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### Space Flight Liability: Knowing and Reducing the Risks



The NewSpace industry involves cutting-edge technologies. It also raises cutting-edge product liability risks. Hundreds of entities can be involved in a launch, including launch service providers, spacecraft and component part manufacturers, payload manufacturers, launch site operators, and space flight participants. If something goes wrong during launch, orbit, or reentry, any one of these parties could potentially be at fault. Manufacturers of equipment that may be used in space should carefully assess their product liability risks—and proactively seek to mitigate those risks.

#### **What Laws Govern Liability in Space?**

Space is an inherently international domain. Liability issues are governed at the international level by the 1972 Convention on International Liability for Damage Caused by Space Objects (the Space Liability Convention), which the United States ratified in 1973. The Space Liability Convention requires the United States and other signatories to pay compensation for any damage caused by their space objects. The scope of liability depends on whether the damage occurs on the earth or in space. If the launching state's space object causes damage on the surface of the earth or to an aircraft in flight, it is "absolutely liable" for that damage. The launching state is also liable for any damage caused by its space object to another launching state's space object (or for damage to people or property on board that space object) "elsewhere than on the surface of the earth" "if the damage is due to its fault or the fault of persons for whom it is responsible."

Because the Space Liability Convention requires national governments to ensure that any losses are compensated, the U.S. government has had to balance its risk of paying damages with its goal of incentivizing the domestic private space industry. The balance Congress has reached is codified in Title 51, Chapter 509, of the U.S. Code. Chapter 509 and its implementing regulations set out a complex regime that divides potential liability risks between the federal government, entities involved in launch and reentry, and the global insurance market. *See* 51 U.S.C. § 50901 *et seq.*

The Department of Transportation has authority to issue launch and reentry licenses to private companies, provided those companies meet certain conditions. Several of the conditions for obtaining a launch or reentry license relate to insurance and liability risk allocation. At a high level, here are three of the key requirements:

- **Insurance and Financial Responsibility.** A licensee must "obtain liability insurance or demonstrate financial responsibility" of up to \$500 million for third-party death, bodily injury, or property damage claims "resulting from an activity carried out under the license." *See id.* 50914(a)(1)(A), (3)(A)(i). The licensee must also obtain insurance or demonstrate financial responsibility of up to \$100 million for damage or loss to government property. *See id.* § 50914(a)(1)(B), (3)(A)(ii). The licensee must extend its coverage to the government (including executive agencies and personnel, contractors, and subcontractors); the licensee's contractors, subcontractors, and customers; the customers' contractors and subcontractors; and any space flight participants (although this last requirement sunsets on September 30, 2025). *See id.* The statute does allow for less insurance to be obtained if "the maximum liability insurance available in the world market at reasonable cost" is less than these limits. *See id.* § 50914(a)(3)(B).
- **Waiver of Claims.** The licensee must also enter into a "reciprocal waiver of claims" with all "applicable parties involved in launch services or reentry services." *See id.* 50914(b). The reciprocal waiver of claims requirement applies to the licensee's contractors, subcontractors, and customers; the customers' contractors and subcontractors; and any space flight participants (this last requirement also sunsets on September 30, 2025). *See id.* Among other requirements, each party must agree "to be responsible for personal injury to, death of, or property damage or loss sustained by it or its own employees resulting from an activity carried out under the applicable license," *see id.*, "regardless of fault" (unless the party has engaged in willful misconduct or possibly gross negligence). 14 C.F.R. § 440.17(b), (f); H.R. Rep. 108–429 (2004). The parties must then flow down the reciprocal waiver requirements to their contractors, subcontractors, and customers in their own contractual agreements. *See id.* § 440.17(b). There are also reciprocal waiver requirements when the government is involved. *See* 51 U.S.C. § 50914(b); 14 C.F.R. § 440.17(c)–(e). When government property is damaged, the "waiver applies only to the extent that claims are more than the amount of insurance or demonstration of financial responsibility required under" 51 U.S.C. § 50914(a)(1)(B). In other words, the government can recover for property damage up to the \$100 million insurance limit regardless of the reciprocal waiver.
- **Excess Federal Coverage.** Finally, the statute requires the federal government to pay for any third-party death, bodily injury, or property damage claims in excess of the licensee's insurance and financial responsibility requirements, in an amount of up to \$1.5 billion (as measured in 1989 dollars). 51 U.S.C. § 50915(a). The statute prohibits the government from "paying a part of a claim for which death, bodily injury, or property damage or loss results from willful misconduct by the licensee or transferee." *See id.*

The net result of these provisions is that—assuming all parties involved with a launch comply with federal law, that there are no allegations of gross negligence or willful misconduct, and that the parties' contractual waivers are appropriately drafted—NewSpace companies should generally be well protected against large out-of-pocket judgments in the event of an accident. As discussed below, however, NewSpace companies should carefully review their contracts, insurance policies, and the applicable laws and regulations to make sure they fully benefit from federal protection.

### What Can NewSpace Companies Do to Mitigate Risks?

Although federal law currently provides liability protection for certain space activities, NewSpace companies should proactively look for opportunities to mitigate their risks. Accidents will inevitably occur as more companies become involved in space activities. Following an accident—especially a high-profile one—the federal government will face pressure to restrict or eliminate existing statutory liability protections. Companies need to be cognizant of this risk, especially as they obtain insurance and negotiate their contracts.

Here are three ways NewSpace companies can mitigate their risks now:

- **Develop Robust Safety Systems.** NewSpace companies should develop robust safety systems to protect against liability risk following an accident. Federal and contractual protections may not apply if there are credible allegations of willful misconduct or gross negligence. The best approach is to develop and follow robust systems that ensure safety concerns are properly identified, evaluated, and mitigated. These systems should also ensure that potential problems are appropriately documented and addressed. Perkins Coie offers its clients one- and two-day product liability workshops to ensure that employees understand that litigation prevention, risk management, regulatory compliance, and proper incident response are everyone's responsibility.
- **Insurance** is one of the most effective risk mitigation strategies for any product manufacturer. NewSpace companies should carefully examine their coverage and ensure that it satisfies any judgments they might face and complies with the insurance requirements described above. They should also make sure that their insurers have strong balance sheets and that their policy limits are appropriate.
- **Contractual risk allocation provisions.** Finally, improperly drafted contracts can subject a company to significant liability risks. NewSpace companies should carefully examine the risk allocation provisions in their commercial contracts, especially with any entities that are subject to the federal reciprocal waiver of claims requirements described above and set out in 51 U.S.C. § 50914. The enforceability of a contractual risk allocation provision is often *the* key issue in a post-accident dispute. Ensuring that those terms are well drafted and fit for purpose beforehand can save untold amounts of money when unforeseen accidents happen.

## Conclusion

Like all businesses, NewSpace companies face product liability risk. Although federal laws currently provide some protections, those protections may not exist forever. Companies can and should take proactive measures to reduce their product liability risk now.

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## Authors

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