Dear Colleagues,

With warfighting now defined by the ability to rapidly adapt to changing battle-demands, the need for effective SATCOM for commanders is more vital than ever. With that in mind, it is with great pleasure that I would like to invite you to join me and SMi at MilSatCom USA, taking place between the 26th and 27th June 2019 in Arlington, VA.

Returning for a fourth year, MilSatCom USA provides a forum within which policy makers, requirements writers, end-users and industry can meet to focus their vision for the future of US SATCOM. As a longstanding supporter of this meeting, I am delighted to return as chair for this important meeting.

We all know that responsibilities and domain ownership are in flux – in particular with the announcement of the US Space Force, United States Space Command, the stand-up of the Combined Space Operations Center, and the Space Development Agency. These organizational changes have a direct impact on the future of US SATCOM and the June forum will be at the center of the debate.

This year’s agenda has been carefully put together to draw on expertise from across key stakeholders for the US Space Enterprise, presenting a fantastic opportunity to learn from senior policy and strategy leaders across the DoD, industry and allied partners.

This conference is the ideal setting to raise questions, share experiences and knowledge among decision makers from government and military as well as industry professionals. I invite you all to join me and take part in both MilSatCom USA and their international satellite forum Global MilSatCom in London.

Best Regards

Mr Doug Lavery, President, Lavery Consulting LLC
Former Deputy Assistance Secretary of Defence for Space Policy & Conference Chair

8.30  Registration & Coffee

8.50  Chairman’s Opening Remarks
Mr Doug Lavery, Independent Consultant, Lavery Consulting, LLC

9.00  Keynote Address: Researching, Developing and Prototyping New SATCOM Capabilities
- Current DoD structure and approach to space systems: how can we more effectively exploit the assets we have?
- Modernising communication systems to provide protected capability against red force electronic warfare
- Exploiting COMSATCOM more effectively – where will future Army bandwidth come from?
- Developing assets that can effectively counter anti-satellite weapons

Future R&D in support of delivering the capability demanded by the warfighter
Mr (SES) James Foltz, Director of Research and Engineering (Advanced Capabilities), US DoD

9.30  Enhancing Cyber Security for SIGINT and Secure Communications
- An overview of the work of the National Reconnaissance Office and it’s role within the wider DoD
- Current cyber based – intelligence and frequency band limitations for growing data demands
- How effective dissemination of information through a net-centric approach enhances battlefield command and situational awareness
- Integrating great cyber hygiene standards into communications
- Where next for space? Reflections on what recent announcements mean for the satellite sector

Brigadier General Mark Baird, Deputy Director, National Reconnaissance Office, US DoD

10.00  Session Reserved for Gold Sponsor Lockheed Martin

Senior Representative, Lockheed Martin

10.30  Morning Coffee

11.00  Advancing the Technology Landscape of Space
- Cyber and technology pathways within the joint information environment
- The quantum revolution – where QKD can be integrated to support more secure communications
- Current R&D projects that can influence our space warfighting construct
- A vision of the future US military cutting edge technology and where the warfighter flies

Mr Frank Konieczny, Chief Technology Officer, SECAF, US Air Force

11.30  SATCOM FOR COMMAND & CONTROL

Fly, Fight and Win: Utilising SATCOM to Build C2 and Optimise Global Strike Capability
- Space enables used for air operations: ensuring the USAF maintains air and space superiority
- Enabling close air support (CAS) through SATCOM-enabled command and control (C2)
- Key enablers for ACC’s operations with other services
- Information assurance: keeping pace with electronic warfare capabilities of red forces

Colonel Chad Raduege, Chief of Space and Cybersecurity, US Air Force

SATCOM RESILIENCY & HARDENING

12.00  Secure and Resilient Communications: Setting the Globe with Enterprise DoD SATCOM
- The changing policy landscape for DoD SATCOM – how resilience is to be maintained within the new Space Force
- High-throughput satellites (HTS) – managing IT security of disruptive C3I/SATCOM
- Operating DoD SATCOM as an enterprise: delivering access to the ‘cloud’ to provide competitive military advantage
- Moving from static to flexible warfighting – leveraging commercial and international partnerships to deliver capability
- Path ahead for the DoD modernisation of C3, COMSATCOM transition to AF Space Command & synchronising emerging SATCOM capabilities

