframe.

Africa, without question, will be a strong market for us. We have a lot of projects going on in Africa but we also have a small development team in Johannesburg so we have more understanding and vision in Africa than we normally would. Pretty much every operator in every country in Africa is looking at this technology because satellite capacity costs are high and the population is generally poor.

Question: What about Asia?

Jack Waters: Parts of Asia are very promising. India looks very good for us. Parts of Australia are also interesting and the rest we will have to see. We have a partnership with ABS and we also have a distributor in Hong Kong.

Warren Brown: A lot of our challenge is raising awareness of what the technology can do and how it is implemented. I think operators tend to worry that adding optimisation will mean breaking up their network which is not the case. They need to be reassured that the technology is easily installed. Sometimes operators can be put off due to the cost of sending people out to remote sites to install the technology but the return on investment far outweighs any initial outlay they have to make. It's a matter of letting operators know what Xiplink technology can do for them. ●