



● ● Jay Icard, CEO of XTAR

XTAR is a trusted commercial satellite operator exclusively providing services in the X-band frequency range, which is the communications cornerstone of today's military, diplomatic, humanitarian and emergency disaster response operations. A privately-owned and operated company, XTAR supports the critical satellite communications needs of governments around the world through its two X-band payloads.

With its high-powered 72MHz transponders and global, fixed and steerable beams, XTAR provides over 4GB of cost-effective, flexible, secure X-band capacity with coverage from Denver east to Singapore. The system can accommodate massive wideband data requirements and provides overlapping coverage with regional redundancy for increased service and reliability.

XTAR bandwidth is not application specific; it can support and transmit to any one of the primary architectures used by government agencies today, including fixed-to-fixed, tactical-to-tactical, reach back, broadcast and airborne platforms.

# GMC

## Q&A

## Increasingly competitive market ● ●

XTAR was the first commercial entity to provide X-band satellite services in the world when it was founded in 2001. Today, the company exclusively serves government and military users, and is currently exploring its expansion options by engaging with government policy makers and military acquisition authorities to ensure its new systems fully address emerging user needs. Jay Icard, CEO of XTAR, opines on how the company will continue to move forwards in an increasingly competitive market.

**GMC: XTAR is well-known for focusing exclusively on government and military users with its X-band services; what's your assessment on the significance of X-band in the wider satellite communications community?**

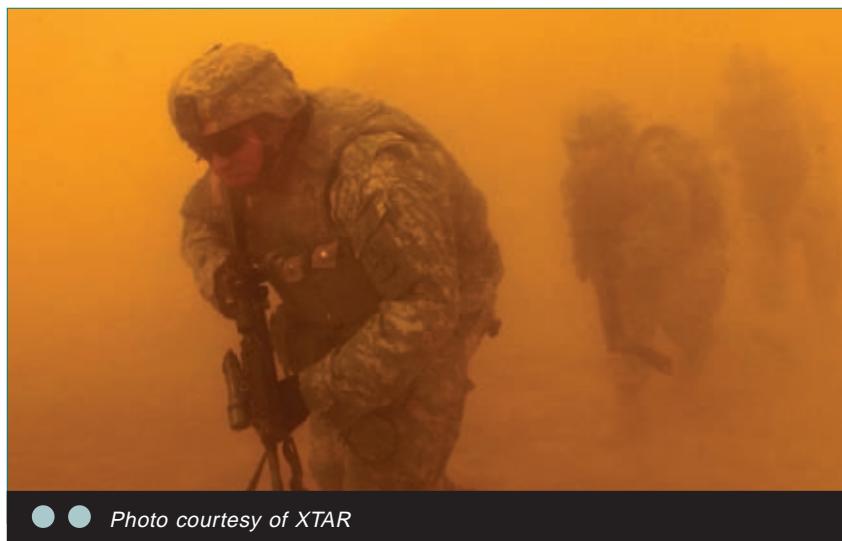
**Jay Icard:** Commercial X-band is a unique product. It solves a particular set of problems and achieves higher data rates into small terminals, maintains strong links in poor weather conditions, and has a low probability of interference. As users such as those in the military determine that maintaining their communications link is mission critical, they will evolve into multi-band systems where they can use the most advantageous link. X-band provide one of the tools in the multi-band toolbox and offers advantages such as large spot beams, low interference, high throughput and weather resistance.

XTAR capacity has been used by some of the most demanding customers, due to their mission set. We are available to so many more who have either never used X-band or have their experience only on government constellations.

**GMC You were appointed as CEO back in March 2018. What skills and expertise will you bring to XTAR, and where do you see the company going under your direction?**

**Jay Icard:** I came to XTAR after 13 years with a satellite system integrator. Prior to that, I worked for a global telecommunications company, a global software company and spent nine years on my first job out of college working on Navy weapon systems acquisitions programs. During my time as a satellite system integrator, we built the DoD business from a cottage business into a substantial player. I have an in-depth understanding of the problems the integrator community faces in their constant competitive environment. I experienced what value a business partner can provide as we built the business.