Dr Brian Twpele, Deputy Chief Information Officer, OSS, US DoD

12.30  Networking Lunch

13.30  FUTURE DISCUSSION
- SATCOM Requirements for the Combatant Commands & Collaboration With Partners
- Operating in remote and inhospitable environments – encryption and resilience requirements
- Delivering multi-band systems that provide the throughput needed for larger combatant commands
- MILSATCOM from a requirements perspective: what the warfighter needs
- Key partnerships between NORAD & the Canadian DoD
- Ensuring ground terminal equipment remains interoperable on joint operations
- Sharing high-volume data across the network in theatre-wide operations
- Unique challenges faced by the respective Combatant Commands

Moderated by: Mr Douglas Lavery, Independent Consultant, Lavery Consulting, LLC

Panelists:
- Colonel Hugh McCuskey, J6 Operations, Division Chief, US CENTCOM
- Lieutenant Colonel Adele Behlmann, SATCOM Section Head, Canadian Armed Forces

14.15  SATCOM in the Central Command — Key Requirements
- Working in coalition – the key challenge for providing communications for multi-national operations in the CENTCOM AOR
- Deploying in degraded environments: key considerations for protected and resilient communications
- Data demands of the future – where the anticipated change in communications tempo will come from moving forward
- How we meet the challenge & what we require to do so

Colonel Hugh McCuskey, J6 Operations, Division Chief, US CENTCOM

14.45  Afternoon Tea

15.15  Supporting the Warfighter: USAF’s Cyberspace and SATCOM
- The Defense Information Systems Network (DISN) – connecting the branches and enabling joint warfighting
- Providing diverse, resilient and protected communications and computing environments
- Evolution of work: exploring new emerging technologies such as automation of network orchestration
- USAF’s network portfolio: enhanced mobile satellite services and unified video dissemination

Mr Charles Osborn, Acting Director, Infrastructure Directorate, USAF

15.45  Keeping the US at the Forefront of Space - Utilising Cutting-Edge Technologies to Solve National Security Problems
- Considering the portfolio and organisational structure of DISN – how space fits into the wider technology remit
- Moving from large physical infrastructure to small, micro and nano-satellites – key innovation developments within the last 5 years
- Overcoming challenges for the replacement of legacy systems: how disruptive technologies are changing the way we look at space
- Building commercial-government synergies: how DISN is fostering relationships with industry
- Enhancing low cost access to space – avenue for project launch solutions within the commercial sector
- Optimising data transfer for ground units – how novel technologies can improve warfighting and disaster relief operations

Colonel Steven Biton, Space Portfolio Lead, Defence Innovation Unit, US DoD

16.15  Lessons Learned on Developing International Cooperative Efforts in MILSATCOM
- Considering the work of the US Air Force within a global context – how the US network fits into wider allied constellations
- What’s next after Wideband AoA? Possibilities for international partnerships within SATCOM
- Disruptive technology in space: exploring the utility of C3I/SATCOM and LEO (Low Earth Orbit) small satellite constellations
- New roles and responsibilities for the US DoD – what’s changed since the NDAA?
- Establishing partnerships across SATCOM – working across the alliance to deliver secure communications
- How to do business with the US Air Force? Processes and approaches to SATCOM partnerships

Mr Michael Laney, Head of International Engagement MilSatCom, Headquarters Air Force, International Affairs (SAF/A), USAF Air Force

16.45  Space Robotics - Applications of Future Technologies
- On Orbit Servicing of satellites – extending the lifetime of SATCOM constellations
- Overcoming the complexity, weight and cost through in-orbit servicing and assembly
- Current designs for robotic space vehicles (RSV) & future concepts
- Bringing RSV’s to LEO – opportunity areas for future servicing of mega-constellations
- Final concluding thoughts: the potential of space robotics and advanced communications technologies to maximise sovereign SATCOM capability

Dr Gurpartap “GP” Sandhoo, President and Founder, Laboratory for Commercial Optical Communications

17.15  Chairman’s Closing Remarks and Close of Day One
Mr Doug Lavery, Independent Consultant, Lavery Consulting, LLC

17.30  Post Conference Drinks Reception hosted by Airbus
9.00 Transformation of SATCOM Capability for the Modern Warfighter
- Consolidating data processing, exploitation and dissemination across platforms
- Delivering a joint access to C4i – the air staff’s coordination with other branches
- Strategic goals for the USAF over the next 10 years and how effective enterprise management can assist in achieving it
- What the US Space Forces means for the A6 and relocation of SATCOM capabilities
- Meeting future data demands and bandwidth requirements for next generation fighters

Brigadier General David Gaedecke, Director, Cyberspace Operations and Warfighting Integration, Office of Information Dominance and Chief Information Officer, US Air Force

