

## ABSTRACT

The growing application of electronics is increasingly becoming a dominating factor in the modern battlefield, both in terms of survivability and combat effectiveness. The electronics industry has developed in leaps and bounds during the past two decades surpassing the development of the whole century before it. Inevitable electronics has pervaded the defense industry with far reaching consequences as it has all other industries. In this scenario, Air Forces around the world should, therefore, actively pursue to attain the capability to operate in the electronic environment in order to pose a viable defense and deterrent to increasingly advance airborne and ground based weapons systems. However, Air Forces in developing countries may find it difficult to keep pace due to Limited Defence Budget, Resource Constraints, and Lack of Technological Base etc.

In this backdrop, this paper attempts to examine options (Up Gradation of the Existing Equipment, Procurement of New EW Equipment, and Indigenous Development) that are available for the Sri Lanka Air Force to harness and fight in the electronic environment despite all the difficulties with which they have had to contend. Further, this paper will analyze the clear and present threat to Sri Lanka's national security from the LTTE and its international backers, and how the Air Force specifically is facing up to the challenge posed by smart missiles and other related threats. The analysis is primarily based on review of books, journals, periodicals, articles, service manuals and internet sources dealing with the subject. Besides, selected group of Operational Pilots and officers in the field of Electronic Engineering in the SLAF had been interviewed for their opinions.

In spite of the constraints peculiar to a developing nation such as Sri Lanka, Sri Lanka Air Force is making commendable efforts to stay abreast of developments in the field. This paper also analyzed the salient factors and derived that Sri Lanka Air Force still has options to attain the capability to operate in the electronic environment by correctly assessing and realizing the need, better utilizing resources and devising a long-term phase-out implementation plan for upgrading of the existing Electronic warfare platforms to present a viable defence for the present and the future.