I came to XTAR because I was interested in having something unique to bring to market. We simply need to make the X-band product an enabler for the integrator community. It has to provide a competitive advantage on the solution and price and we have to make working with us easy. We are doing just that. We have some exciting announcements coming in the near future that will expand our product set, provide broader coverage and further enhance our products in security and resiliency.



● ● Photo courtesy of XTAR

**GMC : Which trends and challenges are emerging in XTAR's key markets, and how is the company addressing them?**

**Jay Icard:** Our users tell us that flexibility and interoperability are both top of mind. As mentioned above, we see the multi-band trend continuing to evolve. However, the ability to do all of this on a limited budget will continue to be an issue to them. XTAR is capable of providing flexibility through actions such as daily use, quick time to service, and porting from beam-to-beam if needed. The interoperability between XTAR, WGS and other government X-band satellites allows users with X-band terminals to just repoint without the need for different equipment. As a government frequency, the use of X-band may also allow partner nations to share information more easily. While budget is always an issue, we continue to highlight the efficiencies of X-band which often means lower overall cost.

**GMC: Last October, XTAR and Leidos Systems Engineering and Integration partnered to demonstrate the power and efficiencies of XTAR's X-band frequency using a small airborne antenna. What can you tell us about the results of this test, and any implications for the communications market?**

**Jay Icard:** The demonstration for USSOCOM allowed us to show off a little bit. It was a great way to prove what we already know to be true, that X-band is a highly effective choice for comms-on-the-move applications. In particular, those missions which require data rates which are higher than 1Mbps into terminals which are 1m or smaller. The demo showed a greater than 26Mbps throughput off of a very small airborne antenna. As AISR missions require higher throughput to support HD video and improved sensor and camera technology, the need for more than 1 or 2Mbps off the aircraft will be increasing. XTAR can support those needs, and quite efficiently, I might add. The 26.7Mbps required only 38.2MHz on our XTAR-LANT North America spot beam and was maintained even during a heavy rainstorm. That is part of the uniqueness that I noted. Keeping in mind that we only serve the government user, our interest is not in proving links which feed data to the aircraft, like a commercial airline service. Instead, we have a bigger challenge of providing strong links which feed the data from the aircraft, which military and intelligence missions require.

**GMC: Late in 2017, XTAR announced an expedited terminal certification process. What benefits does this bring to terminal manufacturers?**

