March/April 2011

GMC

Global Military Communications - ISSN: 1756-3240

Fulfilling MSS requirements

- Off-the-shelf Comms
- Helen Jameson talks to Bob Roe, Stratos Government Services
- Network Enabled Capability

BGAN Terminal in Military Rucksack courtesy of Stratos.

Fulfilling MSS requirements to the tactical edge

Helen Jameson talks with Bob Roe, President and CEO of Stratos Government Services Inc. (SGSI) about how SGSI has evolved its business to meet the sophisticated MSS requirements of US military and government agencies.

Bob Roe, president and CEO of Stratos Government Services Inc.

Military agencies around the globe have an ever-growing need for mobile broadband satellite services (MSS) that are networked and based on the strictest operational security requirements. Recently announced projects by some of the world's leading satellite operators are expected to dramatically impact military MSS deployments in the coming years.

Question: Would you kindly introduce yourself and SGSI to our readers?

Bob Roe: My name is Bob Roe and I am President and CEO of SGSI. I've worked in the commercial and government satellite sectors for 30 years, including 22 years in the US Navy where I operated and managed communications platforms for maritime, land mobile, aviation and intelligence commands. I also have served as Chairman of the Mobile Satellite Users Association since 2007.

SGSI's focus is on the US government market. We serve as an integrator of commercial satellite solutions for the US Dept. of Defense (DoD), federal and state government agencies. SGSI meets government-agency demand for an experienced integrator with end-to-end solutions that are technology agnostic. We've had the privilege of helping major military organisations adopt new MSS that help improve their effectiveness and safety.

The DoD, US Dept. of Homeland Security and state-government emergency responders have similar communications requirements. At SGSI, we supply these organisations with the most advanced, mobile satellite systems – such as Inmarsat BGAN, FleetBroadband and SwiftBroadband systems, as well as Iridium and VSAT solutions – for integrated voice and high-speed data connectivity.

What makes SGSI different is the secure, highly advanced network we call the Stratos Government Network (SGN). Fully deployed since June 2010, the

SGN is compliant with Information Assurance (IA) requirements and designed to minimize operational security (OPSEC) exposure. These attributes are absolutely critical for military users deploying MSS via COMSATCOM to fulfill mission objectives on the ground, at sea and in the air.

Question: How have SGSI's services changed to meet the DoD's evolving OPSEC requirements?

Bob Roe: The introduction of the SGN dramatically changed how SGSI meets the DoD's needs for increased security, decreased latency and geographic diversity. SGSI is the only Inmarsat Distribution Partner to offer this type of secure network. Utilisation of the SGN enables SGSI to provide the industry's only BGAN, FleetBroadband and SwiftBroadband offerings that are OPSEC and IA compliant.

By combining the SGN with The Stratos Advantage suite of value-added services, SGSI has engineered the optimal solution to achieve security objectives of MSS users in the military. SGSI's support of enhanced OPSEC also includes secure billing, which makes it very difficult for adversaries to piece together billing patterns to determine operational activity.

The SGN is completely separate from Stratos commercial service. It features points of presence at the Satellite Access Stations (SAS) in The Netherlands and Hawaii. Also, it is monitored, managed and maintained by the SGSI Network Operations Center in the United States that is staffed exclusively by cleared US citizens.

The SGN secure architecture is a fully private network backed up by a commercial network. It reduces the distance to the government-network point of entry, provides customer APN routing privileges, as well as additional network access and authentication control.

Soldier with VSAT Antenna courtesy of Stratos.

Question: In years past, there was a great deal of emphasis on communications to the edge of the network. Is that still an important consideration?

Bob Roe: Communications to the edge of the network has evolved from a consideration to an absolute requirement. The critical need for a constant, high flow of information – including social media – has led SGSI to design and implement MSS solutions that maximise available bandwidth to and from the edge. The field operative at the edge of the network also is the source of knowledge. That makes communication with the edge of the network more vital than ever before.

From a user perspective, the 'edge of the network' has been replaced by the 'network'. Most, if not all, MSS COMSATCOM are now networked services. Today, the edge has become blurred. One of our next challenges is enabling military agencies to take full advantage of cloud computing via COMSATCOM and more specifically, SGSI's portfolio of value added services that are designed to support the remote user.

