

**LIABILITY TO THIRD PARTIES FOR SPACE  
ACTIVITIES: NAVIGATING THE REGULATORY  
AND INSURANCE MAZE**

By:  
Stephen Tucker

INTRODUCTION

On January 19, 2006, the New Horizons spacecraft blasted off Cape Canaveral on a Lockheed Martin Atlas V rocket bound for Pluto. The spacecraft, about the size of a grand piano, was the fastest ever launched, achieving a speed of 47,000 miles per hour—more than ten times faster than a speeding bullet. On its way to Pluto, it flew by the moon in just nine hours, a journey that took the Apollo astronauts three days to reach. Even at the speeds achieved, the spacecraft will take more than ten years to reach Pluto. Once it gets there, it will take signals from the spacecraft (traveling at the speed of light) four hours to reach earth. In order to power the spacecraft for such a long journey with an ultimately very dim sun, it will carry 24 pounds of Plutonium 238: one of the most toxic materials on earth, referred to by one commentator as “*The Wrong Stuff*”. NASA estimated before launch there was a 1 in 620 chance of an accident that would release plutonium into the environment. Because of this, and many other risks associated with space launches, a complex regulatory scheme has been devised by the United States Government addressing the various liabilities that may arise.

THREE TYPES OF LAUNCHES

There are generally three types of space launches—Commercial, Civil, and Government/Military/National Security related. Each type has its own regulatory scheme and insurance considerations.

Liability for space launches in general is governed by international treaties of 1967, 1972 and 1976. These treaties, taken collectively, hold Launching States responsible for damage to other nations arising out of activities in outer space. Launching States include the geographic locations of the launch site, the domicile of the launch operator and the domicile of the owner of a satellite.

#### COMMERCIAL LAUNCHES

The United States Government treaty obligations for commercial launches are insured by the launch provider through a license agreement. A typical one would involve the launch of a commercial communications satellite. The Department of Transportation agency, the Federal Aviation Administration, is the licensing agency and the Office of the Associate Administrator for Commercial Space Transportation (“AST”)<sup>1</sup> is the department within that agency responsible for administering matters related to commercial space launches. Under the Commercial Space Launch Act of 1984, 1988 and 1994 (“CSLA”), AST has been given the responsibility to:

- Regulate the commercial space transportation industry, only to the extent necessary, to ensure compliance with international obligations of the United States and to protect the public health and safety, safety of property, and national security and foreign policy interest of the United States;
- Encourage, facilitate and promote commercial space launches and re-entries by the private sector;
- Recommend appropriate changes in Federal statutes, treaties, regulations, policies, plans, and procedures; and

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<sup>1</sup> (<http://ast.faa.gov>)

- Facilitate the strengthening and expansion of the United States space transportation infrastructure.

In meetings its obligations, AST issues launch licenses for commercial launches of orbital rockets and suborbital rockets. The first U.S. licensed launch occurred in 1989 and more than 100 licensed launches have occurred since then.

The CSLA sets specific requirements (including insurance and financial responsibility) necessary to obtain a launch license. Launch licensees have traditionally included such companies as Lockheed Martin, Boeing and Orbital Sciences. One launch liability insurance policy covers all launch participants and a reciprocal waiver of claims is mandated. Required insurance is statutorily capped by a known formula—the Maximum Probable Loss (“MPL”) for i) third party bodily injury or property damage (not to exceed \$500 million), and ii) damage to government property (not to exceed \$100 million)—set ad hoc for each launch. Above those amounts, the government endeavors to pay claims above the required insurance up to \$1.5 billion.<sup>2</sup> Above the \$1.5 billion amount, insurance would then apply after the government “undertaking” is exhausted.

Under the launch licensee’s liability insurance policy, the following entities are insured:

- Launch Licensee
- Government
- Executive agencies, contractors, and subcontractors of the Government
- Contractors, subcontractors, and customers of Launch Licensee
- Contractors and subcontractors of the customer

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<sup>2</sup> This has never occurred.

- Customer related entities with financial interest
- Customer related foreign governments as applicable

Besides the abovementioned requirements under the CSLA, in order to use U.S. Government support services for commercial launches on U.S. Government launch sites, a Commercial Space Operations Support Agreement (“CSOSA”) is required. It governs all use and support from first entrance onto the launch complex until beginning of “commercial launch activities” as defined and governed by the CSLA. Hold harmless and indemnity requirements flow one way from user and customers, and contractors/subcontractors of either, to the U.S. Government and its contractors/subcontractors. The insurance policy requirements require: i) the U.S. Government, et al., as additional insureds, ii) waiver of subrogation in favor of the Government, et al., iii) 30 day notices, and iv) dovetail provisions with CSLA required insurance cross waivers.

#### CIVIL LAUNCHES

This type of launch can be characterized as one for scientific purposes involving NASA. The aforementioned New Horizons Pluto launch was a civil launch. In the past, these types of launches have been covered under insurance and above the required limits by Public Law 85-804 (“85-804”), a Government indemnity related law. The current U.S. Government policy has been to offer NASA Space Act indemnity, rather than 85-804 indemnity. NASA’s reimbursement of claims occurs after the “insurance required by the contract” is exhausted and the contractor pays the claim. NASA indemnification is capped to \$1.5 billion excess of the required single policy limit provided by the Prime contractor. Liability limits in the Prime’s contract with NASA are fixed not to exceed \$500 million. This particular scheme has raised some concerns on behalf of launch providers and their contractors and subcontractors, in that it has been interpreted as requiring excess-of-policy limits claims to be paid first by the launch

provider, and then for NASA to “request” funding from Congress by submitting indemnification requests.

In addition to NASA Act coverage for New Horizons, NASA offered Price Anderson Act indemnity under the Atomic Energy Act of 1954 as supplemented by DOE 952.250-70 of 1996.<sup>3</sup> The combination provides authority to any Government Agency to provide indemnity for handling transportation and use of nuclear materials. It is limited to \$10 billion in the United States and \$500 million outside the United States, and does not require the availability of insurance for this peril.

GOVERNMENT/MILITARY/NATIONAL SECURITY-RELATED  
LAUNCHES

This type of launch allows for Public Law 85-804 Government indemnity. It is available to numerous Government agencies for contracts which facilitate the national defense. The launch of a spy satellite would qualify for 85-804 indemnification. The indemnity is only granted for risks that are unusually hazardous or nuclear in nature, and the Government allows for only “named perils”. The Government can approve flow down of prime contractor indemnification to subcontracts at any lower tier. It is important to note that subcontractors must request 85-804 indemnification and work with the Prime contractor in completing the Risk Matrix. Indemnification applies excess of applicable insurance coverage maintained by the contractor. It should be noted that PL 85-804 is available only for DOD<sup>4</sup> launches and some limited NASA launches with direct defense purposes.

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<sup>3</sup> Dept. of Energy: NUCLEAR HAZARDS INDEMNITY AGREEMENT (952.250-70) (JUN 1996).

<sup>4</sup> Dept. of Defense.

CONCLUSION

The U.S. Government has set up a complex and ever changing scheme to account for its liability under U.N. Treaties and otherwise. If a company is involved in the launch industry, it is important to pay close attention to the regulatory schemes for commercial, civil, and defense-purpose related launches. Potential liabilities are enormous, and the day will likely come when the schemes are tested. Understanding these regulations—in advance of being faced with a potentially large loss—should be an important part of risk management for interested contractors and subcontractors.