## 59th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7) Legal Challenges Represented by Large Satellite Infrastructures and Constellations (4)

## Author: Mr. George Anthony Long United States, gal@spacejurist.com

## BLACK MARKET LAUNCHES OF SMALL SATELLITES: A NEW CHALLENGE FOR THE SPACE LAW REGIME

## Abstract

Small satellites encompass a spectrum of space objects with various designations. Generally, the category refers to space objects having a mass of less than 500 kg. Small satellites can perform certain functions of larger satellites but for a shorter temporal duration and, for now, lesser efficiency. These objects are generally placed into orbit as part of a secondary payload on other space launches and are often deployed in groups referred to as a constellation. As more cost efficient means emerge for deploying small satellites, it is reasonable to anticipate a corresponding proliferation in their use among non-state actors. This opens the door for conduct by non-state actors which can encompass black market launches.

The Outer Space Treaty and the Liability Convention are each predicated on the launch of space objects under the auspices of a State or a governmental organization. Accordingly, a black market launch is best defined as the placement of an object in space without any governmental oversight or knowledge. Such launches will become plausible upon the anticipated development and proliferation of technology which allows launching small satellites into orbit from aircraft, high altitude balloons or other alternative platforms.

This paper will examine the concept of black market launches of small satellites and analyze the associated issues of State responsibility under the Outer Space Treaty Article VI, State liability under Liability Convention and the legality of a State removing a space object placed into orbit by a black market launch.