Question: How will SGSI help the DoD use MSS to support cloud applications?

Bob Roe: The DoD has challenged industry to provide creative solutions for supporting cloud applications. With the increased reliance on COMSATCOM and the advent of affordable new MSS

Soldier on Satellite Phone--courtesy of Stratos.

pricing structures, such as flat-fee pricing, MSS is considered a viable platform for cloud computing. In the future, we expect the Inmarsat BGAN family of services to play a vital role in helping commanders maintain applications in remote locations. Inmarsat BGAN via the SGN is positioned well to satisfy the on-demand, self service and broad network-access capabilities required by DISA. Our focus now is on the resource pooling and elasticity objectives. As cloud computing becomes more prevalent in the military architecture, the ultra-high reliability, redundancy and security of COMSATCOM will be seen as a major enabler. The SGN is only the first step.

Question: Which new satcom solutions are in highest demand by military organisations?

Bob Roe: Whether it's on land, at sea or in the air, military commanders are constantly seeking higher-speed MSS that are available on smaller terminals. That's what makes Inmarsat's Global Xpress such a timely service introduction. Global Xpress – based on the new Inmarsat-5, Ka-band constellation – is a next-generation global service that will have a huge impact on maritime, land mobile and aeronautical markets in both the government and private sectors. With global commercial availability expected in 2014, Global Xpress will deliver seamless worldwide coverage and unprecedented mobile broadband with speeds up to 50MB/s, to customer terminals from 20-60cm in size.

It's easy to imagine how the advent of higher bandwidth MSS on smaller terminals will positively impact traditional aircraft, field operatives on land, and vessels at sea. We also expect military agencies worldwide will examine Global Xpress for other important applications, such as Unmanned Aircraft Systems (UAS). As UAS data requirements continue to grow, they will require smaller antennas and greater capability for the servicing satellite. We expect Global Xpress to meet those needs.

Question: Considering the ever-increasing need for more bandwidth, how will SGSI provide its customers with a migration path to Global Xpress?

Bob Roe: We are developing several creative programs to bridge the gap between today's high-performance solutions and the expanded capabilities of Global Xpress. The first example is for the naval market, for which we now offer the new Stratos FBBPlus managed global broadband service. FBBPlus combines Inmarsat's popular FleetBroadband satellite service with Ku-band VSAT service. For a flat monthly fee, FBBPlus offers a managed data communications capability of up to 25 GB per month.

The turnkey service offering, predictable cost, and high data allowance make FBBPlus ideally suited for global naval forces that are customizing their own network environment and require greater throughputs and bandwidth. In the commercial market, Stratos recently began deploying FBBPlus on approximately 40 vessels for Hapag-Lloyd, under a five-year contract.

With its integration of FleetBroadband and Ku-band VSAT services, FBBPlus provides a solution that meets today's needs. With a simple terminal transition from Ku to Ka, FBBPlus instantly will provide Global Xpress capabilities going forward.

Question: How do the satcom needs of other US government agencies parallel those of the DoD?

Bob Roe: In addition to meeting the global needs of the US military and federal agencies, we see strong demand from NGOs such as the American Red Cross and the state government sector – especially as it pertains to serving emergency responders.

First responders require immediate communications upon arrival on a scene. Voice, video and high-speed data are essential, to allow for reliable communications and coordination with command centres and for direct access to Incident Management Systems. For those reasons, the lightweight BGAN systems have become immensely popular. When you also consider that minimal user training is required for set-up and operation, BGAN is a highly effective solution for all government agencies. We consider it a privilege to work with state governments to provide a complete satcom solution to fit the entire emergency-response life cycle.

Question: What are SGSI's future business objectives in the MilSatCom market?

Bob Roe: Since our founding five years ago, SGSI's success has resulted from an intimate knowledge of customer requirements. We understand what keeps commanders up at night – the critical reliance on COMSATCOM systems to complete their missions. Our immediate challenge is to continue expanding our portfolio with solutions that offer the industry's highest levels of throughput, data capacity and security.

Among government buyers and integrators, there continues to be an overarching need for fully integrated MSS. We believe we are ideally suited to meet that need by offering turnkey systems that include airtime, applications, hardware, installation, network engineering and management, customer support and value-added services. **GMC**

US Coast Guard Vessels courtesy of Stratos.