25th IAA SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5) Models for Successfully Applying Space Technology Beyond Its Original Intent (2)

Author: Dr. Chunxia Tong

China Aerospace Science and Technology Corporation (CASC), China, misstex@qq.com

THE ACTING FORCE AND REACTION FORCES BETWEEN SPACE INDUSTRY AND OTHER INDUSTRIES

Abstract

For nearly half a century, space technology are used far more widely for broadcasting, communications, weather prediction, inventory surveys, terrestrial navigation, disaster relief, environmental monitoring and so on, breaking new ground related to astronomy, earth sciences, life science, information science, energy sciences. Also, space technology takes peace-developing responsibility for country, sustainabilitydeveloping responsibility for economy, harmony-developing responsibility for society, green-developing responsibility for environment. What's the forces between space industry other industries? The acting force of space industry and the reaction forces of other industries will be considered in this paper. The first section distinguishes various space technologies according to the DIAMOND MODEL, which can show the distinct values in four dimensions of the maturity of technology, complexity of system, importance of task, novelty of the business, and then explains the acting force of space industry to other industries with plenty of examples. The second section relies on the PYRAMID MODEL, in order to reveal the completed missions of space industry in the peace-developing, sustainability-developing, harmony-developing and green-developing responsibility, due to the reaction forces on space industry from political, economic, legal, science and technology environment. The third section gives some conclusions and some suggestions of means for strengthening international cooperation in space field in order to exert the overall advantages. The paper concludes by presenting a call for international aspirations and global cooperation in space industry because the world needs space.