



Chris Lay, founder and Managing Director of GigaSat.

Compact and lightweight systems

GigaSat is a UK-based company specialising in portable satellite systems. It has a customer base of broadcasters including the BBC, CNN and Al Jazeera. Helen Jameson talks to Chris Lay, founder and Managing Director of the company, about its products and the future.

Question: Many thanks for agreeing to participate. Would you please introduce yourself and GigaSat to our Readers?

Chris Lay: I'm founder and Managing Director of GigaSat, a company, which innovates compact and lightweight satellite earth stations. This has led us to a customer base of TV broadcasters such as BBC, CNN and Al Jazeera who all regularly use our equipment for live international newsgathering and Governments including UK, Australia and USA who use similar GigaSat products for front line military communications.

Question: You specialise in portable satellite solutions. What do these antennas offer that sets them apart?

Chris Lay: It's all in the detail really. We have developed a range of products, which are typically lighter and more compact than any of our competitors, features which, are highly important in today's safety, obsessed society which won't allow an airline baggage handler to lift more than 32Kgs.

Question: Antennas have come a long way over the past ten years in terms of their size and operation. What do you feel have been the most significant developments and what difference have they made?

Chris Lay: We have made considerable investment in composites, following the lead from Formula 1 motor racing and recently set up our own carbon fibre production facility with autoclave and material cutting machine. This has allowed us to reduce the weight of our antennas with no compromise in strength. Carbon fibre is approximately half the weight and double the strength of a comparable aluminium part.

At the same time we have also been working hard on modem development and

video compression systems. Massive developments in these areas over the past 10 years have allowed us to get around double the amount of traffic into half the satellite bandwidth.

Question: Which market sectors do you provide satellite solutions to and which would you say are most reliant on portable satellite solutions and why?

Chris Lay: We are a true global provider of satellite solutions with equipment operating on every continent. However portable or flyaway solutions really come into their own when traditional infrastructures are not available. Fibre optics are a natural and obvious competitor to satellite but finding a fibre optic inject point in Afghanistan or Iraq or half way up a mountain somewhere is not easy.

Question: Which would you say are the key regions for GigaSat across the world?

Chris Lay: We have traditionally been strong in the Middle East where we have supplied to most of the key broadcasters in the area but also have a very strong presence in the UK, Europe and USA, particularly with governments who interestingly then deploy the equipment mostly back to the Middle East.

Question: Where are the major growth areas for GigaSat at the moment?

Chris Lay: The USA is currently our biggest growth market but that is almost exclusively for military communications. Our growth markets with commercial customers seem to be South East Asia, in particular China where we recently opened an office and South America which is rapidly expanding and deregulating it's TV services.

Question: Do you have any upcoming

About GigaSat

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The GigaSat FA-series of flyaway antennas are specifically designed to survive the tough environment of satellite newsgathering, but their highly innovative packaging with robust, lightweight carbon fibre, construction has made them the preferred antenna for a whole variety of other applications. Today FA-series antennas are in service around the World for reliable transmission of sporting events, emergency data restoration and military/government communications.



plans to introduce new products or do you have any new developments that you can tell our readers about?

Chris Lay: We seem to be under constant pressure at both ends of our product range in terms of antennas. Our customers either want to take advantage of new compression techniques which allow us to produce even smaller systems such as back packs and suitcases or they, driven by demand from their customers, want to send even more traffic across the system such as for HD TV or multiple video channels.

Without giving too much away I think it's safe to assume we'll be building flyaway and vehicle based systems smaller than our current 1m dish size and bigger than our current 3.7m dish size.

Question: Where do you see GigaSat in 12 months time?

Chris Lay: We'll be doing what we do now, only more of it. We've been fortunate to experience unprecedented growth since the company started six years ago. We've currently got 68 employees and I think we'll break a hundred this time next year. ●



GigaSat C-band antenna in Pakistan.

IP-Uplinks' acquisition of two new GigaSat vehicle mounted satellite dishes is part of a major expansion programme for the Singapore-Perth based SNG provider.

IP-Uplinks is buying one GigaSat DA-150 roof mounted dish and a DA-100 fly-drive unit to enhance its current Ku services in Australia.

"The DA-150 will be mounted on our new Mercedes Sprinter based vehicle for Ku SNG services in Western Australia while the DA-100 will primarily have a role operating from SUVs in varying locations both in Australia and overseas," said IP-Uplinks Managing Director Graeme Shenton.

The SUV project was primarily aimed at providing greater flexibility for deployment in regional areas and was aimed primarily at the news delivery market.

"While much of our work is at the higher end of the broadcast news and sport sector, we have felt that we needed small dish technology to improve our fast deployment capability," Mr Shenton said.

"In Australia in particular, SNG vehicles by definition operate from capital cities which in such a large country means long travelling times to the more remote areas...which by road can mean 24-36 hours. We have traditionally used larger flyaways to resolve this problem but the fly-drive concept now provides other possibilities.

New technologies have also enabled significant system weight savings for the entire fleet.

IP-Uplinks chose GigaSat after an extensive analysis of the fly-drive antenna market. We have operated GigaSat equipment as part of our flyaway fleet for several years now and believe the company provides a good combination of quality and after sales service. Our experience to date has shown that the GigaSat units are well designed, durable and light, three very important factors in deploying mobile satellite transmission systems."

GigaSat awarded three Bahraini TV contracts

GigaSat has been awarded three tenders for the manufacture, supply and integration of satellite and microwave systems by Radio & Television Corporation in the Kingdom of Bahrain (BRTC).

The 1st contract is for a 3.7m dual DBS/Ku band fully redundant transportable earth station, which will be used as a back-up for existing Bahrain TV earth station, to uplink a bouquet of 10 channels to any transponder on Arabsat in DBS or Ku bands.

The 2nd contract is for a 2.4m Ku band fully redundant DSNG flyaway earth station for operation with Arabsat, Eutelsat & Intelsat satellites.

The 3rd contract is for a fixed digital microwave link system for two way bi-directional transmissions of three video channels with two associated stereo audio channels plus engineering order wire, between Bahrain Radio & TV Studios at Isa Town and Batelco earth station at Ras Abu Jarjur. The system utilizes Gigasat FLV-110 series encoders, transmitters & receivers equipped with (3+1) redundancy on the encoding and decoding systems (expandable to 8+1), and (1+1) redundancy on the RF transmit & receive chains.

Engineer Abdulla Al-Bulooshi, Head of Earth Station & Transmission at BRTC says: "Gigasat won the bid from five bidders because its state of art equipment fully complies with our technical specifications. We received positive feedback from other regional broadcasters on Gigasat products, support and after sales service, and we have seen its' equipment being successfully used during Formula 1 event in Bahrain."