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DEVELOPMENT OF SPACE ACTIVITY IN SOUTH AFRICA AND ITS EFFECT ON THE SOUTH AFRICAN POPULATION

Abstract

With the dawn of a period of rapid economic growth and change in South Africa, a number of exciting challenges in several branches of space activities, particularly research, have been presented. These new developing areas of interest all have the common aim of deriving greater value from space-related research in order to improve the overall quality of life for the South African society. Two major and recent achievements in the aforementioned field are the establishment of the South African National Space Agency (SANSA) in 2010 and the Square Kilometer Array (SKA) project in 2012. Consequently, major contributions towards the positioning of the country as an active participant in the global space arena, despite some of the challenges that are faced by Newly Industrialised Countries (NIC) such as South Africa, have been made. Unfortunately advantages and disadvantages are associated with this classification. The effects of both must be taken into consideration when faced with the task of further improving the aerospace industry in the South Africa: they possess great potential to lay a solid foundation on which to build feasible plans pertinent to the development of the country. Significant projects such as the Southern African Large Telescope (SALT), the Deep Space Array Network (DSAN), as well as the first commercial spacecraft, the "Dragon" designed by South African-born Elon Musk, all illustrate that there is indeed capability within the country to make noteworthy contributions to aerospace. Thus, constant identification and nurturing of relevant talent and interest in the young school student population is necessary to ensure that there is a constant supply of professionals in the aerospace industry. Making use of local campaigns such as the Gauteng Province Vision 2055, which focuses mainly on a radical change in structural and societal backbone, will prove extremely useful in ensuring sustainability in any concurrent space programmes. The aforementioned areas of focus are definitely within reach, as the fruits of development in the aerospace industry will have an immediate impact on the improvement of infrastructure in centralised areas, followed by a long needed decentralisation for growth in disadvantaged provinces, ultimately leading to national social transformation.