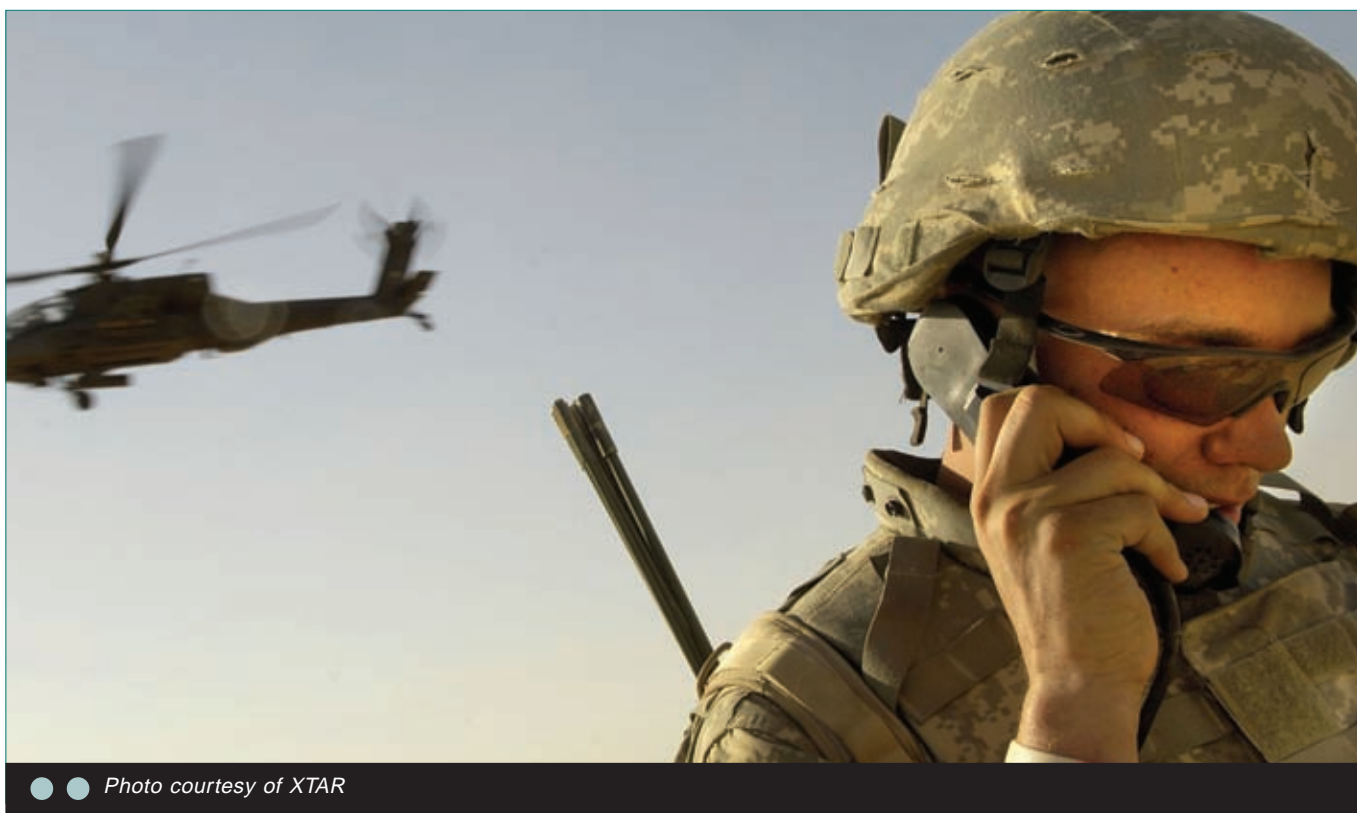
**Jay Icard:** This is part of our 'easy to work with' mantra. There are many brands of terminals on the market today which offer an X-band variant. In order to allow access onto the WGS satellites, for instance, they must go through, and rightly so to access a government satellite, a substantial approval process. This can delay the use of new, innovative equipment into the hands of users while they await such certification. Comparably, XTAR can work with the manufacturers to evaluate and label their antennas as 'XTAR Certified' in just a matter of days. This allows the system integrators and terminal manufacturers a way to promote, test and demo much sooner to prospective buyers. It provides a win-win for the system integrators, manufacturers and users.

**GMC: XTAR is reportedly making plans for a next-generation satellite constellation. How has this project progressed so far, and what new capabilities is the company considering for these satellites?**

**Jay Icard:** Plans for the replacement satellites are being finalized now. As the design specifics and timeline become releasable, I will be sure to notify the press. XTAR will continue to be focused exclusively on the military and government user and you will see that in the way these new satellites have been designed. I can tell you that everyone at XTAR is eagerly anticipating telling our customers about the new satellites and where the future of our constellation is going. It has been quite a while since we have had the opportunity to announce new products at XTAR. This will be an exciting chapter for our company.

**GMC: What are your expectations for XTAR for 2019 and beyond?**

**Jay Icard:** It is going to be one of those chapters in the history of a business that we will say, "you remember when..." We have a slightly different approach to enable our system integrator partners. We have a user community with a growing demand for the product we offer, and we have new satellites coming with more capability and an expanded product offering. It will be a fun ride.

**GMC**

● ● Photo courtesy of XTAR