

# Low Tech, High Concept

*There is a need to promote satellite technology as a “high concept” approach*

by Lou Zacharilla

If there is anything more short-lived than the attention span of a digital-aged teenager it is the lifespan of an Al Qaeda third-in-command. The ranks near the top of that organization are thin and getting thinner. Among the under-reported stories of the last couple of months is that two “number threes” were killed during the time when Osama bin Laden was holed-up in Abbottabad, Pakistan. There was no memory lapse on the part of the United States and the global alliance of nations, who were determined not to forget the events of 11 September 2001. Nor was there an inability to get the job done. Recently,

as we know, bin Laden paid the ultimate price for his extraordinary crime nearly 10 years ago.

While this era and its gruesome reactions will never be forgotten in our lifetime, it does seem that one of the primary reasons that the leaders of a global terror movement are being systematically eliminated is not fully retained in the consciousness of the culture or its businesses. I am speaking about satellites, of course. It seems to be a case of “capability amnesia.” (Or perhaps it is just lousy marketing.) Why? The world evidently no longer thinks of satellites as “high technology.” The thrill of being in space is evidently vanished. Perhaps that is not a bad thing, since technology scares as many people as it thrills; and our visionaries, from SSPI chairman emeritus the late Arthur C. Clarke to Elon Musk and Mark Dankberg, have often said that the goal is to “commercialize” space. While people may not *think* the satellite industry can generate goose bumps (these people

have evidently never been to a launch), we need people to *think MORE* about satellites.

After the attacks on New York, Washington, Madrid, London, Bali and other peaceful places there emerged a phrase which described their bloody, ruthless planning. Al Qaeda was cited for employing “low tech, high concept” tactics to commit its crimes against humanity. It is a nice phrase to describe bad deeds. So, as U2 lead singer Bono said when he decided that his Irish band would cover the Beatles’ great song, *Helter Skelter*, made famous by cult murderer Charles Manson, “An evil person stole this song. We’re stealing it back!”



**Satellite technology played an important role in the successful operation against Osama Bin Laden’s compound in Pakistan.** (photo Digital Globe).

We need high concept to promote the commercial satellite option, especially if it is seen as

ho-hum technology. In an industry of glorious engineering and engineers, I hear more and more that our challenge is now to tone down “propeller-head” jargon and give rise to ideas. In short, we need to create customers through innovation and game-changing strategies.

Is it being done? Many say no. Why? And what can we do to go further down the road? I decided to ask several industry leaders to get us going. **Mark Dankberg**, CEO of ViaSat; **Adrian Ballintine**, CEO of NewSat (and the Teleport Executive of the Year); **Keith Hall**, COO of Globecom Systems and **Keith Buckley**, President of ASC Signal had a back and forth with me on the subject.

Here is Part One of the discussion.

**Lou Zacharilla (LZ):** We’re looking for ideas that will make the satellite industry less of a well-kept secret. Maybe

we have momentum from recent events in Pakistan. Mark Holmes wrote recently that “according to the U.S. CIA, satellite technology should be credited for its silent, crucial role in the mission’s success.” After bin Laden’s hideout was located, the Pentagon’s satellite imagery assisted mightily with the planning and monitoring of the operation. Holmes suspects that satellites were vital in intercepting calls and communications throughout. So we can say that if there were no satellites, there was no stopping Al Qaeda. Seems to me this is a great story to tell. Here’s my question, “How do we tell it better?” Let’s start by discussing your best example of how satellites have contributed to customers, society, the economy or the greater good.

**Ballantine:** Goodness. How do I count the ways! Let’s stay with defence as an example. The innovation and importance in actual mission support speaks for itself. But let’s look at it as we do at NewSat, from the importance of enabling the welfare of these people who defend us. NewSat provides personal communications for military personnel in Afghanistan. We call this “welfare communications” for soldiers. It is extremely important. Militaries around the world have as a major priority the retention of soldiers, especially in volunteer forces like those in your country.

**LZ:** So satellites provide support for the morale of warfighters?

**Ballantine:** Yes. Significant support. At the time of the September 11 attacks, soldiers could use satellite communications a mere 30 minutes every 14 days. This placed enormous stress on them and their families. Retention rates were lower. Now, of course, we enable communication access to them around the clock. So military recruiters have been given the gift being able to recruit the soldier by retaining the family.

**LZ:** So NewSat, using satellite, provides an always-on broadband connection, no matter where a person is, which allows for a more stable emotional environment back home?

**Ballantine:** Yes. Soldiers and sailors enjoy the same access



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**-Keith Buckley, President,  
ASC Signal**



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**-Mark Dankberg, CEO of ViaSat**

as their families and other civilians.

