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REGULATING SUB-ORBITAL FLIGHTS TRAFFIC: USING AIR TRAFFIC CONTROL AS A MODEL?

Abstract

Private sub-orbital flights carrying space tourists on a short journey into outer space are expected to become a reality soon. Indeed, the private company Virgin Galactic has announced that the first flight of the sub-orbital spaceplane SpaceShipTwo, with paying passengers on board, is scheduled to take place in 2011. Taking into consideration that the era of private sub-orbital flights is about to begin, it is time to start discussing about the potential issues which this type of activities may raise with regard to space traffic and operations. The main question is how to make sure that these flights are carried out in a safe and orderly manner so as to avoid interferences and collisions not only with each other but also with other space objects. Additional problems are related to the possible interferences that private sub-orbital flights may have with aircrafts during their access into and re-entry from outer space. A possible mechanism to be used to deal with these issues is provided by the existing aviation practice. The operations of aircrafts in flight are coordinated on a worldwide, regional, and national scale through a system of air traffic control, the main purpose of which is to avoid collisions and to enable the safe flow of traffic in the air. The present paper will explore the possibility to establish a "sub-orbital flights traffic control mechanism" and will suggest the legal elements to be inserted in such a mechanism.