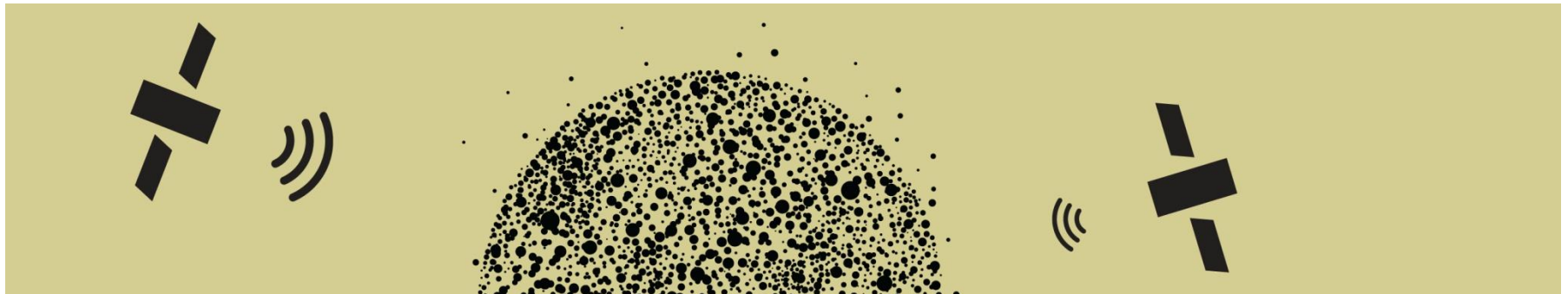




SPACE INSURANCE: WHY IT MATTERS

CHRIS KUNSTADTER | XL INSURANCE | ISPCS 2013



The Space Insurance Market



- **Fundamentals of insurance**
 - *“Losses of the few are shared by the many”*
 - **Fortuity, correlation, risk transfer, indemnification**
 - **First party vs. third party coverage**
 - **Frequency vs. severity**
 - **All risks vs. named perils**
 - **Differentiation vs. spread**
- **Today’s space insurance market**
 - **All technical risk from ignition onwards**
 - **Volatility and overcapacity**
 - **FAA licensing**
 - **New risks and unique challenges – Cyber, C/HSF, debris...**

What Keeps Us Up At Night



➤ Operations

- Environment – debris, solar activity
- External threats – intentional and unintentional
- On-orbit servicing – prox ops
- Hosted payloads – liability, cross-impact
- Cyber – unbounded risk

➤ Systems

- Technology insertion
- Counterfeiting
- Test and analysis
- Workforce

➤ Commercial

- Global economy – shifting alliances
- Emerging risks
- Market weakness – volatility
- Capital allocation



Conclusion



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- **Competitive space insurance market demands even more diligent underwriting**
 - **Emerging risks, introduction of new vehicles, new applications, and new technologies can stress operators, manufacturers, launch providers, and end-users**
 - **The space insurance community is working closely with the commercial space industry to provide support and protection**
 - **Avoid surprises!**
 - **Engage with us early**
 - **Make your voice heard**

Thank you!



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XL Group plc is...



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- **A publicly traded company (*NYSE stock symbol: XL*)**
 - **Total assets of \$45.5 billion (*as of 31 March 2013*)**
 - **Shareholders' equity of \$11.8 billion (*as of 31 March 2013*)**
 - **60 offices in 25 countries**
 - **Through its subsidiaries, a global provider of:**
 - **Insurance and reinsurance**
 - **Specialized commercial risk management solutions**
 - ***XL Aerospace is a leading provider of insurance and risk management services to the aerospace, telecommunications, and related industries worldwide***
 - **XL has worked on numerous launch vehicle and satellite failure review boards and industry groups**
 - **XL has unique capabilities, including security clearances**