**LZ:** This is another example of what is possible in what I call “the Broadband Economy.” Mark, ViaSat has made broadband and the phenomenon of an “always-on” connection central to its vision of the future. Yes?

**Dankberg:** Yes. But it is not a mere technical item. The role of satellites in the national dialogue has to be in proportion to the issues of the day. When I think about our industry’s “Rodney Dangerfield” image, I note other components at work. Perhaps our image has faltered because the industry has become more financially centric in a way that undermines its appeal to the imagination of consumers, politicians, regulators, and governments. I disagree with you about space being “ho-hum.” Space is intrinsically exciting and a romantic place. Satellites of any type are spaceships. Spaceships ought to be capable of capturing a public’s imagination.

**LZ:** I agree. But can we be criticized for running mature, financially viable businesses? We all have shareholders, investors, customers and employees that depend on financial health.

**Dankberg:** Of course we do. But the question we are trying to answer goes beyond that and is probably not going to be answered by putting those attributes forward. I don’t think it will be answered either by taking a purely financially-driven, risk-averse and status-quo institution like the global satellite industry and manufacturing a public relations campaign to present it as a technology pioneer or essential to the future of smart grids.

**LZ:** So where does that leave us?

**Dankberg:** If we want to create more excitement about the satellite industry, we will need a genuine core. It will involve highlighting the sources of innovation, more risk-taking, and adventure.

**LZ:** That is an innovator's dilemma, because we are not sure how to approach it at the moment. However, I agree that adventure does capture imaginations. I like that approach. Maybe a new type of adventure is where our "genuine core" is found. Keith, Mark says we need to start looking at innovation and more risk-taking. Where would you start?

**Buckley:** I agree with Mark and also Adrian. You need to look at trends, how people are living their lives and what will enable them to live life more fully, whether they are in military service or seeking what they consider, for them, an adventure. We are all risk-takers, if you look at what we have willingly put on the line for our respective companies.

**LZ:** You seem to be saying that satellites need to somehow connect more to the human experience? A core experience, or several of them.

**Buckley:** That's right. Mark's company's satellite, ViaSat-1, will accommodate the need for broadband and change perceptions about our business. We need to build on it because he is right. Our industry needs to tap into the issue of the day and be there before a market even knows what it needs. But more important, we need to represent something.

**LZ:** That is what makes Apple and other innovators great companies.

**Buckley:** No question about it.

**LZ:** I say that in the satellite industry the need for increased bandwidth, broadband everywhere and the lifestyle to communicate on the move have inside them an innovation waiting to happen.

**Buckley:** Especially to communicate on the move. Mobility has completely changed the antenna systems business. The increase in mobility is going alongside the rise of broadband as an economic enabler. Satellites are right there if we can get the message out. I don't know if one-time purchases tell us anything, but a few days ago the U.S. Air Force selected our 3.9m lightweight quick-deploy system. It is a big antenna that's highly mobile and can be deployed anywhere in minutes. I don't think this is a one-off. It demonstrates a need for smaller, faster and easier.

**LZ:** "Smaller, faster and easier." Keith (Hall) are there innovations embedded somewhere in this phrase that we can think about as we retool the image of the satellite industry over the next few years?

**Hall:** Certainly the faster part, because with every new technology we have seen, or developed, the society's ability to increase the velocity of use has put a demand on making

**"...it is increasingly not about the technology but about satellite enabled technology in support of a core human experience or need..."**



**—Keith Hall, COO, Globecomm**

**EVEN FASTER!** During the time of this year's SSPI Gala, as you know, we announced a new product named, appropriately, FAST.

**LZ:** Which means?

**Hall:** Forward -Deployed Asset Support Terminal. We decided that one segment of our society which has become very complex is disaster recovery management. The scale of disasters seems to be escalating and gaining a more lethal quality. We know that communications are essential to safeguarding human life and getting things intact again. Globecomm decided to create an enterprise-class platform for organizations that offer a quick-deploy communications solution. To your point, because we are in a "broadband economy," it was designed to deliver tens of megabits of connectivity and technology options that can turn the platform into a multipurpose hub for local communications as well. To Keith's point, we have the ability to tie an instant mobile network in to it, providing GSM, CDMA and other mobile standards. To echo what I have been hearing, it is increasingly not about the technological but about satellite enabled technology in support of a core human experience or need.

**LZ:** I think we're off to a good start. Next we'll drill a little further into Mark's observation that whatever we do to retool the industry's image, it must come from a "genuine" core. Thanks.



**Lou Zacharilla is the Director of Development of the Society of Satellite Professionals International (SSPI). He can be reached at: [LZacharilla@sspi.org](mailto:LZacharilla@sspi.org)**