66th International Astronautical Congress 2015

## BUSINESS INNOVATION SYMPOSIUM (E6) Case Studies and Prizes in Commercial Space (1)

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## EFFECT OF SPACE LAUNCH DELAYS AND FAILURES ON STOCK MARKET RETURNS OF COMMERCIAL PAYLOAD OPERATORS

## Abstract

Schedule delays of satellite launches are often inevitable due to the myriad of environmental and technical factors that can contribute to a postponement or cancellation of a given launch. As the commercial space industry continues to mature, the financial impact of these unplanned delays on satellite operating companies is an issue of increasing concern. Although there have been several instances of satellite operating companies publicly claiming revenue losses directly resulting from a disrupted launch schedule, no previous studies have quantified the effect of launch delays on the valuation of affected commercial satellite operators. To better understand the relationship between launch delays and company valuation, this paper examines the impact of launch announcements (including all publicly announced launch schedules, delays, aborts, failures, and successful launches) on the daily stock market returns of publicly-traded satellite operating companies during the 5-year period from 2009 to 2014. Using the event study methodology, we examine the relationship between launch announcements and changes in stock returns. Building off previous work from the Georgia Institute of Technology on the effect of product introduction delays on operating performance, we also forecast the extent to which a shift in space industry dynamics from an oligopolistic to a more competitive market will amplify or neutralize these effects. The conclusions of this study will allow satellite operating companies and associated financiers to better incorporate marginal effects of possible launch delays into financial predictions.