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THE LUIGI BROGLIO CENTER - REACTIVATING A SPACE LAUNCH SITE CENTER USING
EXISTING AND NEW INFRASTRUCTURE

Abstract

There are seven major space launching centers in the world, with many more smaller space ports across the world. However, Africa does not host any of the active spaceports despite the ideal latitudinal advantage it holds. Luigi Broglio Space center (BSC) was a spaceport located on the coastal nearshore of Kenya at 25618S 401245E, it was primarily used to launch scientific payloads – most notably the first X-ray satellite (Uhuru). BSC only launched the scout launch vehicles family of rockets, which was discontinued in the 1990s. The center is comprised of two offshore platforms and the main ground station on the mainland. Currently the center's ground station is used as an auxiliary space center providing satellite communication and telemetry services to other spaceports across the world. The proximity of BSC to the equator, 2S of equator) and the Kenyan east coast is a strategic spaceflight launch location. It offers a relatively low cost and safer zone for launching space rockets. The Africa space industry is slowly taking off and accelerating in the last five years. There are currently 13 African countries that have launched 44 satellites into space, there are more than 100 satellites being developed and are to be launched by 23 new African countries by 2025. There has been increased investment by African countries and private companies in the African space industry in the last couple of years. This has necessitated the establishment and development of the Africa Space Agency by the Africa Union Commission. With this market demand for space services, it is time that Kenya and Africa reassess the use of the BSC and the key role it could play in the African space industry. This paper will describe the use of existing infrastructure and evaluate required infrastructure to enable the reactivation of BSC as a major spaceport. It will outline the benefits of the spaceport would generate for the country and continent.