*ABSTRACT*

*The development of wireless communication in the world very quickly and will bring a variety of new technology standards. The progress of wireless communication is never separated from the media transmission device called an antenna. The antenna is a medium to send and receive radio signals. Waves can not be transmitted to the air without going through the media called an antenna. Each antenna has a function and application of the different characteristics depending on the frequency and the antenna is working.*

*The emergence of new technology requires an antenna that can serve many applications simultaneously. Helix axial mode antenna is one type of antenna that currently often used for wireless communications applications. Helix axial mode antenna has unidirectional radiation pattern, medium gain and has polarized circular Impedance between 120Ω-150Ω.*

*This task will discuss and implement an antenna-based helix axial mode linier polarized, wideband and with a large gain Impedance 50 Ω. As for how to change the polarity of helix axial mode circular to linier will be implement antenna by combining 2 helix antenna who have played a different direction with the same specifications. Criteria so that can be fulfilled then organized several antenna helix axial mode polarized linier in a certain way.*

*In realizing this antenna, had found bandwidth equal to 1139.34 MHz at 1860.66 MHz – 3000 MHz frequency with limited VSWR ≤ 1.5. While, gain equal to 10.8415 dBi at 2400 MHz frequency. Radiation pattern from measurement test is close to unidirectional characteristic and it's polarization in form of ellipse.*

*Keywords: Helix axial mode, polarity linier unidirectional.*