9.30 Session Reserved for Gold Sponsor Airbus

10.00 Expediency War Communicaetions Requirements of the Future
- The US Marine Corps C4i ambition - providing commanders the means to communication BLOS (beyond line of sight) whilst forward deployed
- VSAT: integrating expeditionary, small, medium and large systems to support high bandwidth data applications
- Reducing VSAT deployment time to 10 minutes and unburdening warfighters with lighter terminals
- Acquiring new capability that avoids the COTS limitations of VSAT
- Progress deploying the MUOS system and ambitions for future roll out

Mr Kenneth Bible, Deputy Director, C4 / Deputy CIO, US Marine Corps

11.00 Defining Future Space Requirements, Policy and Architectures for US Space Operations
- "Look to the stars" – why the future of US operating capability will rely on space based enablers
- Keeping the commands connected – exploiting high frequency communications for secure communications across senior command functions
- Developing a holistic and modular approach to SATCOM technology – ensuring architectures work to the cyber guidelines of the 21st century
- Wideband AOA constellation life-extension: what this means for global coverage and US space policy
- How the growing use of commercial launch capability is shifting requirements for SATCOM

Captain Claude “Willis” Arnold, Chief, Strategic C4 Capabilities Division, US STRATCOM

11.30 PANEL DISCUSSION Industry Perspectives on SATCOM — Developing the Resilient Architectures of the Future
- A holistic approach to communications: managing both ground & space segment
- Delivering multi-band systems that meet both resilience and throughput considerations in the WGS and future constellations
- Performance analysis and resiliency metrics – where SATCOM can be optimised moving forward
- Key drivers for future, more capable satellites: perspectives on design and delivery
- Framing government requirements and providing robust architectures moving forward

Moderated by: Mr Douglas Loverro, Independent Consultant, Loverro Consulting, LLC
Panelists:
- Senior Representative, Lockheed Martin
- Senior Representative, Airbus
- Senior Representative, SES Government Solutions

12.15 Networking Lunch

13.15 Outcomes of the Wideband AoA: Delivering Future Sovereign Capability
- Current mix of COMSATCOM and MILSATCOM – where the balance lies
- Providing higher levels of protection against jamming and other threats
- Hybrid designs for future SATCOM capabilities – delivering the bandwidth required
- Expanding the WGS to meet the needs of the 21st century warfighter
- Future space policy in the post AoA era: providing protected tactical waveforms

Lieutenant Colonel Tyler Phipps, Deputy Chief, Space Support Operations Division & Principal Advisor to the SecAF for Space Staff, US DoD

13.45 US Special Operations Command Satellite Operations
- Special Operation Forces Information Environment (SIE) Wideband transport capability
- Minimising MILSATCOM troubleshooting through training and standardization
- Synchronizing satellite and terminal technologies – ensuring space assets remain functional
- Keeping pace with future developments: how SOCOM is staying lockstep with the commercial SATCOM market
- Developing smaller terminals with higher throughput and integrating end to end trouble shooting at the local level
- SOCOM plans going forward: using MEO and the possibility of utilizing LEO

Mr Jason Perkins, Branch Chief Satellite, Spectrum, & Terrestrial Communications, US SOCOM

14.45 Afternoon Tea

15.15 Lighter than Air SATCOM Capability
- Disruptive traditional communications – what Lighter than Air is set to achieve
- Current state of play for the project and writing requirements for future systems
- BLOS SATCOM opportunities that lighter than air terminals offer
- What next for the project? Development timelines

Mr Michael Rupar, Branch Head, Transmission Technology Branch, US Naval Research Laboratory

15.45 Overseeing and Coordinating Use of SATCOM Across NATO
- NATO's Dependencies on Space report and what it means for future SATCOM
- Feedback from recent exercises coordinating SATCOM activities across partner forces
- How FNM and similar projects can enhance allied interoperability
- Future priorities for NATO ACT to maximise allied communication capability

Squadron Leader Nick Bolan, SATCOM Capability Director, NATO ACT

16.15 Satcom Challenges for Small Countries In Joint Combined Operations
- Continuity across the network: delivering interoperability in joint exercises
- Belgium as a case study: collaboration with partner nations and the NATO alliance
- Ground and space segment connectivity between forces
- Final concluding remarks

Commandant Nicolas Gerome, Head of Space Capabilities, Belgium Ministry of Defence

16.45 Chairman’s Closing Remarks and Close of Day Two

Mr Douglas Loverro, Independent Consultant, Loverro Consulting, LLC

* Denotes Subject to Final Confirmation