HUMAN SPACEFLIGHT SYMPOSIUM (B3) Commercial Human Spaceflight Programs (2)

Author: Mr. Paul Guthrie Bryce Space and Technology, United States

DEFINITION AND ANALYSIS OF THE INTERNATIONAL COMMERCIAL SPACEFLIGHT INDUSTRY, 2006-2013

Abstract

Through exclusive access to proprietary information, this paper presents an uniquely accurate analysis of the emerging commercial spaceflight industry, building upon a dataset that extends back to 2006. The data set is updated through 2012, with a study underway to capture data from 2013.

Since 2006, the market for commercial spaceflight has transitioned from one dominated by development activities funded by investors and governments to an industry realizing meaningful revenues from commercial activities. Revenue from government remains important, and in some cases the government revenue is now coming from programs specifically designed to support this industry.

The paper provides quantitative measures of the overall size of the industry by revenue; the amount of investment raised and spent; the relative percentage of investment sources; facility space devoted to these activities; and overall industry employment.

The annual study this paper summarizes was conducted with the cooperation of the Commercial Spaceflight Federation (CSF) and its member companies. Data from non-member companies was also obtained for a broader and more global depiction of the industry. The purpose of the study is to provide an accurate picture of the commercial spaceflight industry that is useful to investors, entrepreneurs, regulators, media, and industry analysts. The methodology of the study included:

- Collecting primary source data obtained through interviews with commercial spaceflight companies, augmented with open-source research.
- Characterization by appropriate industry metrics such as traditional financial metrics (revenue, investment), as well as specialized metrics that yield insight on a small, emerging industry (facility space, sources of funding).
- Aggregating company-level data and analyzing industry-level results.

The cooperation of CSF, and the protection of individual organization data through aggregation and other measures, makes this measurement of the industry uniquely accurate. Results show cumulative investment levels committed to the industry through 2013; revenue and deposits for spaceflight services by year, and additional revenue to commercial spaceflight companies for hardware, hardware development, and support services.