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Drone Fever: Are You Ready to Implement Drones for Commercial Use?

Legal, Business, and Strategic Perspectives on
Unmanned Aircraft Systems

March 2017



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Hogan Lovells US LLP’s sector-focused approach helps it deliver ‘highly specialized’ advice.

Legal 500, 2016

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Game of Drones : Enabling Use and Navigating Market Opportunities and Challenges


The Unmanned Aircraft Systems (UAS), or drones, market is expected to grow significantly in the next four years. Commercial enterprises are quickly discovering the value and benefit drone technology can bring to daily operations. Expert estimates of economic impact vary, but the numbers are all large. A recent Teal Group Corporation study estimates civil UAS as a US\$2.6bn market in 2016, quadrupling to US\$10.9bn by 2025.¹ A recent PricewaterhouseCoopers report estimates the global market value of UAS-powered solutions at over US\$127bn.² And the Federal Aviation Administration (FAA) recently estimated that by 2020 there will be 11m commercial UAS sold in the United States.³

Drones provide tremendous benefits for many industries and are being used today for a variety of commercial operations, such as pipeline and powerline monitoring, infrastructure inspection, newsgathering, aerial cinematography, construction site inspection, real estate photography, insurance inspection, facility surveillance, and more.

However, this new era of technology poses major safety, privacy, and security challenges for lawmakers. The policy and regulatory frameworks are therefore evolving rapidly in the United States and around the world. Companies must therefore navigate compliance with legal and regulatory obligations that are regularly fluctuating. With this fast-paced and growing industry,

legislative and regulatory changes are inevitable, and strategies to navigate the opportunities and challenges of implementing commercial drones into your operation must be developed thoughtfully, and based on deep industry and government experience.

These innovative technologies and services also raise novel issues relating to intellectual property, export controls, privacy, competition, products liability, spectrum, cybersecurity, and more.



The Unmanned Aircraft Systems (UAS), or drones, market is expected to grow significantly in the next four years.

We know your industry

We are immersed in all industry sectors surrounding UAS. We have a unique combination of expertise and experience available to assist clients in identifying market potential, understanding challenges to deployment, shaping, and responding to evolving legal and regulatory frameworks, and developing practical strategies to take advantage of new business opportunities.

- We have been involved in every recent legislative and regulatory initiative involving unmanned aircraft integration and safety, and have a comprehensive understanding of how changes will impact UAS manufacturers, operators and users.
- We have played critical roles in industry initiatives, from both a federal government and industry perspective, and understand the risks and rewards globally.
- We have advised companies on market entry strategy, corporate fundraising and financing, and strategic partnerships.
- We have spearheaded the industry's development of privacy best practices surrounding the use of drones, working with other industry participants, advocates and the federal government.
- We have advised many companies, both large and small, on the regulatory environment for commercial operations.
- We have successfully achieved extended operational approvals for many clients, and are actively

working with clients to move UAS policy boundaries forward safely.

- We have advised numerous clients on ongoing debates and challenges over the spectrum requirements to support UAS operations.
- We have counseled companies and investors on the regulation of UAS in various countries around the world.
- We have educated the broader community on the importance of UAS technology and safe and responsible operations through webinars, social media outreach, and speaking engagements.

Why choose Hogan Lovells?

We are the premier global UAS legal and business strategy practice and serve as a one-stop shop for all your needs -- from regulatory issues to intellectual property, corporate matters to spectrum requirements, data privacy to export controls, product liability to public policy -- and everything in between.

Our strengths

- Deep understanding of the marketplace and your issues
- Straight talking and practical problem solving
- Strong industry and government relationships and a commitment to taking a collaborative approach
- Global access to government and industry activities to stay informed

Areas of focus

- Government Relations and Policy Advocacy
- Intellectual Property
- International Trade and Investment/Export Controls
- Communications
- Corporate/M&A/Commercial
- Aviation/FAA Regulatory
- Privacy and Data Security
- Public Policy
- Product Liability
- Government Contracts
- Litigation

Enabling to innovate: Highly commended for Lisa Ellman's and Gretchen West's UAS work at the Financial Times North America Innovative Lawyers Awards 2016.



We know your
industry



“Excellent lawyers. They have the ability to step into our shoes and tell us what we should do at a practical level.”

Chambers Global

Change in the UAS industry is happening faster than ever, and to stay ahead, you need to anticipate what comes next. Legal and business challenges come from all directions. We understand and work with you to solve the toughest issues. Whether you are just entering the UAS industry, or considering raising capital, or dealing with the increasingly complex drone regulations, we can help.

Our team has a wide range of backgrounds: working at the highest levels of government crafting UAS policy nationally, serving at the highest levels of the FAA and its legal office, and working with the largest networked industry organizations. We have the depth and breadth of experience to help you on any issue you face in today's uncertain environment.

