

## **Offset Reflector With a Non-Focal Phased Array Feed for Space Applications**

Louis Botha

Defence and Security Cluster

CSIR

Pretoria, South Africa

[lbotha@csir.co.za](mailto:lbotha@csir.co.za)

**Abstract**— The design of an offset reflector fed with a phased array that is not in the focal plane is described. By using the phased array, it is possible to scan the pattern of the reflector antenna. The effect of the position of the feed is shown in a few examples and one example of this is given.