Selected Experience

- Representation in FAA UAS-related regulatory proceedings
- U.S. and international spectrum allocations
- Spectrum acquisition and licensing strategy
- FCC regulatory compliance
- U.S. federal and state privacy and information management law compliance
- Engagement with public policy and regulatory processes
- Due diligence and risk allocation advice for transactions of all types
- Security incident preparedness, response, and disclosure counseling

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UAS Practice Chair Lisa Ellman was named a Fortune Magazine “Most Powerful Woman” for her efforts to develop policy to govern UAS use in the United States.

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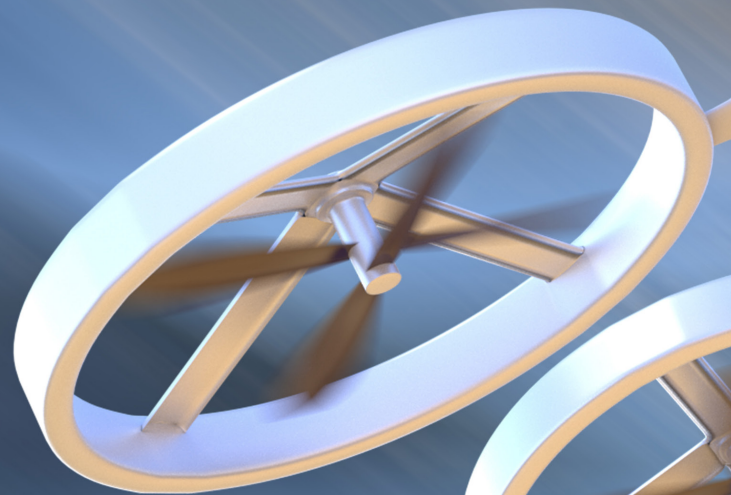
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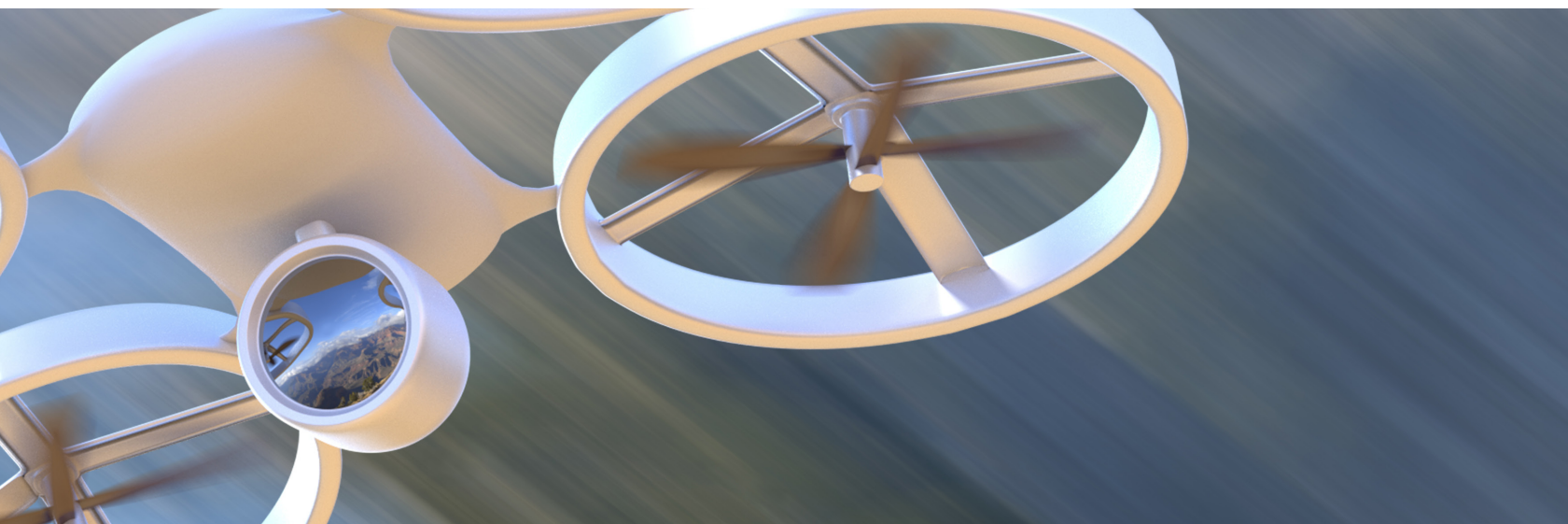
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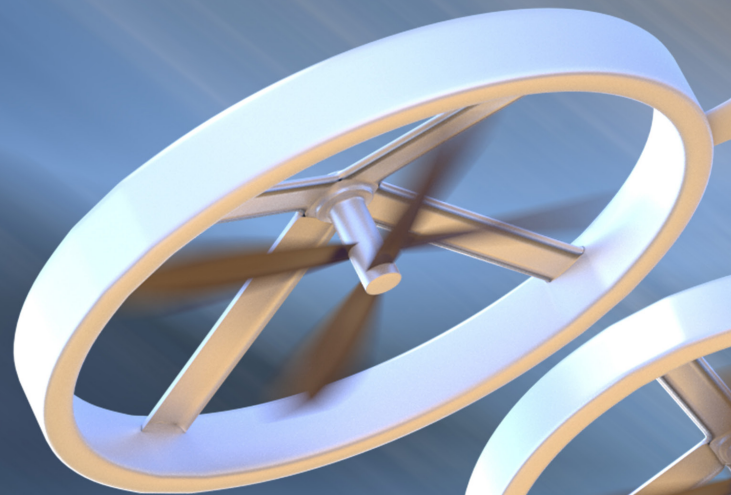
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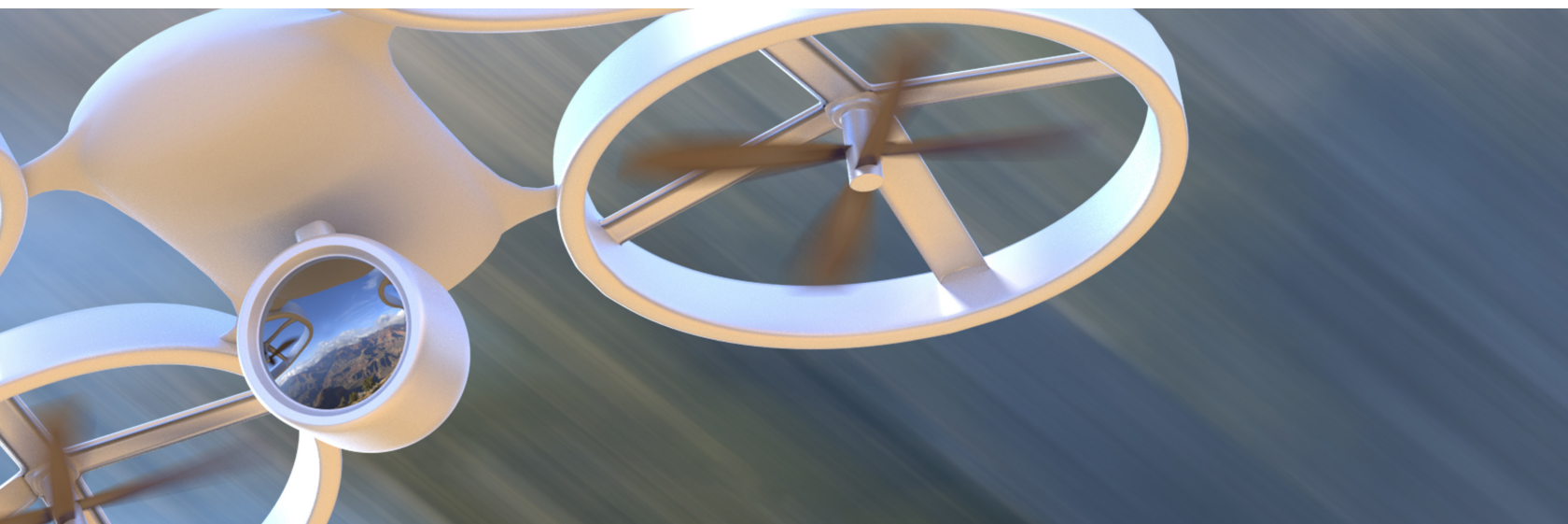
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¹ Finnegan, Philip. World Civil Unmanned Aerial Systems: Market Profile & Forecast. Teal Group Corporation, 2016. Available at <https://dl.dropboxusercontent.com/u/1665888/TGCTOC/sample-WUASC2016.pdf>. Accessed November 2016. This number represents an estimate of the “future worldwide market for civil government and commercial unmanned aerial vehicles.”

² Michal Mazur et al., Clarity From Above: PwC Global Report on the Commercial Applications of Drone Technology. PwC Polska Sp, May 2016. Available at <http://www.pwc.pl/pl/pdf/clarity-from-above-pwc.pdf>. Accessed November 2016. This number represents the “value of current business services and labour that have a high potential for replacement in the very near future by drone powered solutions.”

³ Cheryl Miner et al, Final Rulemaking Regulatory Evaluation: Small Unmanned Aircraft Systems, 14 CFR Part 107, U.S. Department of Transportation, Federal Aviation Administration, June 2016, page 155.



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